

Eco-products



- 1 Home electric appliances/Lighting**
- 2 Carriers/Automobiles**
- 3 OA/IT equipment**
- 4 OA/Furniture**
- 5 Apparel/Textiles**
- 6 Interior decoration/Exterior decoration or furniture**
- 7 Building and civil engineering**
- 8 Machines and equipment**
- 9 Others**

"Eco-products" are "environment-conscious products." In this section, they refer particularly to "finished products" to make a clear differentiation from "eco-materials" and "eco-components." Like eco-materials and eco-components, eco-products include "products that help clean and conserve the environment" and "products with high performance, yet creating a low environmental impact." The latter come in a wide variety. The first stage of eco-product development is the design of eco-products. This is called "eco-design." Eco-design proceeds in detail based on three product evaluation points: 1) effective and efficient use of materials, 2) energy saving, and 3) toxicity. Characteristics of eco-products, including the environmentally conscious aspect, are more or less determined during the design stage, and evaluation results are therefore crucial. These three product evaluation points differ from the six factors of eco-materials (see the title page "Eco-materials" in the *Eco-products Directory 2008*). This is because eco-products involve consumers more directly than eco-materials, and the environmental aspects of eco-products are appropriately evaluated from the consumer's viewpoint.

To help consumers understand eco-products better, environmental labels are widely used in Japan. It is hoped that an ideal cycle to support a low environmental-impact society will develop, where more consumers are encouraged by environmental labels to buy eco-products so that manufacturers make further efforts in eco-product development and the provision of environmental information in response to consumer demand.

Eco-products

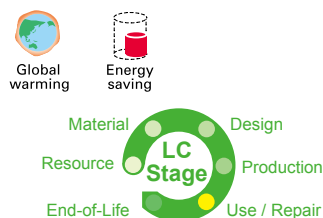
EP-1-001

Home electric appliances / Lightings

hot-water supply system

Heat pump hot-water supply system

Daikin's "Eco-cute" is a heat pump type boiler using natural refrigerant (CO₂). Achieving a high efficiency of heat transfer by cutting grooves to pipes of water heat exchanger, in addition to the existing dimple work, to improve the level of agitation. Furthermore, the hot water storage unit is covered by foamed material as its insulation depending on the shape of tanks, which enable to reduce heat radiation loss by approximately 15%.



EQ37FHV

DAIKIN INDUSTRIES, LTD.

UmedaCenter Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi
530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in : Japan

Eco-products

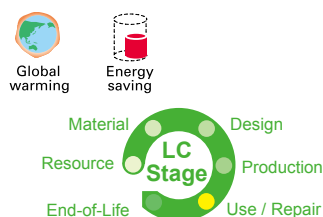
EP-1-002

Home electric appliances / Lightings

heating and cooking apparatus

IH Cooking Heater

- Wide Top Plate-Induction Heater suitable for open kitchen space.
- High heating efficiency(90%) induction heater
- Energy saving by 0W idling power
- Reduction of 95% smoke and odor using palladium oxidation catalyst
- Silent design approx.35dB; the lowest noise in the home appliance sector (in the case of iron, stainless steel pan heating)



Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

HT-B10TWFS(For Japanese Market)

Eco-products

EP-1-003

Home electric appliances / Lightings

power tools

Cordless impact driver which realizes lightweight, high power and long-life

<Product Features>

- Adopting a cobalt Li-Ion battery cell and an individual cell monitor charging system can achieve the total amount of work performed until the end of battery pack's life to be approx. 3.5 times longer, comparing with the amount of our previous models.
- Brushless motor achieves the life of motor and switch to be about twice longer, comparing with our previous models.
- Max. stalling torque is 150Nm and normal bolt M16 can be dealt with.
- 3 stages of power mode can be switched to minimize the failure.



Matsushita Electric Works, Ltd.

1048, Kadoma, Kadoma, Osaka 571-8686, Japan
Tel 81-6-6908-1131 Fax
E-mail
URL <http://national.jp/powertool/>

Available in : Europe, North America, Australia, Japan

Cordless impact driver EZ7540

Eco-products

EP-1-004

Home electric appliances / Lightings

electric rice cookers

Steam IH Rice Cooker & Warmer

- The steam IH rice cooker & warmer increases taste of the rice thoroughly and considered environment.
- This product absorbs water sufficiently to increase sweetness taste by enzyme activity inundation technology to realize a delicious white rice cooking rice course with holding down the power consumption.
- The achievement of energy saving standard rate based on the energy saving law is 97% (SR-SW181).
- Standby power is 0.1W : 95% reduction from the 2000 years model SR-HG18A
- Average power consumption is 26Wh and time reservation power is 0.13W : industrial top-level



Matsushita Electric Industrial Co., Ltd.

5 Saho, Katou, Hyogo 673-1447, Japan
Tel 81-795-42-7000 Fax 81-795-42-7015
E-mail
URL

Available in : Japan

Steam IH Rice Cooker & Warmer SR-SW1series

Eco-products

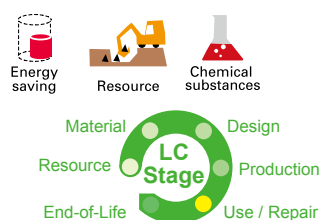
EP-1-005

Home electric appliances / Lightings

electric rice cookers

Rice Cooker

- Reduced power consumption through the adoption of a high-heating-efficiency "solvent implanted iron inner pot," and adoption of a rice-cooking method that utilizes pressure and steam.
- Streamlined usage of reinforcing materials and reduction of the weight of the main unit by an optimal design based on strength analyses.
- RoHS Directive compliant



RZ-GV100J (For Japanese Market)

Hitachi Appliances, Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

Eco-products

EP-1-006

Home electric appliances / Lightings

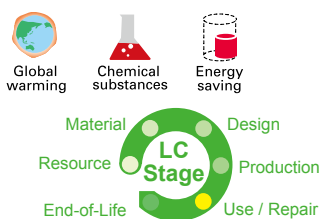
electric rice cookers

IH rice-cooker using a world's first compact vacuum pump

This product adopted new vacuum technology to make the rice more delicious; it is usable for steaming rice, the rice which was kept warm and the rice which cooled down

It has adopted the world's first compact vacuum pump. The rice is soaked in a vacuum state and cooked under a pressure. Thereby, the taste of rice is drawn from the core.

- **Energy saving:** the degree of achievement is 80% for the energy saving standard based on the energy saving act.
- **Elimination of chemical substances:** stainless steel plates which does not need Pb-free solder and chrome plating.



TOSHIBA HOME TECHNOLOGY CORPORATION

2570-1, Urasuda, Kamo-shi, Niigata, 959-1393, Japan
Tel 81-256-53-2545 Fax 81-256-53-2776
E-mail
URL

Available in : Japan

RC-10VSA

Eco-products

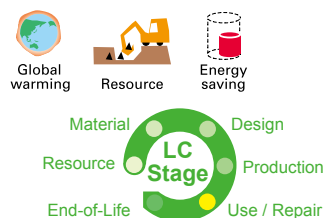
EP-1-007

Home electric appliances / Lightings

electronic ovens

Energy-efficient steam microwave oven, NE-W300

- Global Warming Prevention and Energy Saving by Increased Energy Efficiency.
- This energy-efficient steam microwave oven achieves a highly effective reheat of food, without the need to cover "Wrap-less", by the use of a triple heating system: steam, double antenna microwave feeding and a 320C-deg high-power heater. The oven also includes a high-efficiency Inverter Power Supply.
- The oven also includes a high-efficiency Inverter Power Supply.



Matsushita Electric Industrial Co., Ltd.

800 Tsutsui-cho, Yamato-Koriyama, Nara 639-1188, Japan
Tel 81-743-56-9830 Fax 81-743-56-4040
E-mail
URL

Available in : Japan

Steam microwave oven : NE-W300

Eco-products

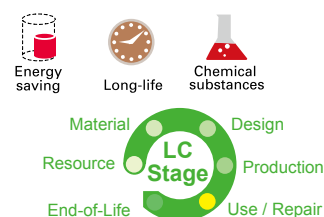
EP-1-008

Home electric appliances / Lightings

electronic ovens

Microwave Oven

- Features such as "improved heating chamber airtightness", "improved heater insulation structure", "wide PAM power supply", and "standby power consumption OFF function" have improved power consumption.
- Easy to clean with the adoption of a removable, washable "table plate" and "leg covers"; and oil-resistant, easily-wipeable "far-infrared black coat" and "steam care function."
- Compliance with the RoHS Directive by alternating materials and parts with those having less environmental impacts



Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

MRO-CV200(For Japanese Market)

Eco-products

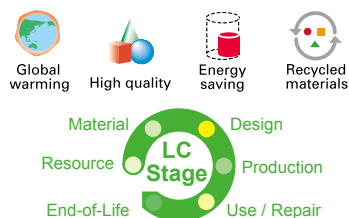
EP-1-009

Home electric appliances / Lightings

electric refrigerators

French door-type refrigerator bearing plasma clust

Non-CFC (non-chlorofluorocarbon) refrigerator that incorporates eco-friendly materials and improved energy saving functions. The product includes energy saving technologies that we have developed such as a high efficiency compressor and meticulous inverter control and vacuum insulation panel. The product incorporates a flexible power saving mode including a power saving function during your absence. Uses non-CFC refrigerant R-600a. By using advanced technology, it achieves ODP (ozone-depleting potential) of zero and 1/400th of the value of conventional CFC substitutes' GWP (global warming potential). The product has been already compliant with EU RoHS directive and J-Moss by utilizing leadfree solder boards and abolishing bromine fire retardant. Further, the product incorporates recycled resin (PP, Hi-PS).



Products/Model: SJ-HD50P

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>

Eco-products

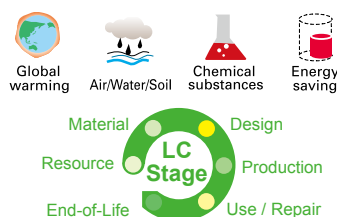
EP-1-010

Home electric appliances / Lightings

electric refrigerators

REFRIGERATOR

- Advanced technologies such as PAM (Pulse Amplitude Modulation) controlled inverter compressor and high-performance VIP (vacuum heat insulation panel) have achieved 1/2 of the energy consumption, compared with the equivalent model released 10 years ago. (In Japan)
- R-600a refrigerant whose ODP (Ozone Depletion Potential) is zero and GWP (Global Warming Potential) is 3 is employed. Furthermore, Cyclopentane whose ODP is also zero and GWP is 3 is employed as the blowing agent of the urethane in order to preserve the ozone layer and avoid global warming.
- Compliance with RoHS Directive
- World's first vacuum compartment which can avoid oxidation of food and consequently can keep the food fresh.
- Big capacity of 601L (net) relative to small outer dimensions which also saves materials.
- Six doors for each compartment; this multi-door construction saves chill leak when opening and closing the doors.
- Door alarms and power-assisted open-closer for drawers reduce energy loss due to door opening for a long duration can be avoided.
- Automatic ice maker convenient for frequent ice users



R-X6000 (For Japanese Market)

Hitachi Appliances, Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

Eco-products

EP-1-011

Home electric appliances / Lightings

electric refrigerators

REFRIGERATOR

- Advanced technologies such as Hitachi original PAM (Pulse Amplitude Modulation) controlled inverter compressor and high-performance urethane can achieve low energy consumption.
- R-600a refrigerant whose ODP (Ozone Depletion Potential) is zero and GWP (Global Warming Potential) is 3 is employed. Furthermore, Cyclopentane whose ODP is also zero and GWP is 3 is employed as the blowing agent of the urethane in order to preserve the ozone layer and avoid global warming.
- RoHS Directive compliant
- Large capacity of 365L(net) relative to small outer dimensions saves materials.
- Four doors for each compartment; this multi-door construction saves chill leak when opening and closing the doors.
- Door alarm reduce loss of energy due to door opening for a long duration can be avoided.
- Automatic ice maker convenient for frequent ice users

Hitachi Appliances,Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>



R-SF37WVPH (For Hong Kong Market)

Eco-products

EP-1-012

Home electric appliances / Lightings

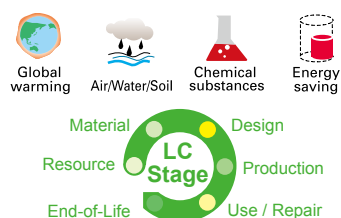
electric refrigerators

REFRIGERATOR

- Advanced technologies such as high-performance compressor and high-performance urethane can achieve low energy consumption.
- R-600a refrigerant whose ODP (Ozone Depletion Potential) is zero and GWP (Global Warming Potential) is 3 is employed. Furthermore, Cyclopentane whose ODP is also zero and GWP is 3 is employed as the blowing agent of the urethane in order to preserve the ozone layer and avoid global warming.
- RoHS Directive compliant
- Large capacity of 305L(net) relative to small outer dimensions saves materials.
- Three doors for each compartment; this multi-door construction saves chill leak when opening and closing the doors.
- Door alarm reduce loss of energy due to door opening for a long duration can be avoided
- Automatic ice maker convenient for frequent ice users

Hitachi Appliances,Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>



R-S31SVG

Eco-products

EP-1-013

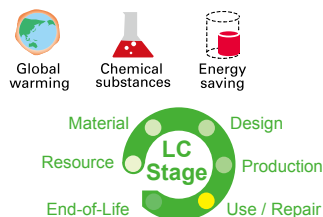
Home electric appliances / Lightings

electric refrigerators

Energy saving refrigerator with a high-humidity original refrigeration compartment

The product is a large-size household refrigerator-freezer; it has two types of the rated capacities of 555L (GR-X56FT) and 525L (GR-X53FT). Above models adopted the new twin cooling system that is our original technology, and the improvement of the convenience and the decrease of the consumption electric power were realized installing the release type crisper at the high-humidity refrigeration compartment which is excellent merit.

- **Energy saving:** The energy saving that the efficiency was 125% (X56FT) and 126% (X53FT) were attained due to the simplification of blow way and the amount reduction of heat leakage.
- **The prevention of the earth warming:** The adoption of non-fluorocarbon refrigerant (R600a)
- **An effective utilization of the resources:** Corrugated cardboard adopts used paper. The decrease of copper diameter of the evaporator and dew proof pipe
- **Recyclability:** Indication of the material name of the plastic resin.



GR-X56FT,GR-X53FT

TOSHIBA HOME APPLIANCES CORPORATION

991, Anada-Cho, Seto-Shi, Aichi 489-8610, Japan

Tel Fax

E-mail

URL http://www.toshiba.co.jp/index_j3.htm, <http://www.toshiba.co.jp/tcm/>

Available in : Japan, developing China and Global

Eco-products

EP-1-014

Home electric appliances / Lightings

kitchen ware

Induction heating cooking heater for double all-metal wares

[Features]

- Double all-metal wares can be used thanks to induction heating evolution. The heating power is highly enhanced.
- A built-in optical sensor allows customers to operate with energy and resource saving.
- A new type high-performance wide-grill which has the automatic water sensor advanced more easy-to-operate.
- Easy-to-read indicators and easy-to-operate universal design are adopted.

[Environmental performance]

- High thermal efficiency of enamel-coated pans approx. 90%, aluminum pans approx. 76% in water-heating mode
- Minimal stand-by power consumption
- Non-use of lead, mercury, cadmium, hexavalent chromium, and specific bromine fire retardants (except lead of sealing agent for sheathed heater)



Matsushita Electric Industrial Co., Ltd.

1-5-1 Takatsukadai, Nishi-ku, Kobe, Hyogo 651-2271, Japan

Tel 81-78-992-9468 Fax

E-mail

URL

Available in : Japan

Induction Heating Cooking Heater KZ-VSW33D

Eco-products

EP-1-015

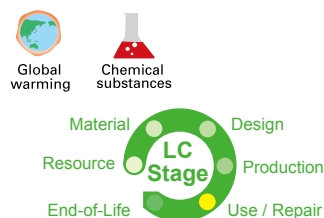
Home electric appliances / Lightings

kitchen ware

IH cooking heater: Superior functionality based on the "clean & silent" concept

This article is an IH cooking heater of 75cm top-surface width, which adopted the frameless top surface and the controller of new feeling. The technical base of this article is our company's original DSP inverter, and the concept for this article is "Clean & Silence". The function is satisfactory; a big grill, a rail-type smooth opening/closing grill, etc. are mounted.

- **Energy Saving:** Thermal efficiency 90% has been realized by the adoption of a high performance inverter and the improvement of heating coil. Furthermore, the power consumption zero has been realized for the stand-by state.



TOSHIBA HOME APPLIANCES CORPORATION

991, Anada-Cho, Seto-Shi, Aichi 489-8610, Japan

Tel Fax

E-mail

URL http://www.toshiba.co.jp/index_j3.htm, <http://www.toshiba.co.jp/tcm/>

Available in : Japan

BHP-M47CS

Eco-products

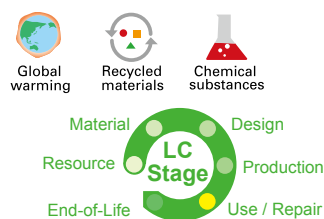
EP-1-016

Home electric appliances / Lightings

ventilators

Ventilation Fan (Intake type pipe fan) FY-08PS8VD

This product is an intake type pipe fan used for home continuous ventilation. The capacitor motor of a newly developed d=48mm core diameter (the previous model was d=63mm core diameter motor) is adopted, and the highly effective fan optimized to an expansion of the style road in the main body and a low rotation and a high static pressure are also adopted, so that the max. energy-saving of 45% compared with the previous model of the company has been achieved. Moreover, resin (P.P.) used for the main body is a recycled material, and its internal wiring uses the electric wire without PVC.



Matsushita Ecology Systems Co., Ltd.

4017 Shimo-nakata, Takaki-cho, Kasugai, Aichi 486-8522, Japan

Tel 81-568-83-5163 Fax 81-568-84-5654

E-mail

URL <http://panasonic.co.jp/mesc/>

Available in : Asia, North America

Ventilation fan (Intake type pipe fan) FY-08PS8VD

Eco-products

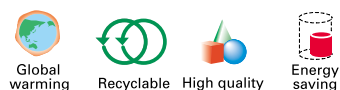
EP-1-017

Home electric appliances / Lightings

air conditioners

Air Conditioner with energy-saving and air-cleaning

This air-conditioner has many functions such as automatic filter cleaning, air purifying by releasing the ion and changing an air flow direction for the best cooling and heating comfortableness. To maximize the energy efficiency, the high- performance "e-scroll compressor" and "hibrid heat exchanger" have been developed, and this product has already achieved the Japan's 2010 energy-saving target by 100%.



CS-X227A



Air Conditioner : CS-X227A

Matsushita Electric Industrial Co.,Ltd. Air Conditioner Business Unit

2-3-1-1 Noji-higashi, Kusatsu, Shiga 525-8520, Japan
Tel 81-77-567-9807 Fax 81-77-561-3208
E-mail
URL <http://national.jp/product/air/aircon>

Available in : Japan

Eco-products

EP-1-018

Home electric appliances / Lightings

air conditioners

Air conditioner featuring ion air purification technology

Equipping 2 units of Plasmacluster generator makes it possible not only to inactivate airborne fungus and viruses but also to remove even stubborn cigarette odors, such as those inside the curtains. And "Long panel", "Smooth guides of vertical louver" and " power concentration guide" make this product to be one of the best* energy saving scores in the industry(COP 4.50), energy saving ratio(141%) and the lowest stand-by power consumption (about 0.5kW).

The product is compliant with EU RoHS directive by utilizing lead-free solder boards and abolishing brominated flame retardant.(COP is acronym for The Coefficient of Performance.

It represents cooling and heating capacity(kW) per 1kW power consumption. The higher the COP value,the greater the energy efficiency.)

*As of November 12,2007;Sharp survey



Air conditioner AY-W50SX

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>

Eco-products

EP-1-019

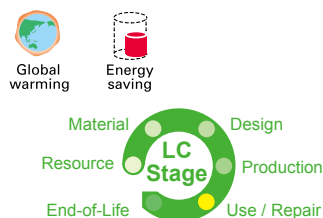
Home electric appliances / Lightings

air conditioners

High performance, energy-saving air conditioner

High energy savings

Daikin has further improved the energy efficiency and realized substantial energy savings compared to conventional models by achieving a high COP of over 4 for both cooling and heating operations.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>



FTXG-E Series

Eco-products

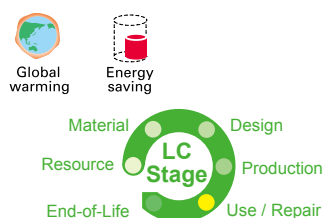
EP-1-020

Home electric appliances / Lightings

air conditioners

High performance, energy-saving air conditioner

Daikin's "Ururu Sarara R series" of air conditioners offers "Ururu Humidifying" function which air-conditioning as well as humidifying without adding water (extract moisture from outside air). It is also installed a new function "Comfort Eco Operation" which automatically controls temperature, humidity, airflow that affects feeling temperature. "Ururu Sarara R series" can realize both comfort and energy saving. By utilising "Comfort Eco Operation", you can reduce energy consumption by approximately 20% a year.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>



FTK(X)S-D Series

Available in : Japan

Eco-products

EP-1-021

Home electric appliances / Lightings

air conditioners

Room Air Conditioner

Inverter technology enables a room temperature to reach the required level more rapidly and up to 30% more efficiently than conventional constant speed systems. Inverter technology also eliminates the incessant use of the stop-start mechanism often required to maintain consistent levels of temperature. Rather than starting and stopping the motor when the room temperature is reached, Hitachi inverters adjust (increase/decrease) the speed of the compressor in an energy saving mode in order to maintain the desired temperature.



Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>



RAS-X13CX

Eco-products

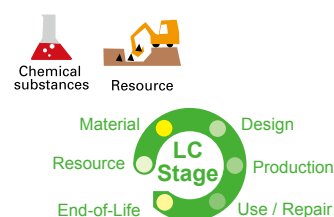
EP-1-022

Home electric appliances / Lightings

air conditioners

Hybrid Dehumidifier Consisting of Adsorption and Refrigeration Cycles

As a new domestic dehumidifier, a hybrid dehumidification systems has been developed. The hybrid dehumidification systems consists of a refrigeration cycles and a desiccant to solve the problems of each dehumidification systems, which are the temperature dependency of the dehumidification performance of the refrigeration cycle and the high energy consumption of the desiccant.



Matsushita Ecology Systems Co.,Ltd.

4017 Shimo-nakata, Takaki-cho, Kasugai, Aichi 486-8522, Japan
Tel 81-568-83-8159 Fax 81-568-83-8198
E-mail
URL <http://panasonic.co.jp/mesc/>



Available in : Asia, North America

Hybrid Dehumidifier Consisting of Adsorption and Refrigeration Cycles F-YHD100

Eco-products

EP-1-023

Home electric appliances / Lightings

air conditioners

Energy-saving air conditioner for residential use

"Daiseikai" BDR air-conditioner is designed under the concept of "kind to user's budget and to the earth". It provides high performance and comfort circumstance at various living scenes at home. "Daiseikai" is a 21st century environment creation air-conditioner with highest energy efficiency in the air-conditioning industry.

- Air-purifier provides clean air automatically using dust sensor.
- Cleaning mechanism cleans inside of the indoor unit automatically.
- Energy saving is achieved by spot airflow which provides air only to the recorded area by customer.
- **Energy Saving:** 25% reduction in power consumption is achieved by development of high performance compressor, inverter, and the improvement of airflow performance according to the new Plasma ion charger air-purifier. Automatic cleaning function maintains energy saving and powerful operation.
- **Resource Saving:** Reduce magnet to be used for compressors by 82%.

Toshiba Carrier Corporation

Shinagawa Center Building, 23-17 Takanawa 3-chome, Minato-ku, Tokyo 108-0074, Japan

Tel Fax

E-mail

URL <http://www.toshiba-carrier.co.jp/>



RAS-402BDR

Eco-products

EP-1-024

Home electric appliances / Lightings

electric washing machines

Full Auto Washer Dryer with Heat Pump System

<Heat pump dry system>

The latest heat pump technology achieves one third of power consumption (electricity cost), a half of water consumption, and a half of time while washing and drying 6kg of load in comparison with the previous model; NA-V81. 65C-degree dehumidified air dries even delicate cloths gently.

<Innovative 'Dancing wash technology'>

In addition to the traditional tumble washing, the brand new 'Dancing wash technology' makes your clothes very clean. This new function reverses the rotation quickly to squeeze the dirt out from cloths.

<'Mist refresh' function>

The mist generated by supersonic wave moistens the clothes to remove odor and to stretch the wrinkles. The mist is so fine that the water molecule can penetrate deeply into the fiber. The laundry will be refreshed after drying.

Matsushita Electric Industrial Co., Ltd.

1-2 Kamisu-cho, Toyonaka, Osaka 561-0823, Japan

Tel 81-6-6331-6826 Fax 81-6-6334-0567

E-mail

URL



Full Auto Washer Dryer : NA-VR2200

Available in : Japan

Eco-products

EP-1-025

Home electric appliances / Lightings

electric washing machines

Fully Automatic Washer/Dryer Combo with Ag+ Ion Coating

<Energy and water saving>

A hole-less stainless steel tub enables energy saving operation from washing to drying. Since water does not pour into the outside of the tub due to its hole-free design, the amount of water and detergent used is drastically reduced. The hole-less stainless steel tub keeps heat inside and the temperature of inner tub rise at shorter time. Then it enables energy saving. Standby energy is 0W.

<Recycling>

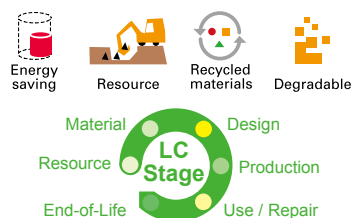
We have developed our own technology for the recycling of plastic. Sharp is the first company in the industry developed the technology of assessing the degraded state of plastic in a simplified way along with characteristic improvement treatment and quality control technology. This allows collected polypropylene to be repeatedly recycled as material for new products.

<Green material>

Main board uses lead-free solder.

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-662-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>



Fully Automatic Washer/Dryer Combo ES-TG81G

Eco-products

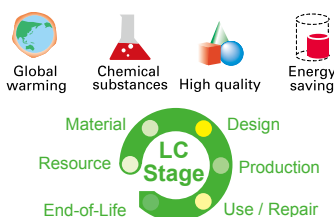
EP-1-026

Home electric appliances / Lightings

electric washing machines

Drum type Auto Washing Machine

- With a pump for transferring water from bathtub, this model's water consumption(Fuzzy course) is only 20L/cycle(7kg load).
- Thanks to the latest technology, this model has achieved 40% less energy consumption, compared with the equivalent model released 5 years ago. (In Japan)
- This model fully complies with RoHS regulations, thus such hazardous substances as lead, mercury, cadmium, etc, are not contained.
- This washing machine has a large capacity of 9kg(net) relative to its small outer dimensions. This feature has contributed to saving materials.



Hitachi Appliances, Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

BD-V2

Eco-products

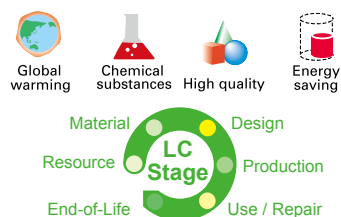
EP-1-027

Home electric appliances / Lightings

electric washing machines

Auto Washing Machine

- Water Circulation System of this model improved 40% of the water consumption compared with the equivalent model released 9 years ago. (In Japan)
- Drying system without heater can significantly save energy.



Hitachi Appliances, Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>



BW-105H

Eco-products

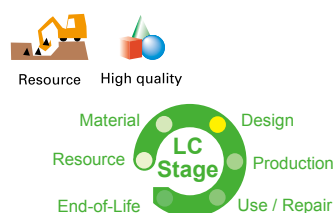
EP-1-028

Home electric appliances / Lightings

electric cleaning machine

Cyclone Cleaner with Tissue Paper Block System SC-XW66J Series

- 1) Easy disposal (care) of garbage by employing tissue paper in front of a filter (SANYO's original method) and reduction of paper consumption;
7-year paper consumption reduced 686g, or 65%, as compared to the conventional paper carton type cleaner;
- 2) Wet-cleaning of a filter unnecessary (Reduced water usage: 420 l/year)



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
Tel 81-77-543-5671 Fax 81-77-543-5618
E-mail hira074299@sanyo.co.jp
URL <http://www.sanyo.co.jp/>



SC-XW66J Series

Eco-products

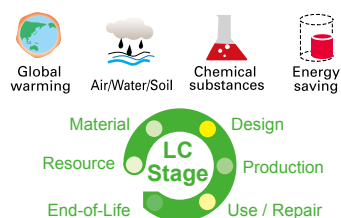
EP-1-029

Home electric appliances / Lightings

electric cleaning machine

Vacuum Cleaner

- Hitachi's dust compression technology compresses the dust volume approximately 1/2 and minimizes suction power loss.
- No paper bags are needed
- Full compliance with RoHS regulations; the six hazardous substances are not contained.



Hitachi Appliances, Inc

Hitachi Atago Bldg., 15-12, Nishi Shimbashi 2-chome, Minato-ku
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>



CV-SH20V

Eco-products

EP-1-030

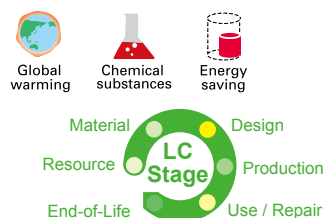
Home electric appliances / Lightings

electric cleaning machine

Cleaner with two automatic washing functions by air and ozone

This goods is equipped with the "Typhoon robo system XP" which washes the inside of the cleaner by the air power automatically, so the care of filter is unnecessary for ten years. In addition, the "plasma ozone unit" was mounted for the first time in the industry. The unit works to deodorize and sterilize the inside of the cleaner by the action of ozone.

- **Energy Saving:** Power consumption at the "eco-mode" is 20% less than that of conventional machine.
- **Resource Saving:** Paper bag became unnecessary by the adoption of cyclone system.



TOSHIBA HOME APPLIANCES CORPORATION

43 Horiyamashita, Hadano-shi, Kanagawa-ken 259-1393, Japan
Tel Fax
E-mail
URL http://www.toshiba.co.jp/index_j3.htm, <http://www.toshiba.co.jp/tcm/>



VC-105XP

Available in : Japan

Eco-products

EP-1-031

Home electric appliances / Lightings

electric hot water cleaning seats for toilet

Energy-efficient personal hygiene system

This product realized the highest level of energy efficiency in domestic market.

- Instant heating of washing water
- Seat made by newly-developed quick heating system for a toilet seat



Matsushita Electric Industrial Co., Ltd. Hygiene Toilet Seat & Heating Equipment Business Unit

800 Tsutsui-cho, Yamato-koriyama, Nara 639-1188, Japan
Tel 81-743-56-9877 Fax 81-743-56-9934
E-mail
URL <http://national.jp/product/sumai/toilet/>



Available in : Japan

Personal Hygiene System : DL-GZ70,50,40,20

Eco-products

EP-1-032

Home electric appliances / Lightings

washer dryer

Drum-type Automatic Washer and Dryer, AWD-AQ 2000, with water-saving and disinfecting functions

"A challenge to global environment problem" is our keyword. From a viewpoint of making good use of water of the limited resource, this machine was developed with the switch of idea, namely from the conventional idea "reduce the using water" to a new idea "reuse the used water" or "not use water". The machine has two great functions. "Air Wash" works to break the source of various germs and smell by ozone, and thereby we can decompose even smear without using water. "Aqua-loop" works to sterilize rinsing or bath water by ozone and reuse in next washing.

◆ Main features of this machine.

1. "Air Wash" –Germ elimination (*), deodorization, and fouling decomposition by the air (ozone).
2. "Aqua-loop" –Reuse of the used bath water after clarification and disinfection.
3. "Guidance Display" to teach what to do next with large characters, and the universal design including a "Kitchen Work-style" position to reduce the user's physical load.

* The commissioned organization: Japan Food Research Laboratories Foundation, Testing method: Agar-plate incubation. Sterilization: Ozone.



SANYO Electric Co., Ltd

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
Tel 81-77-543-5671 Fax 81-77-543-5618
E-mail hira074299@sanyo.co.jp
URL <http://www.sanyo.co.jp/>

AWD-AQ2000

Eco-products

EP-1-033

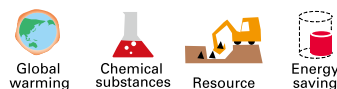
Home electric appliances / Lightings

washer dryer

World's first air conditioner mounted drum-type washing dryer, TW-3000VE

This product is equipped with a new dehydration control system with a pre-heater to remove the implication moisture before drying to a minimum and with a newly developed heat pump system that optimized the efficiency of the clothing drying. Thereby, the power consumption was reduced by about 60%. In addition, the quantity of water at the time of the use was reduced by replacing a conventional heater with the heat pump drying method. Furthermore, the amount of CO₂ discharge at a use stage which occupies 90% of the whole life cycle was improved and the reduction of about 68% has been achieved.

- **Energy Saving:** As described above, the power consumption was reduced by 60% in comparison with that of conventional machine.
- **Resource Saving:** By the heat pump drying method, the consumption of water was saved by 62% compared to the heater type of the conventional machine. Weight of the counter weight (steel plate) was reduced. Regenerative plastic was used for the base plate (4kg). A compact SDD motor of higher power than DD motor was adopted.
- **Recyclability:** For the resin more than 25g, the raw materials were expressed.



TW-3000VE

TOSHIBA HOME APPLIANCES CORPORATION

991, Anada-Cho, Seto-Shi, Aichi 489-8610, Japan

Tel Fax

E-mail

URL http://www.toshiba.co.jp/index_j3.htm, <http://www.toshiba.co.jp/tcm/>

Available in : Japan

Eco-products

EP-1-034

Home electric appliances / Lightings

sonic power toothbrush

Super Slim Sonic Power Toothbrush

<Product Features>

1. Smallest and Lightest in the industry. Slim body allows "Pen Grip" brushing as a dental hygienist recommends.
2. Very quiet when brushing due to the new sonic structure.
3. Full washable body to keep it clean always.

<Environmental Considerations>

Combination of a super miniaturized linear motor and an AAA lithium ionic rechargeable battery makes a compact size and light weight power toothbrush. (55% lighter and 25% slimmer body than previous model) As a result, its light and compact body is contributing to CO₂ reduction.



Sonic Power Toothbrush : EW1163

Matsushita Electric Works, Ltd.

1048 Kadoma, Kadoma, Osaka 571-8686, Japan

Tel 81-6-6908-1131 Fax

E-mail

URL http://national.jp/product/beauty/dental_care/

Available in : Japan

Eco-products

EP-1-035

Home electric appliances / Lightings

massage chair

Massage chair for the entire body with low standby power consumption

[Product Features]

- Newly developed "Kneading Massage Function" is effective against stiff shoulder.
- Three-dimensional 1117 massage patterns are available. Four "auto full-body courses" are also available for a total massage.
- The massage area of the Industry maximum has increased more from our conventional model "EP2110" by the "massage deployment out of shoulder".

[Environmental Features]

- The power switch (relay) cuts the power supply to the motor during standby mode, reducing the standby power consumption by approx. 94% from that of our conventional model 'EP2110'(5W → 0.3W).
- All components used for this product (including electronic components and their electrodes, soldered joints, and harnesses) are free from lead.

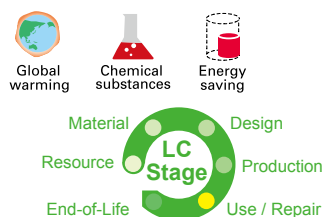
Matsushita Electric Works, Ltd.

1048 Kadoma, Kadoma, Osaka 571-8686, Japan

Tel 81-6-6908-1131 Fax

E-mail

URL http://national.jp/product/health/massage_chair/



Massage Chair EP30002

Available in : Asia, Europe, North America

Eco-products

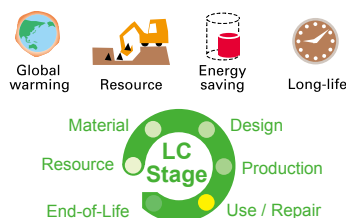
EP-1-036

Home electric appliances / Lightings

fluorescent lamps

Screw-in fluorescent lamp "spiraLUPICA mini"

"spiraLUPICA" mini is the compact size screw base fluorescent lamp. Small spiral shaped inner bulb and compact inverter achieve compact size. Consumption power is from quarter to one fifth compared to incandescent lamp (40W, 60W). Therefore it enables to save energy and reduce greenhouse gas. Also the lifetime of "spiraLUPICA mini" is 6 times longer than that of incandescent lamp. Maintenance cost decreases and it leads to efficient use of resources. Run-up speed is fast. Therefore it's bright even right after switching on a light. ON-OFF cycle is up to 20,000 times. (Cycle is 10 seconds on and 170 seconds off.) This new product is also suitable for the places where you frequently repeat switching on and off.



spiraLUPICA mini

MITSUBISHI ELECTRIC OSRAM Ltd.

Tobu Yokohama Bldg.No.3(4F) 8-29, Kita-Saiwai 2-chome, Nishi-ku, Yokohama 220-0004, Japan

Tel 81-45-323-5187 Fax 81-45-323-5156

E-mail

URL <http://www.mol-oml.co.jp>

Eco-products

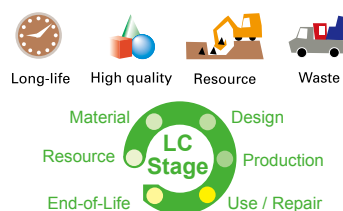
EP-1-037

Home electric appliances / Lightings

fluorescent lamps

Long life fluorescent lamp "Lupica Power Platinum"

Lupica Power Platinum is long life circular and straight fluorescent lamp. The lifetime: Circular types and Straight 20W type is 13000 hours, straight 40W type is 15000 hours. Circular type lifetime is 2.2 times, Straight type is 1.25 to 1.5 times longer compared with conventional products. They enable to reduce maintenance cost and lead to efficient use of resources. Also lumen maintenance factor is improved to about 80% and they keep original brightness at the end of lifetime. Original lighting color is lined up and you can create favorite atmosphere in your own room by selecting our various original lighting colors.



MITSUBISHI ELECTRIC OSRAM Ltd.

Tobu Yokohama Bldg.No.3(4F) 8-29, Kita-Saiwai 2-chome, Nishi-ku,
Yokohama 220-0004, Japan
Tel 81-45-323-5187 Fax 81-45-323-5156
E-mail
URL <http://www.mol-oml.co.jp>



Lupica Power Platinum circular type

Eco-products

EP-1-038

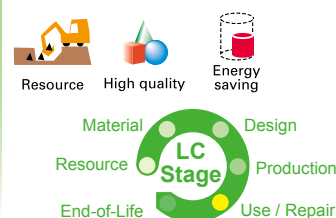
Home electric appliances / Lightings

fluorescent lamps

Self-ballasted compact fluorescent lamp with 1/4 power consumption

Self-ballasted compact fluorescent lamp "Neo-Ball Z REAL" is the substitute of an incandescent 100W lamp. It is an energy saving lamp having equal brightness with about 1/4 power consumption.

- **Energy Saving:** Power consumption has been reduced by 16% compared to that of the conventional product (EFA25EL).
- **Resource Saving:** In comparison with 120g of the conventional product (EFA25EL), the weight of this product is 110g; the resources of about 10% have been saved.
- **Elimination of harmful chemical substances:** Lead-free glass and solder are adopted.



TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

1-201-1, Funakoshi-cho, Yokosuka-shi, Kanagawa 237-8510, Japan
Tel 81-46-862-2155 Fax 81-46-860-1203
E-mail takeo.yasuda@tlt.co.jp
URL <http://www.tlt.co.jp/>



EFA25EL/21-R and two other models

Eco-products

EP-1-039

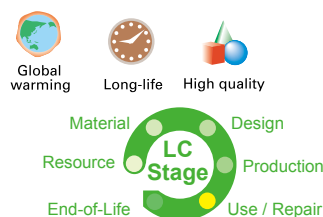
Home electric appliances / Lightings

fluorescent lamps

Bright fluorescent lamp with a lifetime of 15,000 hours

"Neo-slim Z PRIDE" is the fluorescent lamp for exclusive use of high-frequency lighting. It has the life of 15,000 hours, which is 1.3 times longer than that of the previous product. Also the brightness improved about 5% in comparison with that of the previous product of "Neo-slim Z series, (in the high output lighting condition).

- **Energy Saving:** The brightness is 5% up of the conventional product and the energy saving is about 5% if compared at the same brightness.
- **Resource Saving:** The frequency of lamp exchange decreases owing to the extension of lamp life. Quantity of the emitter material (electron emissive) of the electrode has been optimized. Because of having adopted a new protective film, a long life of 15,000 hours has been realized.



TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

1-201-1, Funakoshi-cho, Yokosuka-shi, Kanagawa 237-8510, Japan
Tel 81-46-862-2155 Fax 81-46-860-1203
E-mail takeo.yasuda@tlt.co.jp
URL <http://www.tlt.co.jp/>



FHC27ED-PD

Eco-products

EP-1-040

Home electric appliances / Lightings

fluorescent lamps

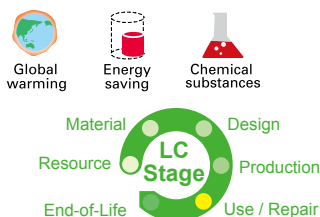
Lighting fixture with sensor function : "Omakase-SelCon"

<Product Features>

- Equipped with brightness sensor and timer built-in block, achieving great energy saving by using daylight and initial illuminance correction function.

[Environmental Features]

- About 55% energy saving, compared to the conventional ballast type fixture under same illuminance. (Number of fixture: decrease 40%, energy saving by illuminance correction: about 15%, Energy saving by using outside light: about 40%)
- About 48% energy saving compared to our output power fixed type fixture with high frequency lamps. (Number of fixture: same, Energy Saving by illuminance correction: about 15%, Energy saving by using outside light: about 40%)
- Vinyl chloride free with using eco-electric wire - Reducing packing materials by using see-through package in some models.



Matsushita Electric Works, Ltd.

1048 Kadoma, Kadoma, Osaka 571-8686, Japan
Tel 81-6-6908-1131 Fax
E-mail
URL <http://biz.national.jp/Ebox/shisetsu/index.html>



Available in : Japan

"Omakase-SelCon" : FSS42560A PX9

Eco-products

EP-1-041

Home electric appliances / Lightings

fluorescent lamps

Environmentally conscious Lighting Fixture "W-Eco"

New generation's lighting fixture for industrial use with "energy saving" and "resource saving"

The industry's first high output and long-life G-Hf fluorescent lamp and the special inverter (with initial illuminance correction function) realized the same brightness with two lamps even by one lamp.

- Equipped with high power inverter with initial illuminance correction function.
- Newly developed "G-Hf fluorescent lamp" enable longer life time (1.5 times of FLR40W type) and higher output power lamp (2.1 times of FLR40W type).
- One-lamp "W-Eco" fixture realized the same brightness with two-lamp (FLR40W) fixture. About 35% saving energy and about 66% reduction of lamp exchange frequency compared to FLR40Wx2 fixture. (scrap saving and maintenance saving).
- The half size and weight of fixture from old products saves resource. Using eco-electric wire, chrome-free steel, and low VOC painting (organic solvent free).

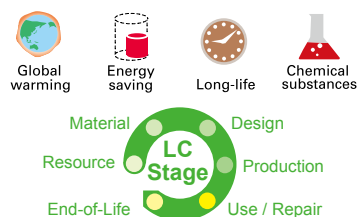
Matsushita Electric Works, Ltd.

1048 Kadoma, Kadoma, Osaka 571-8686, Japan

Tel 81-6-6908-1131 Fax

E-mail

URL <http://biz.national.jp/Ebox/shisetsu/index.html>



Available in : Japan

Office Lighting Fixture "W Eco" FX619MA WF9 Maruti Comfort louver type

Eco-products

EP-1-042

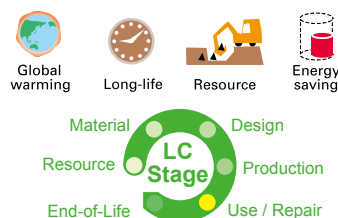
Home electric appliances / Lightings

fluorescent lamps

Compact spiral down light with silver deposited reflector, SPILE series

<Compact and high power down light featured with high efficiency and long life>

This down light can supply the same brightness with 100W type incandescent lamp (size: d=125mm) by using 20W type florescent lamp (size: d=100mm). It also saves energy by 75%, lasts 7 times longer and 36% compact compared to the conventional model. Low environmental impact is achieved by developing a compact, high efficient and long life lamp together with a high efficient inverter, and applying a silver deposited reflector of 98% reflectance.



Matsushita Electric Works, Ltd

1048 Kadoma, Kadoma, Osaka 571-8686, Japan

Tel 81-6-6908-1131 Fax

E-mail

URL <http://biz.national.jp/Ebox/nashop/index.html>

Available in : Japan

Spiral down light with silver deposited reflector "SPILE series" : NFM21700ENM

Eco-products

EP-1-043

Home electric appliances / Lightings

fluorescent lamps

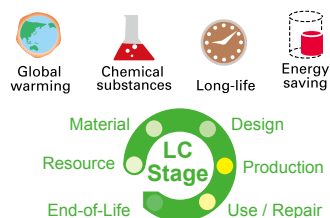
Luminaire for High frequency Operated Lamp(s) "Hf86 HIGH POWER SERIES"

The Hf86 high-power series are fluorescent lamp fixtures that have increased brightness compared to precious Hf86 type apparatuses with an illuminator equipped with a special inverter and a high power lamp "High-power UV" newly developed by an eco-factor of 1.2. In addition, the lamp achieved a long life 15,000 hours that is about 1.3 times greater longevity than ordinary one.

The brightness becomes equal to the mercury light 400W for (HPK11207VH-EU24) in the case of a fixture equipped with two lights and a shade so that mercury light 400W which have been used frequently in factories and warehouses can be replaced with our fluorescent lamp fixtures. Consequently energy reduction (and CO₂ reduction) by 54% has been achieved compared to the 400W mercury light. In addition to energy conservation, our technology can contribute to resource conservation and waste reduction by its significant longevity.

HITACHI Lighting

2-5-2, Kanda-Sudachou, Chiyoda-ku 101-0041, Japan
Tel 03-5296-2947 Fax 03-3255-5279
E-mail iwata@hitachi-hll.co.jp
URL <http://www.hitachi-hll.co.jp/index.php>



HPK11207VH-EU24

Eco-products

EP-1-044

Home electric appliances / Lightings

ceramic metal halide lamps

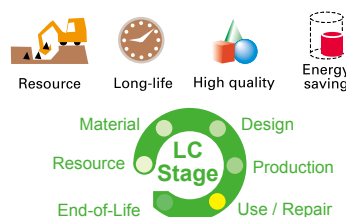
Ceramic metal halide lamp "HCl series"

HCl series are compact metal halide lamp with ceramic bulb. Both efficiency and color rendering properties are high ability. It keeps stable luminous flux and lighting color from starting to the end of lifetime. Now the bulb of "HCl series" are proceeded to change into ball shaped bulb "POWERBALL" which improves the lamp performance such as efficiency, color rendering properties, lifetime and so on. Many kinds of products are lined up in base, wattage and lighting color. They can be utilized at various places of commercial facilities.

Especially, HCl-TE100W(4000K, transparent type) achieves high efficiency of 115lm/W. SHOPLIGHT type, which is improved in red color reproducibility, is suitable for needs reproducibility of brilliant color in shop.

mitsubishi electric osram Ltd.

Tobu Yokohama Bldg. No.3(4F) 8-29, Kita-Saiwai 2-chome, Nishi-ku, Yokohama 220-0004, Japan
Tel 81-45-323-5187 Fax 81-45-323-5156
E-mail
URL <http://www.mol-oml.co.jp>



HCl-TE100W

Eco-products

EP-1-045

Home electric appliances / Lightings

light bulbs

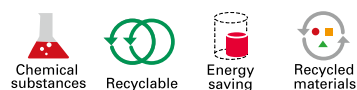
RoHS-Free Liliput Series Fluorescent Energy Saving Lamp

Established in 1994, MEGAMAN has already established itself as a respected German brand, making it one of the top 3 brands in the CFL industry. In Europe, MEGAMAN is a leading brand in energy-saving lamps that has successfully positioned itself as one of the innovative leaders in lamp designs that are exceptionally outstanding.

Megaman cares for environment, our eco-friendliness lies in the: RoHS compliant features in all MEGAMAN lamps exported to Europe. Lead-free Soldering and Lead-free Glass used in RoHS compliant models. Silicone Sleeve holds broken glass and mercury in place before proper disposal and recycling. Water-based adhesive is used to prevent release of toxic substances during lamp operation.

Megaman (S) Electrical & Lighting Pte Ltd

101 Kitchener Road, #01-32 Jalan Besar Plaza 208511, Singapore
Tel 65-6396-5576 Fax 65-6396-7456
E-mail sales@megaman.com.sg
URL www.megaman.com.sg



Available in : Asia

MU111i/E27- RoHS compliant features in Liliput Plus and Liliput with INGENIUM series

Eco-products

EP-1-046

Home electric appliances / Lightings

DC lamps

Energy Efficient DC Lamps

Phocos is one of the largest suppliers of off-grid power supply system components in the world. Headquartered in Ulm, Germany, Phocos develops, designs and manufactures products to suit the needs of all stake-holders in the global solar power market.

Phocos is strongly committed in developing and producing products that meet the company strict specifications in terms of quality, innovation and technology in our products.

Besides the comprehensive range of solar charge controllers, Phocos is offering quality 12/24 V DC lamps that have very high illumination efficiency at low power consumption. Our DC Lamps have more than 8,000 hours of life span at 25°C ambient temperature with more than 500,000 switching cycles (IEC925).

For Phocos 11W DC Lamps, an average luminous efficacy is 63lm/W for Warm Light and 61lm/W for Cool Light. The equivalent brightness compared with normal incandescent lamp is 65W!

PHOCOS SEA PTE LTD

51 Ayer Rajah Crescent, #06-15 139948, Singapore
Tel 65-6778-9509 Fax 65-6778-0119
E-mail info-sea@phocos.com
URL http://www.phocos.com



Available in : Worldwide

CFL & LED Lamps

Eco-products

EP-1-047

Home electric appliances / Lightings

energy efficient DC lamps

EcooLite™ Long Life Lamps

A patented superb high quality lamp which is designed to fill the gap of low power consumption bulb below 4 watts and yet deliver high soothing diffused illumination.

EcooLite™ is a Long-life Lamp that has low heat loss resulting in energy saving and is safe to touch during operation, unlike conventional CFL and incandescent bulb. External non-glass cover provides greater safety factor during usage and handling. As a result, greater life span of the lamp is achieved with more than 25,000 operating hours.

EcooLite™ is highly reliable and durable that it carries 2 years' warranty.

The Features of EcooLite™ :

- Durability as it is designed for harsh condition
- Reliability as it operates 25,000 hours or more
- Safety in handling as it is protected by non-glass cover
- Energy efficient as it consumes low power and low heat loss

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>

Available in : Worldwide



GZE 01202W/C EcooLite 12V, 2W Warm or Cool

Eco-products

EP-1-048

Home electric appliances / Lightings

solar signboard lighting system

Solar Signboard Lighting System

Solar Signboard Lighting System (SSLS) harnesses energy from the sun. Energy generated is used to light up signboard whether it is back lighted or front illuminated.

It can be installed easily anywhere that has unblocked sunlight. SSLS can either act as the sole energy provider to the signboard lighting or as back-up power.

Many urban or sub-urban places still face unstable power from the grid and SSLS solution to ensure the signboard is always illuminated as planned.

SSLS is a cost effective solution for both new and existing signboards

The benefits of SSLS:

- Easy to integrate with existing Signboard's AC lamps
- Acts as backup power
- Auto on/off

The Features:

- Capable to power up to 4x 36W AC Fluorescent lamps or equivalent
- Standalone or retrofit on existing display
- Smart control system by detecting dusk to turn on the signboard.
- Automatic switch over (non-real time) to battery when blackout occurs (Solar-AC System)

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>

Available in : Worldwide



Solar Signboard Lighting System

Eco-products

EP-1-049

Home electric appliances / Lightings

portable lighting solutions

EcooRay Rechargeable Lantern

EcooRay Rechargeable Lantern, with its aluminium body and tough polycarbonate cover, is suited for rugged outdoor use and handling. It can take a wide range of DC Voltage inputs (9V to 18V), making it the best choice option for remote and rural applications.

The benefits of EcooRay:

- Ease of use
- Light and portable
- Provide instant lighting in off-grid locations
- Rugged and handy
- Rechargeable lantern
- RoHS Compliant

The Features:

- Long-life lamp with more than 5 years of cycle life without requiring lamp replacement
- Durable with aluminium alloy body, transparent polycarbonate cover that is splash and shatter proof.
- Use commercial NiMH "AA" rechargeable batteries where users can replace it themselves
- Versatile charging channel such as from PV, DC and AC Adaptor (9V, 2A type preferred)
- Ability to charge and use simultaneously
- Built-in microprocessor for efficient charging and discharging control

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>



Available in : Worldwide

GZR 05402C EcooRay Rechargeable Lantern

Eco-products

EP-1-050

Home electric appliances / Lightings

solar street light

EsoLit Solar Lighting System

EsoLit Solar Lighting System is the ideal solution for streetlight for park, junction, factory, housing estate and other common areas that requires reasonable illuminations. It operates at low voltage level which is safe for public use.

EsoLit is fully autonomous as it will automatically turn on/off the lamp according to the daylight condition. The default setting is dusk-to-dawn operation. Other operational modes such as dusk on, midnight off can be programmed too.

The benefits of EsoLit:

- Easy to install, no long cables to be laid compared with conventional street lighting
- Provide instant lighting in off-grid locations
- Auto on/off
- Back-up power of 3-days
- Low cost

The Features :

- Highly energy efficient with use of compact fluorescent lamp (CFL) or low pressure sodium lamp (LPS). Both lamps consume less power and supply much higher illumination compared to conventional tungsten lamp
- Fully autonomous operation. Default mode is dusk-to-dawn uninterrupted lighting.
- 3-days standby backup power
- Built-in protection circuits for overcharging and discharging of the battery.
- Weather proof lamp fixture fitting

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>



Available in : Worldwide

GZS 06215W /C EsoLit Solar Lighting System

Eco-products

EP-1-051

Home electric appliances / Lightings

linelight

Linelight

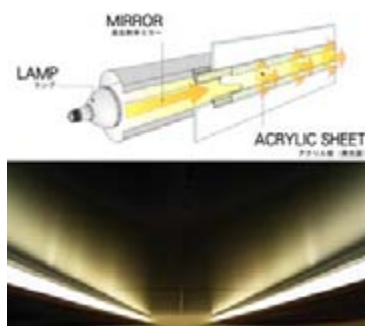
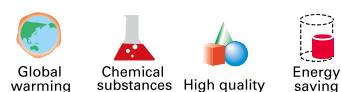
Linelight maximizes the illumination potential of artificial lighting by efficiently channeling the illumination of a single or two light sources along a significant length of line. Linelight is comprised by a highly-reflective aluminum mirror housing with a total reflection of 98% fronted by an acrylic sheet for even dispersion, which is contained within an aluminum frame.

Linelight accepts lamps from 35 to 150 Watts in power, and will carry bright light 30 feet or more using only a single or two lamps. It boasts of flexible design and strong expressiveness, while saving energy, particularly if used for indirect lighting.

Not only are fewer fixtures required compared with conventional point-source installations, but maintenance is also simplified, as only a single or two fixtures must be changed.

Materialhouse Co., Ltd.

1-19-3, Naka-ikegami, Ota-ku, Tokyo 146-0081, Japan
Tel 81-3-3751-5158 Fax 81-3-3755-0065
E-mail h.arai@materialhouse.co.jp
URL <http://www.materialhouse.co.jp>



Linelight

Eco-products

EP-1-052

Home electric appliances / Lightings

LED task lighting

VIOLED Sensor LED Lighting with Backup Battery

The Sensor LED Lamp automatically reduces power and energy consumption in normal operation by providing reduced constant lighting and yet able to increase the light intensity for a time period when required to save power and energy costs substantially. Various models in ranging LED power ratings 5W/11W, 8W/16W, 11W/22W, 11W/25W, 11W/35W are also available with and without backup battery power pack for emergency lighting. The operation of the backup battery provides 11W power for lighting during emergencies for corridors and stairways.



VIOLED International Pte Ltd

55 Ubi Avenue 1 #04-01 408935, Singapore
Tel 65-6842-1623/6747-9719 Fax 65-6842-5623
E-mail patrick@lmw.com.sg
URL

Available in : Made in Singapore, available Worldwide

V-SENSOR LED LIGHT-BBP-11W/25W

Eco-products

EP-1-053

Home electric appliances / Lightings

lighting fixtures

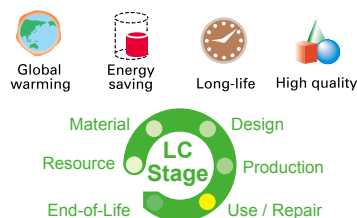
highly-efficient and power-saving "LED Desk Lamp"

[product features]

- With power-saving LED devices and "MiLED ILLUMINATION UNIT" [International Application No.:PCT/JP2005/016848], color shading and shadow of illumination light have been settled.
- With the effect of "MiLED ILLUMINATION UNIT" and LED devices, High illuminance (1,000 lux), low power (5W) and color rendering properties (Ra90) have been realized.
- With the constant current power supply, function of flicker-Free dimmer control have been realized.

MIRAI Co.,LTD.

Nishimotokosannishikicho BLDG. 5F 3-23, Kandanishikicho, Chiyoda-ku, Tokyo 101-0054, Japan
Tel 81-3-5217-2233 Fax 81-3-5217-2235
E-mail mirai@miraijapan.com
URL <http://www.miraijapan.com/>



M005

Eco-products

EP-1-054

Home electric appliances / Lightings

lighting fixtures

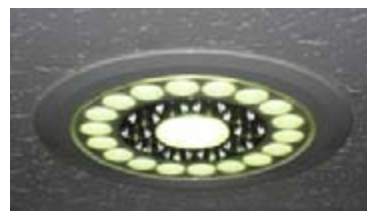
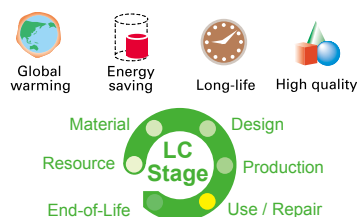
highly-efficient and power-saving "LED Downlight Unit"

[product features]

- With power-saving LED devices and "MiLED ILLUMINATION UNIT" [International Application No. : PCT/JP2005/016848] with two different surface treatment, color shading and shadow of illumination light have been settled.
- With the effect of "MiLED ILLUMINATION UNIT" and power saving LED devices, 4.5W low power and 200lm luminous flux have been realized.
- With controlling the LED heat generation, the lighting unit was realized the appliance height of 35mm with which placing is possible even in the narrow ceiling space.

MIRAI Co.,LTD.

Nishimotokosannishikicho BLDG. 5F 3-23, Kandanishikicho, Chiyoda-ku, Tokyo 101-0054, Japan
Tel 81-3-5217-2233 Fax 81-3-5217-2235
E-mail mirai@miraijapan.com
URL <http://www.miraijapan.com/>



M006

Eco-products

EP-1-055

Home electric appliances / Lightings

lighting fixture

Energy saving HID lighting fixture for high-ceilinged rooms

NEOCERA 250W lamp has a high color rendition and the industry's highest lamp efficiency. By combining this lamp with a newly developed film which has an increased reflection factor, the industry's top-level fixture efficiency was realized. The combination realized a decrease in number of the fittings to be placed. Thereby, 52% of the consumption energy was saved in comparison with the conventional lamp instruments (400W mercury lamp plus fittings). Moreover, an inverter having a 100%- 50% continuous dimming function also contributes to energy saving through the flexible lighting control.

- **Energy Saving:** Owing to the increased reflectivity of the mirror from 80% to 94%, the energy consumption was halved in comparison with the conventional mercury lamp. Dimming function is also useful.
- **Resource Saving:** Number of fittings was reduced by 25%.
- **Elimination of harmful chemical substances:** Cr-free steel and Pb-free solder was used as instrument materials. Pb-free electric wire was used for the wiring in the instrument.



DD-25111FK-DPM2

TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

Minamishinagawa JN Bldg, 2-13, Minamishinagawa 2-chome,
Shinagawa-ku, Tokyo 140-8660, Japan
Tel 81-3-5463-8769 Fax 81-3-5463-8824
E-mail
URL <http://www.tlt.co.jp/>

Eco-products

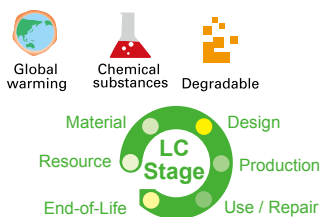
EP-1-056

Home electric appliances / Lightings

emergency lighting fixture

Factory-use Emergency Lighting Fixture with reduced harmful chemical substances

- **Elimination of harmful chemical substances:** A Cd-free nickel metal-hydride battery was adopted as the emergency battery. A Cr-free steel plate without any soil pollutant was used for the main body. Pb-free printed circuit board was adopted for the lighting unit. Pb-free wire is used for electric wiring inside the lighting fixture. As above mentioned, we have promoted the reduction of harmful chemical substances.
- **Resource Saving:** The number of fixtures was reduced by 20-30% compared to that of the conventional incandescent emergency-light, which contributes to resource saving.



IEM-13821HN

TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

Minamishinagawa JN Bldg, 2-13, Minamishinagawa 2-chome,
Shinagawa-ku, Tokyo 140-8660, Japan
Tel 81-3-5463-8769 Fax 81-3-5463-8824
E-mail
URL <http://www.tlt.co.jp/>

Eco-products

EP-1-057

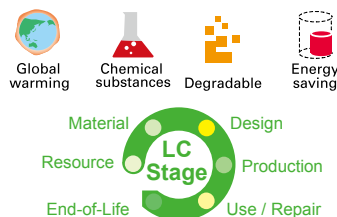
Home electric appliances / Lightings

office lighting fixture

High-efficiency office luminaire offering both energy and resource savings

High efficiency of the luminaire (lighting fitting) was achieved by using a white steel-plate reflector and aluminum mirror reflector with a reflectivity of more than 90%. Environmental load was reduced by using Cr-free steel plate without the soil pollution material, and by Pb-free electric wire and solder. In addition, total material quantity of the product was reduced by miniaturization and partial packaging. As for the source voltage to be used, the universal voltage of 100-242V has been realized.

- **Energy Saving:** The reflectance was improved from 83 % to 92 % for the main body and from 80% to 94% for the louver reflectance, and thereby the luminaire efficiency increased from 56% to 72%. As a result, the energy saving of 30% has been realized.
- **Resource Saving:** By the adoption of the voltage-free inverter, the stock space was halved. The height of luminaire was reduced from 83mm to 70mm, so the package material was reduced by 50%.
- **Elimination of harmful chemical substances:** steel plate not containing six valence chromium, Pb-free electric wire, and Pb-free solder are used.



TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

Minamishinagawa JN Bldg, 2-13, Minamishinagawa 2-chome,
Shinagawa-ku, Tokyo 140-8660, Japan
Tel 81-3-5463-8769 Fax 81-3-5463-8824
E-mail
URL <http://www.tlt.co.jp/>



FHR-42941NK-PH9

Eco-products

EP-1-058

Home electric appliances / Lightings

high efficiency led downlight

High-efficiency LED Downlight, considering economy and global warming prevention

In the accomplishment plan of the Kyoto Protocol, many measures were set for the prevention of global warming. Among them, "The spread of high efficiency lighting (LED) "was planned. "E-CORE" achieved the required performance for energy saving as well as economical efficiency, for the first time in the industry.

- **Energy Saving:** The same brightness as the incandescent bulb was realized with 1/7 power consumption.
- **Resource Saving:** The life of LED is 40,000 hours, which is 20 times of life of the incandescent bulb. Exchange of lamp is unnecessary for 10 years so 20 lamps are reduced.
- **Elimination of harmful chemical substances:** As the materials of the main body, chromium-free steel plate and lead-free solder were used. Lead-free electric wire was used for the wiring in the instrument.

The product won a prize at the 4th Eco-Products Awards.(E-CORE40) in Japan.



TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

Minamishinagawa JN Bldg, 2-13, Minamishinagawa 2-Chome,
Shinagawa-ku, Tokyo 140-8660, Japan
Tel 81-3-5463-8768 Fax 81-3-5463-8824
E-mail
URL <http://www.tlt.co.jp/>



E-CORE60:LEDD-66001W-LS1, E-CORE40:LEDD-44001W-LS1

Eco-products

EP-1-059

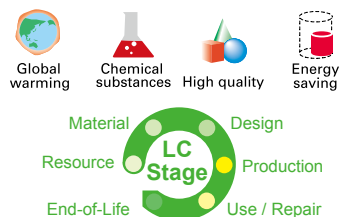
Home electric appliances / Lightings

ceramic metal halide lamps

Ceramic metal halide lamp, giving energy-saving high-grade illumination space

NEOCERA <PRIDE>145W is a high color rendering lamp. It has a lamp efficiency of 130lm/W which is highest in the lamp industry. It is a beautiful, bright light source of energy saving type, and it can realize a high-grade illumination space with small power consumption. If a street light is designed with this lamp and its exclusive appliance, 64% of energy saving is possible in comparison with the conventional street light.

- **Energy Saving:** Power consumption decreased from 400W to 145W, which gives 64% reduction.
- **Resource Saving:** The lamp became slim; the outer diameter decreased from 116mm to 40mm.
- **Elimination of harmful chemical substances:** The amount of mercury was reduced to below 1/5.



Neocera "PRIDE"145W

TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

Minamishinagawa JN Bldg, 2-13, Minamishinagawa 2-chome,
Shinagawa-ku, Tokyo 140-8660, Japan
Tel 81-3-5463-8750 Fax 81-3-5463-1085
E-mail
URL <http://www.tlt.co.jp/>

Eco-products

EP-1-060

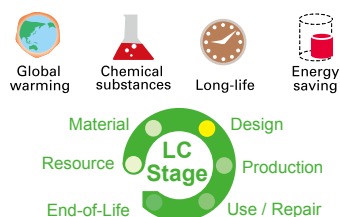
Home electric appliances / Lightings

ceiling lights

Japanese-style house-lighting equipment which adopted the plastic of plant origin

This product is friendly to earth and human being, and authorized by Japan Organics Recycling Association as the "biomass mark goods". By using this, it is possible to reduce the discharge of the greenhouse effect gas CO₂ which is a cause of the global warming, and to contribute to construct the recycling society.

- **Energy Saving:** Energy consumption efficiency was raised up by 8% compared to a comparison product (Model: FPH-7691ZK).
- **Resource Saving:** The fossil resources consumption at the time of the plastic production reduces about 30% in comparison with the oil-based plastic.



TOSHIBA LIGHTING & TECHNOLOGY CORPORATION

8-13, Sotokanda 1-chome, Chiyoda -ku, Tokyo 101-0021, Japan
Tel 81-3-5297-5715 Fax 81-3-3251-6601
E-mail
URL <http://www.tlt.co.jp>

FVH77607

Eco-products

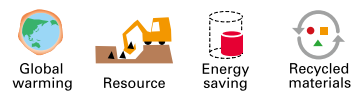
EP-1-061

Home electric appliances / Lightings

daylighting system

Solatube Daylighting System

Eurolite offers Solatube, Natural Daylighting System, which is energy - efficient & environmentally friendly . Engineered for Peace of Mind, innovations from Solatube offer huge amount of saving in utilities and contribution toward clean and green environment. Suitable for a wide variety of application including warehouse, industrial, commercial, education, etc.



Eurolite Group

20 Bukit Batok Crescent, Enterprise Centre 658080, Singapore
Tel 65-6896-3131 Fax 65-6899-3131
E-mail solatube@eurolite.com.sg
URL <http://www.eurolitegroup.com>

Available in : Worldwide

Eco-products

EP-1-062

Home electric appliances / Lightings

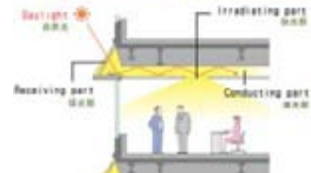
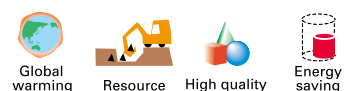
the daylighting system using mirror ducts

The Daylighting System using Mirror Ducts

The daylighting system using mirror ducts (the System) brings daylight into indoors. It is easy to use because it thoroughly diffuses and controls light during the receiving and conducting processes.

The System contributes to CO₂ discharge reduction by decreasing electric power usage for lighting as well as the creation of comfortable environments that artificial lighting cannot provide. It has the following characteristics:

1. A simple structure, utilizing mirrors to lead daylight into rooms, which supplies plenty of light economically.
2. High energy-use efficiency because the System simply uses natural light without converting it into electricity, etc.
3. No energy consumption to operate any machinery or equipment because there is nothing like sun-chasing devices.
4. Maintenance-free for significant time of period because its closed up structure protects itself from most trouble and deterioration.



The Daylighting System using Mirror Ducts

Materialhouse Co., Ltd.

1-19-3, Naka-ikegami, Ota-ku, Tokyo 146-0081, Japan
Tel 81-3-3751-5158 Fax 81-3-3755-0065
E-mail h.arai@materialhouse.co.jp
URL www.materialhouse.co.jp

Eco-products

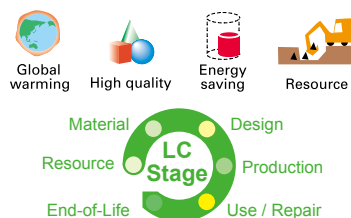
EP-1-063

Home electric appliances / Lightings

video cameras

High Definition Video Camera, HDC-SD5

- Standby power consumption of AC adaptor reduced to 0.1W due to low power circuit technology.
- Achieved Main Product weight(w/o Battery) of 340g (reduced by 20% compared with our current model HDC-SD3).
- Circuits have been integrated to promote energy saving, and compactness and light weight of circuit boards and fundamental parts have been improved.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)



Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>



Available in : Japan

High Definition SD Card Video Camera : HDC-SD5

Eco-products

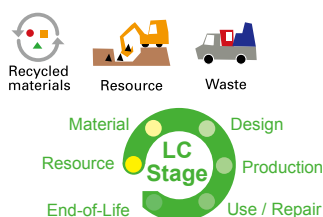
EP-1-064

Home electric appliances / Lightings

video cameras

Digital video camera recorder "Handycam" DCR-SR62

CDs disposed of by optical disc manufacturer Sony Music Manufacturing Inc. in Japan are converted into recycled polycarbonate using a proprietary method developed by the Sony Group that removes the surface coating through crushing and chemical cleaning. This recycled high quality plastics are used in the front panel of camcorder "DCR-SR62". Recycling loop started to go around within the Sony Group.



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



Digital video camera recorder "Handycam" DCR-SR62

Eco-products

EP-1-065

Home electric appliances / Lightings

video cameras

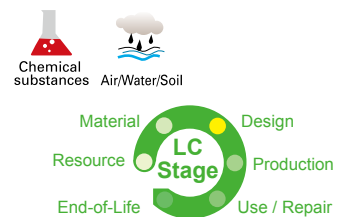
Digital high-definition video camera recorder "Handycam" HDR-SR8

While PVC currently is not regulated by any laws that apply to chemical substances used in electronics products, Sony is working to eliminate PVC wherever a viable alternative is available. For example, Sony has succeeded in eliminating PVC from the casing and packaging materials used for its products. In addition, Sony has switched to Polyolefin materials for certain power cables, AC adapter cords and electrical cords used in its products. Sony plans to substitute PVC in all new models of Mobile products (excluding accessories) by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.

And also, Sony is promoting the use of alternatives to brominated flame retardants (BFRs), which can generate harmful substances if treated improperly after disposal. Sony plans to substitute BFRs in the casing and main PWBs of all new models of Mobile products by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



Digital high-definition video camera recorder "Handycam" HDR-SR8

Eco-products

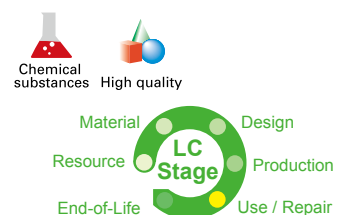
EP-1-066

Home electric appliances / Lightings

video cameras

BD CAMERA

5.3 Mega Pixel 1/2.8" CMOS Image Sensor Captures high definition video through a newly developed CMOS image sensor that can record video at 1920 x 1080/60Hz and still images at 2400 x 1800 pixels. 8 cm BD-RE/-R/DVD Drive Hitachi has developed a compact, low power consuming, quiet and highly reliable 8 cm BD/DVD drive which is compatible with five types of industry standard discs: BD-RE/-R, DVD-RAM/-RW/-R.



Hitachi,Ltd.,

292 Yoshida-cho, Totsuka-ku, Yokohama 244-0817, Japan
Tel 81-45-866-6152 Fax 81-45-866-5920
E-mail
URL <http://www.av.hitachi.co.jp>



DZ-BD7HSW

Eco-products

EP-1-067

Home electric appliances / Lightings

digital cameras

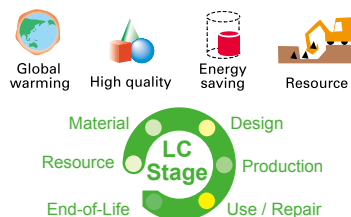
Digital Camera, LUMIX FZ18

/28mm wide-angle LEICA DC VARIO-ELMARIT lens with f/2.8-4.2 brightness and a powerful 18x optical zoom (equivalent to 28-504mm on a 35mm film camera) plus an 8.1 megapixel CCD into a compact, portable body.

- Achieved power consumption of 1.5W (reduced by 6% compared with our current model DMC-FZ8) due to low power circuit technology.
- Power saving performance realizing about 400 continuous shots.
- Circuits have been integrated to promote energy saving, and compactness and light weight of circuit boards and fundamental parts have been improved.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>



Available in : Japan

Digital Camera : LUMIX FZ18

Eco-products

EP-1-068

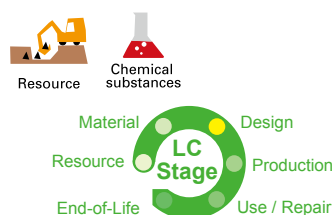
Home electric appliances / Lightings

digital camera

Digital Movie Camera VPC-HD1000

Smallest & Lightest (As of 24/08/2007 SANYO study of 1080i High Definition Video Camera)

Complies with RoHS Directive



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
Tel 81-77-543-5671 Fax 81-77-543-5618
E-mail hira074299@sanyo.co.jp
URL <http://www.sanyo.co.jp/>



VPC-HD1000

Eco-products

EP-1-069

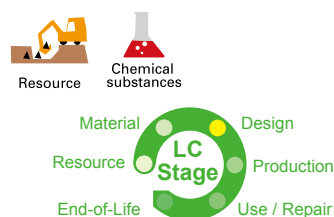
Home electric appliances / Lightings

digital camera

Digital Movie Camera VPC-HD700

Smallest & Lightest! (As of 11/01/06 SANYO study of 720p High Definition Video Camera)

Complies with RoHS Directive



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
 Tel 81-77-543-5671 Fax 81-77-543-5618
 E-mail hira074299@sanyo.co.jp
 URL <http://www.sanyo.co.jp/>



VPC-HD700

Eco-products

EP-1-070

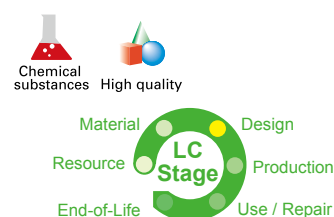
Home electric appliances / Lightings

digital camera

Digital Movie Camera VPC-CA65/E1

The world's 1st waterproofing Digital Movie Camera

Complies with RoHS Directive



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
 Tel 81-77-543-5671 Fax 81-77-543-5618
 E-mail hira074299@sanyo.co.jp
 URL <http://www.sanyo.co.jp/>



VPC-CA65/E1

Eco-products

EP-1-071

Home electric appliances / Lightings

blu-ray disc players

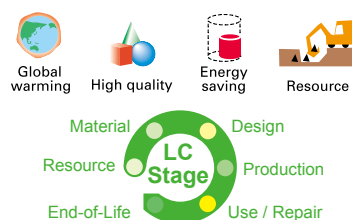
Blu-ray Disc player with SD Card Slot, DMP-BD30

Blu-ray Disc Player with SD Card Slot, Final Standard Profile, Precise Digital Audio & Video and UniPhier Technology

- Achieved power consumption of 25W (reduced by 40.4% compared with our current model DMP-BD10) due to low power circuit technology.
- Circuits are highly integrated to conserve energy, and compact and light weight design are employed for circuit boards and key components.
- Non-Use of Specific Chemical Substances *
(* Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>



Available in : Japan

Blu-ray Disc player with SD Card Slot : DMP-BD30

Eco-products

EP-1-072

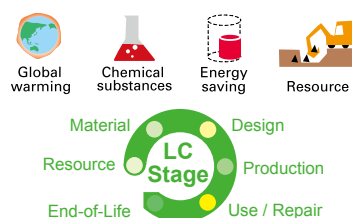
Home electric appliances / Lightings

blu-ray disc recorders

Blu-Ray disc recorder with digital HD tuner and HDD

Using lead-free solder and reducing standby power consumption by approx. 12 %, * the product is environmentally designed and achieved to save weight and thickness of its packaging while maintaining protective functions. The product not only reduces cardboard materials used but gives consideration to environmental impact due to transportation through improving transport efficiency.

- * Compared with our model "BDZ-V9." Brightness: lights-out Standby mode: Standard



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



BDZ-X90

Eco-products

EP-1-073

Home electric appliances / Lightings

digital audio players

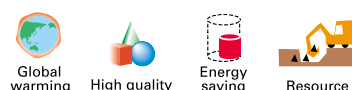
SD Audio Player, SV-SD850N

- Achieved power consumption of 0.023W (reduced by 27% compared with our current model SV-SD350V) due to low power circuit technology.
- Circuits have been integrated to promote energy saving, and compactness and light weight of circuit boards and fundamental parts have been improved.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>

Available in : Japan



SD Audio Player, SV-SD850N

Eco-products

EP-1-074

Home electric appliances / Lightings

portable dvd player

Portable DVD Player DVP-FX850/FX860DT

Mercury-free backlight is used in high-definition LCD which you can enjoy more beautiful DVD images. You can watch or play DVDs with a battery capacity of up to approx. 6 hours, so you do not have to be worried about the battery to run out soon. DVD-FX860DT is equipped with one-segment broadcasting tuner and its battery will allow you to watch one-segment broadcasting program for approx. six hours continuously.

* In case of using LCD backlight at minimum with headphones (sold separately) indoors. The battery life depends on the use environment or status of the battery and might shorten the time you watch/play DVDs.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



DVP-FX860DT (Model equipped with one-segment broadcasting tuner)

Eco-products

EP-1-075

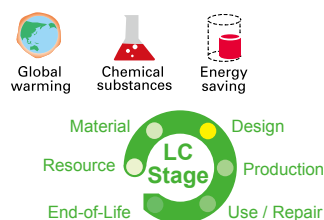
Home electric appliances / Lightings

HDD & DVD recorder

HDD & DVD recorder "RD-E301"

RD-E301 is a DVD recorder corresponding to recording the high-definition television broadcasting to the hard disk. And it corresponded to two programs recording of the high-definition television broadcasting and the analog broadcasting simultaneously.

- **Energy Saving:** 22% of the power consumption was reduced. 19 grams a day of CO₂ emissions were reduced. (Benchmark model: RD-X1)
- **Resource Saving:** 46% of the volume and 33% of the weight were reduced by the adoption of a thin-type design. (Benchmark model: RD-X1)



TOSHIBA CORPORATION Digital Media Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
 Tel 81-3-3457-2581 Fax 81-3-5444-9407
 E-mail
 URL <http://www.toshiba.co.jp>



Available in : Japan

RD-E301

Eco-products

EP-1-076

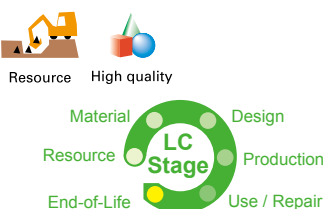
Home electric appliances / Lightings

batteries

eneloop HR-3UTG

As part of the new "eneloop lifestyle", eneloop is thought of as a "living battery", not a disposable one. eneloop can be used repeatedly and can be recycled. eneloop was created by SANYO Electric as the first "ready to use" rechargeable battery that can replace dry cells.

We believe that by creating this necessary product we are contributing to and helping maintain a beautiful world for our children and their future. eneloop was developed as the first product that embodies the "Think Gaia" SANYO vision. It can be safely recycled, is resource efficient and of course RoHS compliant. eneloop is more powerful than dry batteries, especially useful at low temperatures, longer lasting and rechargeable. Moreover, it can be used about 1000 times, which makes it economical. SANYO's eneloop unites a more comfortable lifestyle with a concern for the global environment.



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
 Tel 81-77-543-5671 Fax 81-77-543-5618
 E-mail hira074299@sanyo.co.jp
 URL <http://www.sanyo.co.jp/>



eneloop HR-3UTG

Eco-products

EP-1-077

Home electric appliances / Lightings

primary batteries

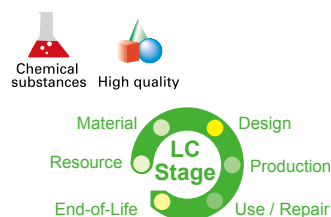
Mercury-Free Silver Oxide Batteries

Silver oxide batteries, used in wristwatches and other small products, traditionally contain mercury to prevent the generation of hydrogen gas; a cause of the deterioration of batteries. Because the production of silver oxide batteries without mercury has generally been seen as unfeasible, the use of mercury in these batteries is exempted ^{※1}. Sony has been conducting research with the aim of realizing mercury-free silver oxide batteries since the 1990s. These efforts led to the development of the technologies; new zinc alloy powder, new anticorrosion material in anode and new zinc anticorrosion process onto the collector. These technologies have facilitated the production of mercury-free batteries that deliver equal safety and performance as their conventional batteries.

※1 Under the EU Directive 2006/66/EC on batteries and accumulators, exemption provided for mercury content of maximum 2% by weight.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



Mercury-free silver oxide battery, SR626SW

Eco-products

EP-1-078

Home electric appliances / Lightings

digital audio players

WALKMAN NW-A800 series

While PVC currently is not regulated by any laws that apply to chemical substances used in electronics products, Sony is working to eliminate PVC wherever a viable alternative is available. For example, Sony has succeeded in eliminating PVC from the casing and packaging materials used for its products. In addition, Sony has switched to Polyolefin materials for certain power cables, AC adapter cords and electrical cords used in its products. Sony plans to substitute PVC in all new models of Mobile products (excluding accessories) by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.

And also, Sony is promoting the use of alternatives to brominated flame retardants (BFRs), which can generate harmful substances if treated improperly after disposal. Sony plans to substitute BFRs in the casing and main PWBs of all new models of Mobile products by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



WALKMAN NW-A800

Eco-products

EP-1-079

Home electric appliances / Lightings

mini discs

Mini Disc using Recycled Plastic

Sony's Bianca minidisc (MD) uses recycled resin for approximately 30% of total plastic content, excluding the disc itself. Index cards are made from recycled paper and printed using volatile organic compound (VOC)-free vegetable oil-based ink.



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



Minidisc, 5MDW74BAA

Eco-products

EP-1-080

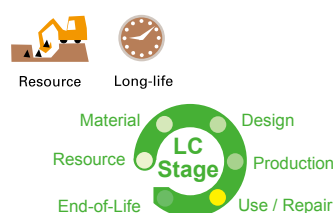
Home electric appliances / Lightings

magnetic discs

Next-Generation DVD HD DVD-R

Hitachi Maxell has developed a next-generation DVD HD DVD-R product with a 15 gigabyte storage capacity, 3.2 times larger than that of conventional DVD-Rs.

A newly developed recording player with organic dye and high-precision stamper (master) have realized higher density and capacity. Efficient energy and resource utilization has been also achieved. As a result, CO₂ emissions per unit capacity is reduced by 70%.



Hitachi Maxell, Ltd.

1-1-88 Ushitora, Ibaraki-shi, Osaka 567-8567, Japan
Tel 81-72-623-8250 Fax 81-72-623-9014
E-mail kankyo@maxell.co.jp
URL <http://www.maxell.com/>



HDR 15P. 1P

Eco-products

EP-1-081

Home electric appliances / Lightings

radio receivers

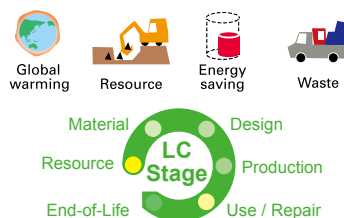
Portable Radio ICF-B01

Cranking the handle will charge a built-in rechargeable battery. You can listen to FM/AM radio or use the light without having dry batteries. In addition, you can charge your mobile phone by cranking the handle or dry batteries. A minute of cranking gives you an hour of AM reception, 15 minutes of light, 90 minutes of keeping the standby screen of the mobile or 3 minutes of talk on the mobile ^{*1}. The radio has two light settings, high-intensity LED flashlight and soft light. This product is splash resistant and specifically designed for use in emergency situations. A big tuning knob and a handle cranked in both directions are examples of our focus on user-friendliness. The product has all hand-cranked goodness.

^{*1} Standby time or duration of call should be used only as a guide, and do not adjust to all of the models.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



TV(1-3ch)/FM/AM Portable radio [ICF-B01]

Eco-products

EP-1-082

Home electric appliances / Lightings

television receivers

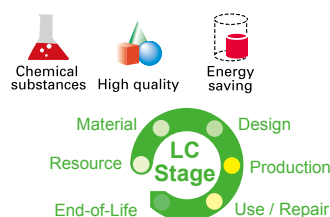
Hi-vision Plasma-TV "VIERA" PX70 Series (37)

Energy saving, high definition and high quality Plasma-TV

- Big image, space saving and high quality
 - "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
 - Under speaker type
1. Non-Use of lead for plasma panels (world's first)
 2. Non-Use of vinyl chloride resins for internal wires
 3. Annual power consumption: Reduced by approx. 45% (compared with the conventional model, TH-37PX300)
 4. Long lifetime design of LCD panel: Approx. 60,000 hours
 5. Brightness sensor: Automatic picture brightness control according to room brightness
 6. Power consumption switching mode: Peak brightness down with bright seans by setting
 7. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd. Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>



Plasma-TV "VIERA" : TH-37PX70

Available in : Japan

Eco-products

EP-1-083

Home electric appliances / Lightings

television receivers

Hi-vision Plasma-TV "VIERA" PX70S Series (37)

Energy saving, high definition and high quality Plasma-TV

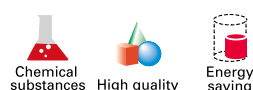
- Big image, space saving and high quality
- "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
- Side speaker type

1. Non-Use of lead for plasma panels (world's first)
2. Non-Use of vinyl chloride resins for internal wires
3. Annual power consumption: Reduced by approx. 45% (compared with the conventional model, TH-37PX300)
4. Long lifetime design of LCD panel: Approx. 60,000 hours
5. Brightness sensor: Automatic picture brightness control according to room brightness
6. Power consumption switching mode: Peak brightness down with bright seans by setting
7. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>

Available in : Japan



Plasma-TV "VIERA" : TH-37PX70S

Eco-products

EP-1-084

Home electric appliances / Lightings

television receivers

Hi-vision Plasma-TV "VIERA" PX70 Series (42)

Energy saving, high definition and high quality Plasma-TV

- Big image, space saving and high quality
- "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
- Under speaker type

1. Non-Use of lead for plasma panels (world's first)
2. Non-Use of vinyl chloride resins for internal wires
3. Annual power consumption: Reduced by approx. 45% (compared with the conventional model, TH-42PX300)
4. Long lifetime design of LCD panel: Approx. 60,000 hours
5. Brightness sensor: Automatic picture brightness control according to room brightness
6. Power consumption switching mode: Peak brightness down with bright seans by setting
7. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>

Available in : Japan



Plasma-TV "VIERA" : TH-42PX70

Eco-products

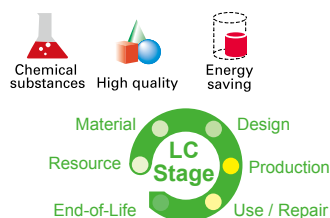
EP-1-085

Home electric appliances / Lightings

television receivers

Hi-vision Plasma-TV "VIERA" PX70 Series (50)

- Big image, space saving and high quality
 - "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
 - Side speaker type
1. Non-Use of lead for plasma panels (world's first)
 2. Non-Use of vinyl chloride resins for internal wires
 3. Annual power consumption: Reduced by approx. 41% (compared with the conventional model, TH-50PX300)
 4. Long lifetime design of LCD panel: Approx. 60,000 hours
 5. Brightness sensor: Automatic picture brightness control according to room brightness
 6. Power consumption switching mode: Peak brightness down with bright seans by setting
 7. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours



Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
 Tel 81-6-6905-5758 Fax 81-6-6905-5927
 E-mail
 URL <http://panasonic.jp/tv/>

Available in : Japan

Plasma-TV "VIERA" : TH-50PX70

Eco-products

EP-1-086

Home electric appliances / Lightings

liquid crystal television receivers

"REAL" - A LCD television having various energy saving functions

-----<< E : Energy >>-----

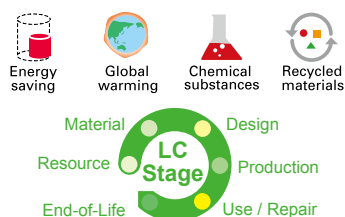
- (1) "Brightness sensor" detects the brightness of the room automatically and controls the brightness of the screen ideally.
- (2) There are various functions for consumption electricity savings.
 - "Electric energy saving mode" holds down the brightness of the screen and saves consumption electricity.
 - "No operation economy in power consumption mode", switches it off automatically when it was not operated for about 3 hours.
 - "No signal economy in power consumption mode" switches it off automatically when it passed for about 10 minutes as soon as broadcast was finished and back video signal cried.
 - "Sensor economy in power consumption mode" cuts a power supply automatically about 6 seconds later after a room becomes dark.
 - "Delete picture mode" deletes a screen and outputs only a sound.
- (3) It is designed to consume absolutely 0W when the main power supply is off.

-----<< M : Material >>-----

It adopts recycled styrene in the stands

-----<< T : Toxicity >>-----

Does not use any substances subject to the EU's RoHS Directive or JIS's J-Moss



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
 Tel 81-3-3218-9024 Fax 81-3-3218-2465
 E-mail eqd.eco@pj.MitsubishiElectric.co.jp
 URL www.MitsubishiElectric.co.jp

Available in : Japan

"REAL" LCD-H52MZ75

Eco-products

EP-1-087

Home electric appliances / Lightings

television receivers, except liquid crystal receivers

Plasma Display Television

The visual experience of HD is all about resolution-that is, the number of lines and pixels on the screen. Hitachi's revolutionary ALIS Panel serves as the canvas on which the colors and shapes of the visual artist are painted.

- Product features
 - High resolution full HD panel for digital HD broadcast.
 - Just insert the removable HDD 「iVDR-S」 into 「iV pocket」 for easy recording and increasing capacity.
 - Reproduces 24-exposure films to smooth motion pictures.
- Environment consideration
 - Adapted to RoHS.
 - Use of non halogen plastic material for the cabinet part.
 - 「Low power consumption mode」 feature, can adjust screen brightness.
 - 「Automatic power off」 feature, after certain period of no operation and receipt of no signals, the power will be cut automatically.
 - Using eco paint to reduce VOC materials.
 - Encouraging the use of ester alcohol materials instead of toluene and xylene (VOC) for environment consideration.



P50-XR01

Hitachi, Ltd.,

292 Yoshida-cho, Totsuka-ku, Yokohama 244-0817, Japan
 Tel 81-45-866-6152 Fax 81-45-866-5920
 E-mail
 URL <http://av.hitachi.co.jp>

Eco-products

EP-1-088

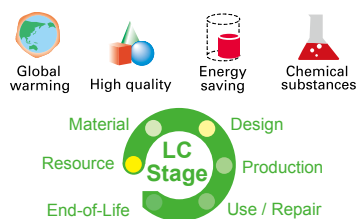
Home electric appliances / Lightings

hi-definition plasma TV

Hi-Definition Plasma TV with minimum power consumption and lightest weight

This High Definition Plasma Television achieved a high quality picture and low power consumption by our various unique advanced technologies. High contrast of jet-black and bright color is realized by developing the crystal emissive layer and the new electron source. At the same time, the high efficiency luminescence achieved the industry's minimum level of rated power consumption of 368W. In addition, its energy saving mode function enables you to view it without budget concerns even for a long period of time. Moreover, the development of direct filter realized the extremely low reflection to the display panels resulting the high quality regardless the viewing environment, and also the reduction of use of filter glasses brings the lowest class of weight in the industry.

※ 1. Resources from the research on 50-inch PDPs for Japan as of August 2, 2007 provided by Pioneer



PDP-508HX

PIONEER CORPORATION

545-57 Ogura, Saiwai-ku, Kawasaki-shi, Kanagawa-ken 212-0054, Japan
 Tel 81-44-580-4275 Fax
 E-mail products_eco@post.pioneer.co.jp
 URL <http://www//pioneer.jp>

Eco-products

EP-1-089

Home electric appliances / Lightings

hi-definition plasma TV

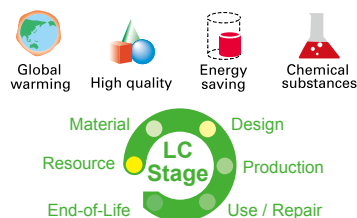
Hi-Definition Plasma TV with minimum power consumption and high quality picture

This High Definition Plasma Television achieved a high quality picture and low power consumption by our various unique advanced technologies. High contrast of jet-black and bright color is realized by developing the crystal emissive layer and the new electron source. At the same time, the high efficiency luminescence achieved the industry's minimum level of rated power consumption of 296W. In addition, its energy saving mode function enables you to view it without budget concerns even for a long period of time. Moreover, the development of direct filter realized the extremely low reflection to the display panels resulting the high quality regardless the viewing environment, and also the reduction of use of filter glasses brings the lowest class of weight in the industry.

※ 1. Resources from the research on 42-inch PDPs for Japan as of August 2, 2007 provided by Pioneer

PIONEER CORPORATION

545-57 Ogura, Saiwai-ku, Kawasaki-shi, Kanagawa-ken 212-0054, Japan
Tel 81-44-580-4275 Fax
E-mail products_eco@post.pioneer.co.jp
URL <http://www.pioneer.jp>



PDP-428HX

Eco-products

EP-1-090

Home electric appliances / Lightings

liquid crystal TV receivers

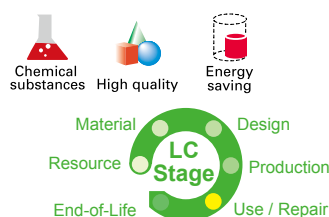
Hi-vision LCD-TV "VIERA" LX70 Series (20/23)

Wide view angle, high definition and high quality picture LCD-TV

- Wide view angle, space saving and high quality
 - "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
 - Under speaker type
1. Annual power consumption: Reduced by approx. 23/17% (20/23 inches, compared with the conventional model, TH-20/23LX60)
 2. Non-Use of vinyl chloride resins for internal wires
 3. Long lifetime design of LCD panel: Approx. 60,000 hours
 4. Brightness sensor: Automatic picture brightness control according to room brightness
 5. Power consumption switching mode: Peak brightness down with bright seans by setting
 6. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd. Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>



Available in : Japan

LCD-TV : TH-23LX70

Eco-products

EP-1-091

Home electric appliances / Lightings

liquid crystal TV receivers

Hi-vision LCD-TV "VIERA" LX70 Series (26/32)

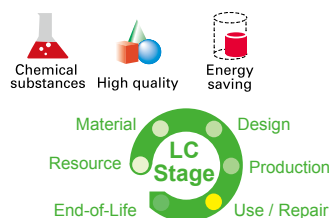
Wide view angle, high definition and high quality picture LCD-TV

- Wide view angle, space saving and high quality
- "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
- Under speaker type

1. Annual power consumption: Reduced by approx. 26/13% (26/32 inches, compared with the conventional model, TH-26/32LX60)
2. Non-Use of vinyl chloride resins for internal wires
3. Long lifetime design of LCD panel: Approx. 60,000 hours
4. Brightness sensor: Automatic picture brightness control according to room brightness
5. Power consumption switching mode: Peak brightness down with bright seans by setting
6. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>



LCD-TV "VIERA" : TH-32LX70

Available in : Japan

Eco-products

EP-1-092

Home electric appliances / Lightings

liquid crystal TV receivers

Hi-vision LCD-TV "VIERA" LX75S Series (26/32)

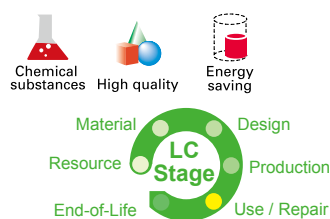
LCD-TV for better reproduction of 3D and fast-moving images

- Wide view angle, space saving and high quality
- "VIERA LINK" making possible a remote controle of Panasonic's DVDs and AV amps by controle signals with HDMI cables
- Side speaker type

1. Annual power consumption: Reduced by approx. 23/23% (26/32 inches, compared with the conventional model, TH-26/32LX65)
2. Non-Use of vinyl chloride resins for internal wires
3. Long lifetime design of LCD panel: Approx. 60,000 hours
4. Brightness sensor: Automatic picture brightness control according to room brightness
5. Power consumption switching mode: Peak brightness down with bright seans by setting
6. Automatic power off: In case of no signals for more than ten minutes or no directions for more than three hours

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-5758 Fax 81-6-6905-5927
E-mail
URL <http://panasonic.jp/tv/>



LCD-TV "VIERA" : TH-32LX75S

Available in : Japan

Eco-products

EP-1-093

Home electric appliances / Lightings

liquid crystal TV receivers

65/57/52/46/42V-inch Terrestrial/BS/CS110 Digital HD LCD TV

RX1series

High definition TV, equipped with Full high-definition Resolution (1920x1080 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology. (boasts a high contrast ratio of 3,000:1)

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- TV stand using 20% recycled material
- Closed-loop material recyclable rear cabinet *¹
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

In addition, we have developed world-first technology for painting the plastic parts of consumer electronics with plant-based paint made from corn. That technology is used for the stand of these models.

*¹ without 65/57 inch model

SHARP CORPORATION

22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan

Tel 81-6-6625-0434 Fax 81-6-6625-0153

E-mail eco-info@sharp.co.jp

URL <http://www.sharp.co.jp>



Products/Model: AQUOS LCD TV LC-65RX1W

Eco-products

EP-1-094

Home electric appliances / Lightings

liquid crystal TV receivers

52/46/42/37V-inch Terrestrial/BS/CS110 Digital HD LCD TV

GX3 series

High definition TV, equipped with Full high-definition Resolution (1920x1080 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology. (Slim, Compact design)

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- TV stand using 20% recycled material
- Closed-loop material recyclable rear cabinet (without LC-37GX3)
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

In addition, we have developed world-first technology for painting the plastic parts of consumer electronics with plant-based paint made from corn. That technology is used for the stand of these models

SHARP CORPORATION

22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan

Tel 81-6-6625-0438 Fax 81-6-6625-0153

E-mail eco-info@sharp.co.jp

URL <http://www.sharp.co.jp/>



Products/Model: AQUOS LCD TV LC-37BD1W/32BD1/26BD1

Eco-products

EP-1-095

Home electric appliances / Lightings

liquid crystal TV receivers

52/46/42/37V-inch Terrestrial/BS/CS110 Digital HD LCD TV

GX4 series

High definition TV, equipped with Full high-definition Resolution (1920x1080 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology.(Slim,Compact design)

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- TV stand using 20% recycled material
- Closed-loop material recyclable rear cabinet(except LC-37GX4).
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

In addition, we have developed world-first technology for painting the plastic parts of consumer electronics with plant-based paint made from corn. That technology is used for the stand of these models.

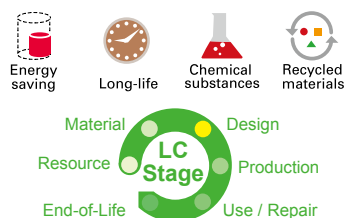
SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan

Tel 81-6-6625-0438 Fax 81-6-6625-0153

E-mail eco-info@sharp.co.jp

URL <http://www.sharp.co.jp/>



Available in :

Products/Model:AQUOS LCD TV LC-52GX4W

Eco-products

EP-1-096

Home electric appliances / Lightings

liquid crystal TV receivers

42/37/32V-inch Terrestrial/BS/CS110 Digital HD LCD TV

DS3 series

High definition TV, equipped with Full high-definition Resolution (1920x1080 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology.(Stylish design)

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- TV stand using 20% recycled material
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

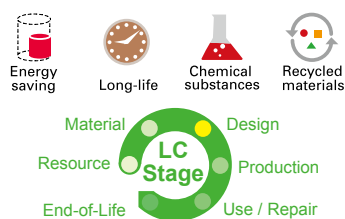
SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan

Tel 81-6-6625-0438 Fax 81-6-6625-0153

E-mail eco-info@sharp.co.jp

URL <http://www.sharp.co.jp/>



Products/Model:AQUOS LCD TV LC-42DS3-B(Black)

Eco-products

EP-1-097

Home electric appliances / Lightings

liquid crystal TV receivers

32/26V-inch Terrestrial/BS/CS110 Digital HD LCD TV

GH4 series

High definition TV, equipped with high-definition Resolution (1366x768 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology.

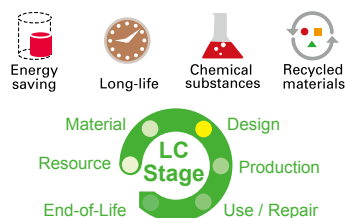
AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- Stand using 20% recycled material
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>



Products/Model:AQUOS LCD TV LC-32GH3

Eco-products

EP-1-098

Home electric appliances / Lightings

liquid crystal TV receivers

32/26V-inch Terrestrial/BS/CS110 Digital HD LCD TV

GH4 series

High definition TV, equipped with high-definition Resolution (1366x768 pixels) liquid crystal panel and Double-speed 120-Hz frame rate conversion LCD technology.

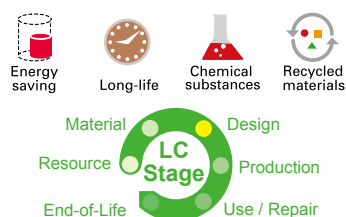
AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- Stand using 20% recycled material
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>



Products/Model:AQUOS LCD TV LC-32GH4

Eco-products

EP-1-099

Home electric appliances / Lightings

liquid crystal TV receivers

32/26/20V-inch Terrestrial/BS/CS110 Digital HD LCD TV

D10 series

High definition TV, equipped with high-definition Resolution (1366x768 pixels) liquid crystal panel.

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- Stand using 20% recycled material
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>



Products/Model:AQUOS LCD TV LC-32D10-W(White)

Eco-products

EP-1-100

Home electric appliances / Lightings

liquid crystal TV receivers

16V-inch Terrestrial/BS/CS110 Digital HD LCD TV

E1 series

High definition TV, equipped with high-definition Resolution (1366x768 pixels) liquid crystal panel (Small/Personal use)

AQUOS is an energy-efficient, space- and resource-saving product and minimizes harmful substances in its parts, and uses recycled materials.

Environmental performance of AQUOS

- Backlight life is about 60,000 hours.
- Stand using 20% recycled material
- Non-halogen cabinet
- Lead-free solder circuit board
- Hexavalent chromium-free sheet steel
- Non-halogen power cords and inner cables
- Hexavalent chromium-free fasteners (nuts and bolts)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>



Products/Model:AQUOS LCD TV LC-16E1-R(Red)

Eco-products

EP-1-101

Home electric appliances / Lightings

liquid crystal TV receivers

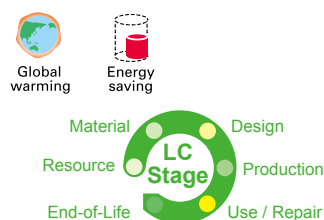
Realizing brilliant pictures with low energy consumption. "BRAVIA" LCD televisions

The BRAVIA V5000 series of LCD televisions feature the Live Color Creation backlight system, which widens the color gamut and creates high-purity primary colors (cyan, yellow and magenta), thereby enabling these televisions to deliver true-to-life color while keeping power consumption to a minimum. The BRAVIA V5000 series's televisions are also equipped with an Advanced Contrast Enhancer, which automatically adjusts backlight intensity in response to the brightness of the image, as well as a Light Sensor, which adjusts the screen brightness in response to ambient brightness. Thanks to such features, the KDL-52V5000 model has achieved 170% for the energy-conservation standard of the energy-saving laws in Japan, and has attained the industry's highest energy-saving performance.^{※1}

※1 As of December 2007, comparison is with digital LCD televisions sold in the Japanese market and based on Sony data.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



Terrestrial/BS/110 CS digital high-definition television BRAVIA KDL-52V5000

Eco-products

EP-1-102

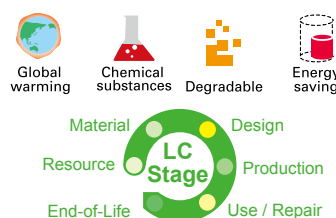
Home electric appliances / Lightings

liquid crystal TV receivers

Liquid crystal television "REGZA" in which the beauty and the environment is compatible.

"REGZA -37C3500" is simple high-resolution model of the Toshiba liquid crystal television. The user can enjoy the beauty of expanding image, because this television has "the interlock force" as well as "the description force".

- **Energy Saving:** Annual power consumption is equivalent to that of WXGA in spite of full HD.
- **Resource Saving:** The weight of a set was reduced by 18 % owing to minimal design.



TOSHIBA CORPORATION Digital Media Network Company

1-9-2, Hatara-cho, Fukaya-Shi, Saitama 366-8510, Japan
Tel 81-48-574-2532 Fax 81-48-572-8120
E-mail tooru.hirata@toshiba.co.jp
URL <http://www.toshiba.co.jp>

37C3500

Eco-products

EP-1-103

Home electric appliances / Lightings

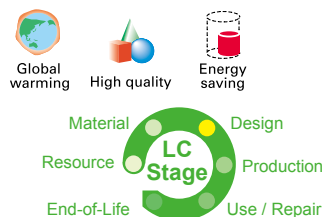
liquid crystal TV receivers

LCD Television

The UT series is designed to free customers from restrictions of where to place the TV. The monitor of the UT series, which is 35 mm thin, is more than just a TV suitable to be hung on a wall.

By separating the Wooo station from the monitor, the UT series provides consumers with a range of options for placement throughout the home, as well as ease in connecting with other consumer electronic equipments.

The body design increased 20% of transport efficiency compared to the current model and consequently reduced the emissions.



Hitachi,Ltd.,

292 Yoshida-cho, Totsuka-ku, Yokohama 244-0817, Japan
Tel 81-45-866-6152 Fax 81-45-866-5920
E-mail
URL <http://av.hitachi.co.jp>



UT32-HV700

Eco-products

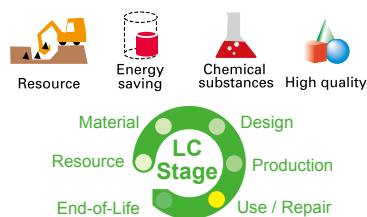
EP-1-104

Home electric appliances / Lightings

OLED (organic light-emitting diode) TV

World's first OLED (organic light-emitting diode) TV "XEL-1"

As OLEDs are light-emitting, there is no need for an additional light source such as a backlight system. Sony's "Organic Panel" consists of an organic material layer of just several hundred nanometers thickness, with two extremely thin glass panels aligned on either side of the organic material layer. This realizes a new TV form factor measuring approximately 3mm at its thinnest point, and contributes to saving energy as well. OLED does not require a separate light source, therefore it can be powered using very low voltages. This means that OLED TVs consume extremely low levels of power compared with other display devices. As a result, the power consumption of this product is as low as 45W. In addition, this model does not use mercury generally included in the backlight.



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



OLED (organic light-emitting diode) TV "XEL-1"

Eco-products

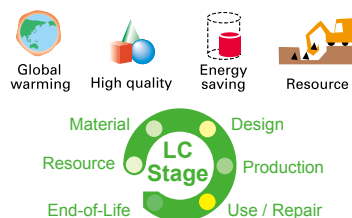
EP-1-105

Home electric appliances / Lightings

stereo sets

SD Stereo System, D-dock SX950

- Achieved stand-by power consumption of 0.1W due to low power circuit technology.
- Circuits have been integrated to promote energy saving, and compactness and light weight of circuit boards and fundamental parts have been improved.
- Non-Use of Specific Chemical Substances *
(* : Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)



Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>



Available in : Japan

SD Stereo System : SC-SX950

Eco-products

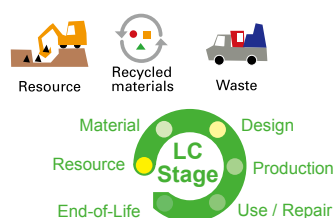
EP-1-106

Home electric appliances / Lightings

stereo sets

Mini Hi-Fi system using recycled polystyrene, FST-ZUX9 and LBT-ZUX10D

FST-ZUX9 and LBT-ZUX10D mini Hi-Fi systems use high-quality recycled polystyrene made from used plastic inside the products. This recycled polystyrene accounts for 5% by total weight of the product.



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



FST-ZUX9 uses recycled plastic

Eco-products

EP-1-107

Home electric appliances / Lightings

digital photo printers

Digital Photo Printer DPP-FP70/90

While PVC currently is not regulated by any laws that apply to chemical substances used in electronics products, Sony is working to eliminate PVC wherever a viable alternative is available. For example, Sony has succeeded in eliminating PVC from the casing and packaging materials used for its products. In addition, Sony has switched to Polyolefin materials for certain power cables, AC adapter cords and electrical cords used in its products. Sony plans to substitute PVC in all new models of Mobile products (excluding accessories) by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.



Digital Photo Printer DPP-FP70

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>

Eco-products

EP-1-108

Home electric appliances / Lightings

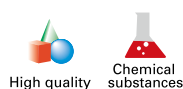
electric bicycle

Electric Hybrid Bicycle CY-SPE26DK

1) New Auto Mode (Auto Controll Assist & Auto Recharge System) Auto Mode is smart automatic control program. No lose the feeling of assistance and Extend mileage. Mileage can be extended about 70%* compared with Standard Mode w/o using regeneration charge.

* At continuous running by "SANYO standard pattern"

- 2) The regenerative break charge system.
- 3) The new S character frame which had a cord and a wire built-in.
- 4) Adoption of lead-free solder.
- 5) Abolition of foamed polystyrene for packaging.



SANYO Electric Co., Ltd.

1-1, Seta, 1-chome, Otsu City, Shiga 520-2134, Japan
Tel 81-77-543-5671 Fax 81-77-543-5618
E-mail hira074299@sanyo.co.jp
URL <http://www.sanyo.co.jp/>

CY-SPE26DK

Eco-products

EP-1-109

Home electric appliances / Lightings

air purifiers

Air purifier using Plasmacluster ion technology

Newly developed 'Plasmacluster Ion Shower' inactivates airborne mold fungi and harmful bacteria as well as removes drifting house dust in interior spaces by releasing a burst of powerful Plasmacluster Ions in a shower-like pattern into the air.

DC motor and inverter control contribute to reduce energy consumption and achieve an annual electric bill of about 390 JP yen. (This is calculated based on power consumption during silent running and power charge per unit of 22 yen/kWh(tax included) as a rough standard.) Standby power consumption is 0.3W. We have eliminated the use of specific brominated flame retardant. Vegetative soy ink and recycled paper are used for the instruction manual. We also applied lead-free solder to the circuit board and a bicapsular cabtyre cord to allow the product to be placed on the floor.

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>



Air Purifier FU-U53CX-W

Eco-products

EP-1-110

Home electric appliances / Lightings

water purifiers

Alkaline Ion Water Purifier of low standby power consumption

<Product Features>

- Water-saving design reduces 70% drainage*, save water of 1.7t annually. (*compared with TK7505)
- 13 substances regulated by the JIS standard are removed.
- Standby power consumption is decreased 85% compared with the conventional model. (1.4W → 0.2W)



Alkaline Ion Water Purifier : TK7507-W

Matsushita Electric Works, Ltd.

1048 Kadoma, Kadoma, Osaka 571-8686, Japan
Tel 81-6-6908-1131 Fax
E-mail
URL <http://national.jp/product/health/alkaline/>

Available in : Japan

Eco-products

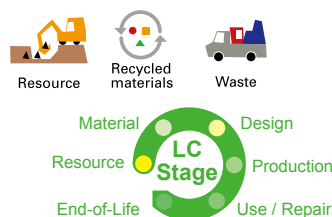
EP-1-111

Home electric appliances / Lightings

high definition wireless link set

High Definition Wireless Link Set "LF-W1HD"

Materials mixed with recycled plastics are used in exterior frame, cases for each pair and stand of this product. Moreover, recycled plastic mixed with waste CD is used in the top cover. Sony proactively promotes to use recycled plastic materials in order to reduce the amount of exhaustible resource newly used. Regarding recycled plastic, waste CDs, unsold or sample CDs generated in CD manufacturing processes within Sony Group and CDs collected via distribution network of Sony affiliate companies are processed into the basic recycled plastic material using a proprietary method (crushing and removing the surface coating) developed by Sony Music Manufacturing Inc. Blended with other resin and additives, the basic recycled plastic is compounded with glossy black flame-retardant recycled plastic.



Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>

High Definition Wireless Link Set "LF-W1HD"

Eco-products

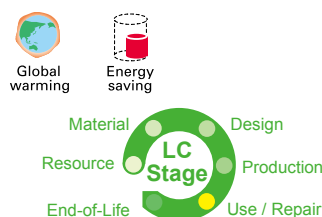
EP-1-112

Home electric appliances / Lightings

water heaters

Heat Pump Water Heater for Home Use

- High performance with the adoption of a newly developed heat pump unit as well as Hitachi's original direct connection water supply system.
- A highly reliable, original heat exchanger and the newly developed heat pump unit are integrated. As a result, compared to conventional models, the product saves about a week equivalent of power consumption over a year.
- Improved ease of use with the adoption of a voice-function-equipped LCD remote control. The display equipped with a white LCD is easy to see. In addition, the product is equipped with a "Kindness mode" which informs the user of the contents of operations by voice and screen display and an "Tell-me" button, which informs the user of the current settings by voice.
- Improved ease of delivery with the adoption of a round form for the hot-water storage tank unit. The hot-water storage tank unit has a round form. Moreover, tank unit thinnest in the home appliance industry sector, with a width of 415 mm, has realized easy installation even in small spaces. Furthermore, the tank is about ten percent lighter than a conventional model and handles inside the bottom pillars are newly equipped, both of which improve easiness of delivery.



Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo 105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

BHP-FS37ED (For Japanese Market)

Eco-products

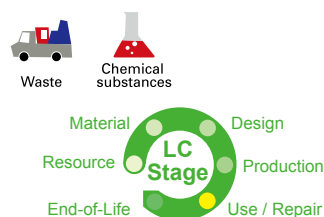
EP-1-113

Home electric appliances / Lightings

disposers

Home Garbage Disposers

- It can reduce the volume of 400g of garbage to about 1/7 of the original volume in approximately 85 minutes.
- Compliance with the RoHS Directive by alternating materials and parts with those having less environmental impacts.



ECO-V30 (For Japanese Market)

Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

Eco-products

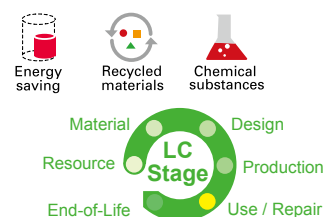
EP-1-114

Home electric appliances / Lightings

air purifiers

Air Purifier with Humidifying Operation

- Reduced power consumption through the adoption of an inverter motor and wing turbofan.
- Odor absorbent composed of artificial zeolite that is manufactured from incineration ash produced through thermal power generation.
- Compliance with the RoHS Directive by alternating materials and parts with those having less environmental impacts



EP-BV60 (For Japanese Market)

Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo
105-8410, Japan
Tel 81-3-3502-2111 Fax
E-mail
URL <http://www.hitachi-ap.co.jp/>

Eco-products

EP-1-115

Home electric appliances / Lightings

dishwashers

Steam engine-mounted dish washer of high detergency and low noise

Feature of this product is that the great detergency was realized by the installation of a steam engine. As for this machine model, low noise driving (about 35 dB) is possible, so the user can spend a relaxed time after meal. Since three slides and folding pins were adopted for convenience, it is easy to set various tableware.

- **Energy Saving:** Total expense of water service, detergent and electricity is lower than half of that of the hand washing.
- **Resource Saving:** Water consumption is about 1/9 in comparison with the hand washing.



DWS-600B

TOSHIBA HOME APPLIANCES CORPORATION

991, Anada-Cho, Seto-Shi, Aichi 489-8610, Japan

Tel Fax

E-mail

URL http://www.toshiba.co.jp/index_j3.htm, <http://www.toshiba.co.jp/tcm/>

Available in : Japan

Eco-products

EP-1-116

Home electric appliances / Lightings

solar heater

Solar Hot Water Heater

In view of the abundant solar energy freely available in the tropics (1,600kwh per sq. metre per year) we believe that harnessing the solar energy is the best way in meeting today's energy needs. SOLAR HEATERS will not only benefit the global environment but is cost effective to customers in their electricity savings. Solar Hot Water Heaters is use for bathing, cooking, washing, heating of pools, and other hot water applications.

Edwards and Thermomax use the latest Solar Absorber technology material TINOX (titanium oxide) for their solar collectors. TINOX absorbs 95% solar radiation and minimize energy loss with an emission of only 5%. Once the solar energy is converted into heat, the energy remains captured in the TINOX absorber which heats the water. Efficiency of TINOX solar collectors has reached 80% and it works even on cloudy and rainy days.

Solar Commercial Hot Water Systems are installed in Singapore which include the Changi International Airport Services Ltd (CIAS) flight kitchen currently the largest solar hot water system in South East Asia.



EDWARDS L305

CONNECTIONS INTERNATIONAL PTE LTD

No.2 Soon Wing Road #06-02 Soon Wing Ind. Bldg., 347893, Singapore

Tel 65-6483-1031 Fax 65-6483-5343

E-mail connect@connections.com.sg

URL <http://www.connections.com.sg>

Available in : Singapore, Australia

Eco-products

EP-1-117

Home electric appliances / Lightings

power meter

HMM3702AC™ Power Meter

HMM 3702AC™ Power Meter measures wide range of AC electrical parameters, such as power, energy voltage and current. It is a low-cost, multi-function monitoring and control solution for domestic, commercial, industrial and power generation applications. The menus, measurements and control settings are displayed clearly on an LCD for ease of reading.

With proper power management, power from the grid, renewable energy sources, or any other power generation sources can be utilized effectively to optimize the electrical system performance.

The benefits of HMM 3702AC™ Power Meter

- Monitor energy consumption to control costs
- Enhance system performance and reduce downtime
- Analysis of energy usage for better load control

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>

Available in : Worldwide



HMM3702AC™ Power Meter

Eco-products

EP-1-118

Home electric appliances / Lightings

portable DC power pack

EcooPower Modular Power System

EcooPower is a truly integrated modular power system completes with high performance battery and controller than can be recharged by a wide range of electrical sources including photovoltaic. Designed with high safety and ruggedness to withstand harsh conditions and long operating life.

It is the power source of many wireless applications including lighting, telecommunication, security, marine, transport, recreational and emergency relief.

The benefits of EcooPower:

- Ease of use with plug and play switches
- Portable power pack
- Provide instant power in off-grid locations
- Rugged and handy

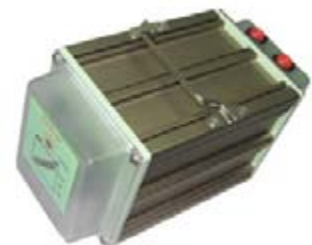
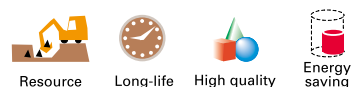
The Features:

- Integrated gel battery (600 cycle @50% DOD) with intelligent charge controller
- Rechargeable from PV and other power sources (AC-to-DC Adaptor, Car Cord Adaptor, Genset etc)
- Optimized battery charging algorithm to protect battery and increase efficiency
- Load control to prevent over discharge from battery
- Flexible mechanical mounting
- For indoor and mobile applications

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>

Available in : Worldwide



GZP 01212S EcooPower Switch

Eco-products

EP-1-119

Home electric appliances / Lightings

fluorescent lamps

Easily introduced high frequency inverter-type lighting equipment for institutions

-----< E : Energy >-----

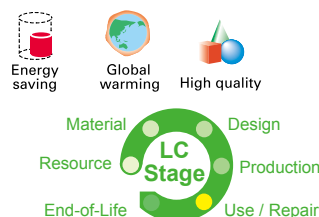
As for the high frequency inverter-type lighting equipment, the illumination that 1.2 times are bright is provided with about 80% electricity in comparison with the conventional magnetism-type appliance.

"Easyeco" - more eco - series is high frequency inverter-type lighting equipments that enables to regulate brightness to three phases by the simple operation of the wall switch.

The three phases are 100% : Bright mode, 85% : eco mode, and 70% : more eco mode.

You do not need light control machinery nor wiring work of signal line when introducing light control.

The brightness under the "eco mode", which is about 30% energy saving, is equal with that of the conventional rapid-magnetism-type appliance.



三菱電機照明器具
Easyeco
KV4382EF VPTN

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

FHF32W for two lighting : KV4382EF VPTN

Eco-products

EP-1-120

Home electric appliances / Lightings

air conditioners

Air Purifier with a Humidification Function

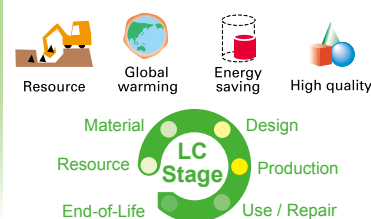
The new air purifier with a humidification function is the compound machine equipped with a humidification function to an air purifier. The air purification adopts a machine type with the filter, and the humidification method adopts vaporization type.

-----< M : Material >-----

- (1) Space-saving resource saving by having made two articles 1 In comparison with one air purifier and one humidifier providing the same ability each, this air purifier reduced materials 37%.
- (2) It completely got rid of the filter exchange that was necessary for a conventional humidifier and air purifier. As for the dust-collection and the deodorization filter, a user does not need to change them because their performances are regenerated if he wash them. It has no humidification filter as it adopts the disk-type vaporization that is hard to be stucked to by the chlorine ingredient.

-----< E : Energy >-----

Commonizing a ventilation fan and, motor and the board of two articles, this air purifier reduced an annual electricity bill 20% and improved the total CO₂ discharge in the life cycle 16%.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

Air Purifier MA-517DK-S

Eco-products

EP-1-121

Home electric appliances / Lightings

electric refrigerators

Energy saving refrigerator for families with excessive cooling technology

A refrigerator for families using excessive cooling technology. It refrigerates food deliciously as it prevents the destruction of the cell.

-----<< M : Material >>-----

It uses recycled plastic for a board case or a caster. It is made easy to be recycled by the materials indication of the resin part.

-----<< E : Energy >>-----

For consumption electricity 620kWh/year of the product (ME-G50M) one year ago, MR-G52N the capacity of it is increasing realizes 530kWh/year. It turned the compressor smoothly by the new control (named " the new smooth wave inverter ") and prevented outbreak of useless torque which improves energy saving and silence.

-----<< T : Toxicity >>-----

It uses non-Freon refrigerant isobutane R600a that global warming potential is extremely low.

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan



MR-G57N-W

Eco-products

EP-1-122

Home electric appliances / Lightings

LED spot light

LED Spot Light

This spotlight is the lighting fixture with 4 LEDs (11W) realizing energy saving and long life and having brightness equivalent to low-volt halogen lamp 35W/50W.

-----<< E : Energy >>-----

1. Its spot effect is equivalent to that of low-volt halogen lamp 35W/50W and its CO₂ reduction rate is 68-78%.

2. Its life time is from 10 times to 13 times longer than that of low-volt halogen lamp.

Approximately 40000 hours of the life time through rearranging its heat radiation structure enables maintenance-free at retail store where the spot is used for long time.

3. UV and IR radiation, which causes color fading or damaging, do not exist.

The spot light does not harm the object because the light does not contain harmful components and heat.

4. Thin and soft innovative form utilizing LED feature.

Mitsubishi Electric Lighting Corporation

2-14-40, Ofuna, Kamakura-shi, Kanagawa 247-0056, Japan
Tel 81-467-41-2724 Fax 81-467-41-2788
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/group/mlf/>

Available in : Japan



LED Spot Light

Eco-products

EP-2-001

Carriers / Automobiles

forklifts

Electric Hybrid Forklift Trucks FB15HB

In recent years, even for forklifts, advances have rapidly emerged towards powering the vehicles with batteries so as not to release emissions. However, electric-powered vehicles have a number of shortcomings, such as short operating times between charges compared with engine-powered vehicles and long recharging.

To resolve these issues, Komatsu Utility Co., Ltd. launched electric hybrid forklift trucks that feature two systems for electrical power, with an electrical storage device known as a capacitor in addition to the conventional battery. A capacitor can quickly store the regenerative energy that is lost as heat in conventional electric-powered vehicles and save energy by up to 20%*.

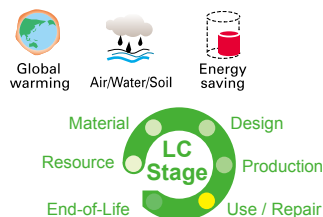
Exiting electric-powered vehicles have had maximum continuous operating times of about six hours, while recharging has required ten hours. Electric hybrid forklifts employ rapid auxiliary charging by means of an inverter-type battery charger, and the FB15HB is capable of operating as long as 11hours* after a one-hour rapid auxiliary charge.

* : Varies according to operating conditions

Komatsu Utility Co., Ltd.

110 Yokokurashinden, Oyama-shi, Tochigi 323-8567, Japan
Tel 81-285-28-8585 Fax 81-285-28-8734
E-mail makoto_kawase@komatsu-utility.co.jp
URL <http://www.lift.co.jp/>

Available in : JAPAN



Electric Hybrid Forklift Trucks FB15HB

Eco-products

EP-2-002

Carriers / Automobiles

buses

Natural Gas Vehicle

Natural gas vehicle (NGV) is environment-friendly as it emits no PM / black exhaust and less NOx / CO₂ than gasoline or diesel vehicles. Because of these features, NGV plays an important role in reducing the world's dependency on oil.

As of the end of September 2007, the number of NGVs in Japan reached 33,000. Osaka Gas promotes the broader use of NGVs in its service area.

Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>



Eco-products

EP-2-003

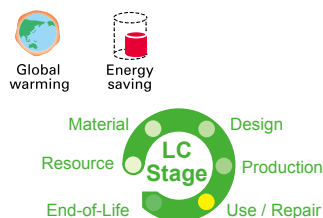
Carriers / Automobiles

automobiles

New eco-friendly Prius with hybrid power

The new Prius model is equipped with THS, a new-generation Toyota Hybrid System known as Hybrid Synergy Drive, which means simultaneous evolution of ecology and power. It achieves world-beating fuel consumption of 35.5km/L and low emissions. The drive has been dramatically improved by the development of hybrid power. 10-15 mode drive.

(Ministry of land, Infrastructure and Transport figure)



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



Prius

Eco-products

EP-2-004

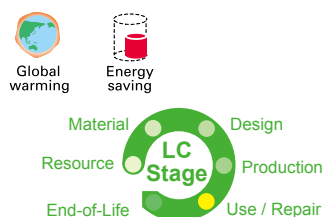
Carriers / Automobiles

automobiles

TOYOTA Vitz with Idling Stop System

The Toyota Vitz is a CVT* vehicle, featuring the Toyota Intelligent Idling Stop System which applies hybrid technology. We achieved the lowest domestic fuel consumption value of 22.5km/L, for a light car, excluding hybrids and improved fuel consumption by 8.5% compared with our current vehicle by using a lithium ion battery that allows automatic idling stop when the vehicle stops.

*CVT: Continuously Variable Transmission



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



ヴィッツ 1.0i 4000cc 1000cc 2005.3

Vitz

Eco-products

EP-2-005

Carriers / Automobiles

automobiles

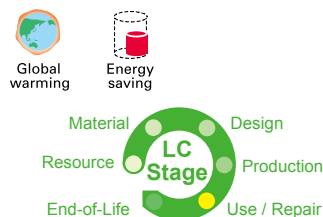
TOYOTA FCHV

From the start of the fuel cell vehicle effort in 1992, Toyota has pursued development of its own fuel cell stack, the core component of any fuel cell vehicle. This high-performance fuel cell—the Toyota FC Stack—is a performance leader among vehicular fuel cells worldwide. In addition to the fuel cell, the FCHV has a secondary battery which stores energy regenerated during braking. When combined with the hybrid system which was first put to large-scale application in the Prius, the FCHV achieves highly efficient operation through sophisticated energy management.

(Fuel type) Hydrogen, (Max cruising range) 330km, (Max speed) 155km/h, (Weight) 1880kg, (Seating capacity) 5 persons.

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-1754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



TOYOTA FCHV

Eco-products

EP-2-006

Carriers / Automobiles

automobiles

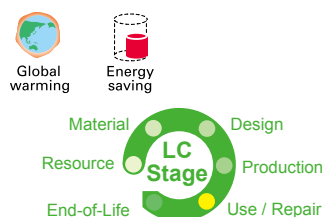
Eco-friendly vehicle "TOYOTA CAROLLA Axio"

"TOYOTA CAROLLA Axio" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2010 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 18.2km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



Eco-friendly vehicle "TOYOTA CAROLLA Axio"

Eco-products

EP-2-007

Carriers / Automobiles

automobiles

Eco-friendly vehicle"TOYOTA CAROLLA FIELDER"

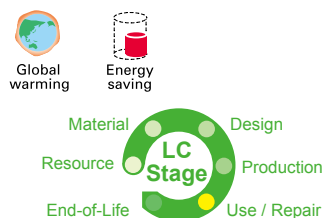
"TOYOTA CAROLLA FIELDER" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005

Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption(10-15Japanese test cycle):18.0km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA CAROLLA FIELDER"

Eco-products

EP-2-008

Carriers / Automobiles

automobiles

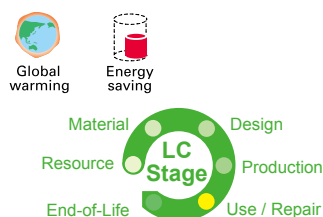
Eco-friendly vehicle"TOYOTA AURIS"

"TOYOTA AURIS" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption(10-15Japanese test cycle):17.2km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA AURIS"

Eco-products

EP-2-009

Carriers / Automobiles

automobiles

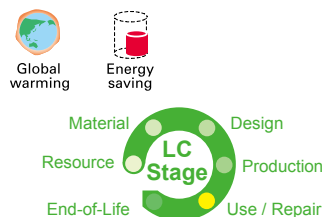
Eco-friendly vehicle "TOYOTA CROWN ROYAL"

"TOYOTA CROWN ROYAL" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2010 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 12.0 km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system
 - Direct injection 4 stroke gasoline engine
 - Battery charge control system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle "TOYOTA CROWN ROYAL"

Eco-products

EP-2-010

Carriers / Automobiles

automobiles

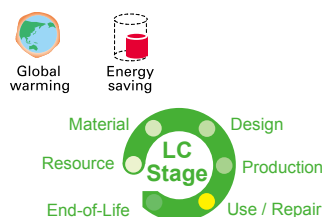
Eco-friendly vehicle "TOYOTA MARK X"

"TOYOTA MARK X" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2010 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 12.0 km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system
 - Direct injection 4 stroke gasoline engine

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle "TOYOTA MARK X"

Eco-products

EP-2-011

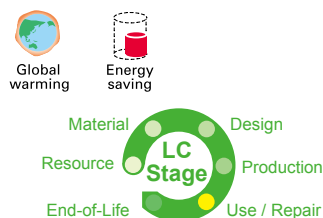
Carriers / Automobiles

automobiles

Eco-friendly vehicle"TOYOTA IPSUM"

"TOYOTA IPSUM" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15Japanese test cycle):11.4km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Battery charge control system



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA IPSUM"

Eco-products

EP-2-012

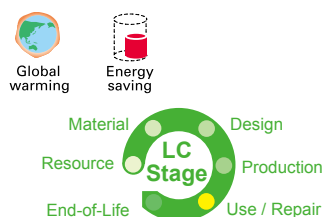
Carriers / Automobiles

automobiles

Eco-friendly vehicle"TOYOTA WISH"

"TOYOTA WISH" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 50% lower than the 2010 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15Japanese test cycle):14.4km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Electric power steering system



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA WISH"

Eco-products

EP-2-013

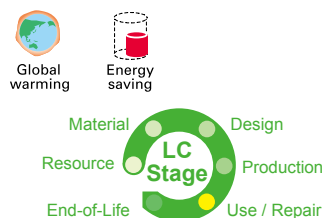
Carriers / Automobiles

automobiles

Eco-friendly vehicle"TOYOTA HIACE WAGON"

"TOYOTA HIACE WAGON" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 50% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15Japanese test cycle):8.6km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Battery charge control system



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA HIACE WAGON"

Eco-products

EP-2-014

Carriers / Automobiles

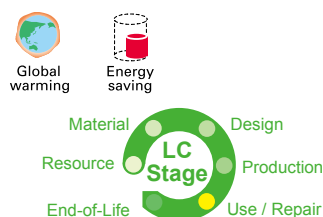
automobiles

Eco-friendly vehicle"TOYOTA ALPHARD"

"TOYOTA ALPHARD" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005

Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15Japanese test cycle):9.7km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle"TOYOTA ALPHARD"

Eco-products

EP-2-015

Carriers / Automobiles

automobiles

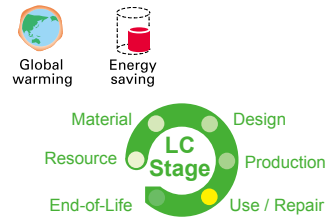
Eco-friendly vehicle "TOYOTA NOAH"

"TOYOTA NOAH" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 50% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 14.2km/liter
- 2) Technology to reduce fuel consumption
 - Continuously variable transmission
 - Variable valve timing
 - Battery charge control system
 - Direct injection 4 stroke gasoline engine

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle "TOYOTA NOAH"

Eco-products

EP-2-016

Carriers / Automobiles

automobiles

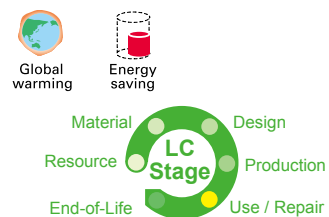
Eco-friendly Hybrid vehicle "TOYOTA ALPHARD HYBRID"

"TOYOTA ALPHARD HYBRID" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 17.2km/liter
- 2) Technology to reduce fuel consumption
 - Hybrid system
 - Continuously variable transmission
 - Variable valve timing

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly Hybrid vehicle "TOYOTA ALPHARD HYBRID"

Eco-products

EP-2-017

Carriers / Automobiles

automobiles

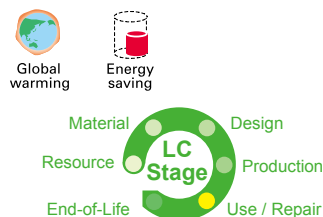
Eco-friendly Hybrid vehicle "TOYOTA HARRIER HYBRID"

"TOYOTA HARRIER HYBRID" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 17.8km/liter
- 2) Technology to reduce fuel consumption
 - Hybrid system
 - Continuously variable transmission
 - Variable valve timing
 - Electric power steering system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly Hybrid vehicle "TOYOTA HARRIER HYBRID"

Eco-products

EP-2-018

Carriers / Automobiles

automobiles

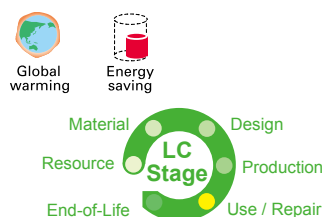
Eco-friendly vehicle "TOYOTA HARRIER"

"TOYOTA HARRIER" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 75% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 11.0km/liter
- 2) Technology to reduce fuel consumption
 - High-efficiency transmission
 - Variable valve timing
 - Battery charge control system

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle "TOYOTA HARRIER"

Eco-products

EP-2-019

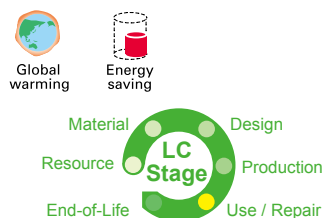
Carriers / Automobiles

automobiles

Eco-friendly vehicle TOYOTA PROBOX WAGON

"TOYOTA PROBOX WAGON" clears the 2010 Fuel Efficiency Standards, and also achieves an exhaust emission level that is 50% lower than the 2005 Exhaust Emission Standards in the Ministry of Land.

- 1) Specific fuel consumption (10-15 Japanese test cycle): 17.2km/liter
- 2) Technology to reduce fuel consumption
 - Variable valve timing



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Eco-friendly vehicle TOYOTA PROBOX WAGON

Eco-products

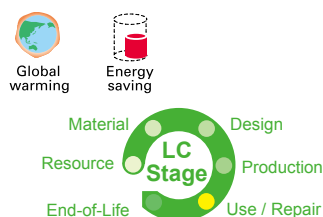
EP-2-020

Carriers / Automobiles

automobiles

Eco-friendly Lexus 600h with hybrid power

The Lexus 600h is equipped with Toyota Hybrid System. It achieves fuel consumption of 12.2km/L and low emissions.



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
 Tel 81-565-23-1341 Fax 81-565-23-5754
 E-mail satoshi_aida@mail.toyota.co.jp
 URL <http://www.toyota.co.jp>



Lexus 600h with hybrid power

Eco-products

EP-2-021

Carriers / Automobiles

automobiles

Eco-friendly Lexus 450h with hybrid power

The Lexus 450h is equipped with Toyota Hybrid System. It achieves fuel consumption of 14.2km/L and low emissions.



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



Lexus 450h with hybrid power

Eco-products

EP-2-022

Carriers / Automobiles

automobiles

LPG (Liquefied petroleum gas) vehicle"TOYOTA DYNA"

LPG vehicle emits little CO₂ and NO_x, particulate emissions are zero. (Max payload)1.5ton



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>



LPG (Liquefied petroleum gas) vehicle"TOYOTA DYNA"

Eco-products

EP-2-023

Carriers / Automobiles

automobiles

LPG (Liquefied petroleum gas) vehicle"TOYOTA COASTER"

TOYOTA COASTERLPG vehicle emits little CO₂ and NO_x, particulate emissions are zero.



Air/Water/Soil



COASTER (minibus)

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>

Eco-products

EP-2-024

Carriers / Automobiles

automobiles

Clean diesel truck"DPNR-equipped TOYOTA DYNA&TOYOACE

The DPNR(Diesel Particulate NO_x Reduction)is a catalytic converter system that continuously and simultaneously removes PM(Particulate Matter)-granular material consisting mainly of fly ash- and NO_x(nitrogen oxides)from diesel exhaust emissions by utilizing the NO_x storage reduction three-way catalytic converter technology.

(Max payload)2-3ton (Fuel type)low-sulfur gas oil at 10 ppm max



Air/Water/Soil



diesel truck"DPNR-equipped TOYOTA DYNA&TOYOACE

Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan
Tel 81-565-23-1341 Fax 81-565-23-5754
E-mail satoshi_aida@mail.toyota.co.jp
URL <http://www.toyota.co.jp>

Eco-products

EP-2-025

Carriers / Automobiles

automobiles

Clean diesel truck "DPR-equipped TOYOTA DYNA&TOYOACE

This truck equipped DPR(Diesel Particulate Reduction)system achieves low

PM(particulate matter) emission level that is 10% lower than the standard levels for 2005.

(Max payload)2-3ton (Fuel type)low-sulfur gas oil at 50 ppm max



Air/Water/Soil



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan

Tel 81-565-23-1341 Fax 81-565-23-5754

E-mail satoshi_aida@mail.toyota.co.jp

URL <http://www.toyota.co.jp>



Clean diesel truck "DPR-equipped TOYOTA DYNA

Eco-products

EP-2-026

Carriers / Automobiles

automobiles

Clean diesel truck "TOYOTA DYNA&TOYOACE Hybrid"

This truck equipped with a hybrid system is the first of its kind in the world and was jointly developed with Hino Motors,LTD. This truck achieves a PM&NO_x emission level that is 10% lower than standard levels for 2005. qualifying it as an low emission diesel vehicle. The truck's fuel efficiency has also been improved by 30%.

(Max payload)2-3ton (Fuel type)low-sulfur gas oil at 50 ppm max



Global warming



Energy saving



Toyota Motor Corporation

1, Toyota-cho, Toyota-shi, Aichi 471-8571, Japan

Tel 81-565-23-1341 Fax 81-565-23-5754

E-mail satoshi_aida@mail.toyota.co.jp

URL <http://www.toyota.co.jp>



Clean diesel truck "TOYOTA DYNA Hybrid"

Eco-products

EP-2-027

Carriers / Automobiles

tire temporary mobility restoration kits

Tire Temporary Mobility Restoration Kit

Bridgestone corporation has been developing Tire Temporary Mobility Restoration Kit, which can be used in major puncture case instead of spare tire, to allow the driver to continue driving to a place to replace the punctured tire. The kit will be effective in countries with good road condition.

- Resource saving: This kit can deal with major puncture case, therefore, spare tire will no longer be necessary when the kit is equipped. Resource used to produce spare tire, which are disposed mostly unused, can be greatly saved.
- Reusable: The kit consists of a sealant and an air compressor. The kit can be reused by replacing the sealant only, when used.

Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-3563-6972 Fax 81-3-3563-1165
E-mail
URL <http://www.bridgestone.co.jp/english/index.html>



Proto type

Eco-products

EP-2-028

Carriers / Automobiles

solar control films / safety & security films

Spectrally Selective Solar Control Films

First developed for aerospace and defence applications, V-KOOL's wavelength or spectrally-selected technology revolutionized the industry by being the first "intelligent" film that can differentiate between wavelength in the solar spectrum.

The technology behind V-KOOL's revolutionary performance is in a complex process of embedding multiple stacks of heat reflecting. The super clear substrate is embedded with 7 atomic layers of Gold, Silver and Indium Oxide. This complex process gives V-KOOL it's amazing heat reflection qualities without looking reflective or dark.

V-KOOL films work by reflecting heat rather than absorbing heat. Heat absorbing films can cause intensive heat build-up in the car due to re-radiated heat and thermal stress onto the glass can result in glass breakage or cracks.

A July 2000 desert test program with the U.S Department of Energy's National Renewable Energy Laboratory (NREL) reported that a test vehicle equipped with V-KOOL film had significantly reduced interior cabin temperatures and improved fuel economy by 3%.

V-KOOL (S) Pte Ltd

12 Jalan Kilang Barat #01-01 Globamatrix Building 159354, Singapore
Tel 65-6776-5432 Fax 65-6774-9949
E-mail info@v-kool.com.sg
URL <http://www.v-kool.com.sg>



Available in : Worldwide

Eco-products

EP-2-029

Carriers / Automobiles

car navigation system

Fuel Consumption- Conscious HDD Car Navigation System

HDD Car Navigation System consists of five units; In-car main unit (FM/AM tuner, DVD/CD player), Monitor unit, Digital terrestrial tuner unit, Brain unit, and Home kit. Users can share and use the information like a driving-history uploaded through the network with the "Smart Loop System" loaded into this product. More concretely, the "Accumulative Probe" and "Real-Time Probe" provide the latest traffic congestion information beyond a wide area, daily traffic congestion prediction, and location information of parking lot of the destination, etc. These information allow our users to set a quicker route even than with the former models and accordingly, to save the fuel. This product complies with the standards specified in EU RoHS and ELV, and achieved the size and weight reduction by 91% in volume and 94% in weight from the previous model not complying with them.



AVIC-VH099G

PIONEER CORPORATION

545-57 Ogura, Saiwai-ku, Kawasaki-shi, Kanagawa-ken 212-0054, Japan
Tel 81-44-580-4275 Fax
E-mail products_eco@post.pioneer.co.jp
URL

Eco-products

EP-2-030

Carriers / Automobiles

diesel engine exhaust system

Adblue Abacus for Euro IV Diesel Engine Exhaust System

Adblue Abacus is used for reduce and eliminate exhaust emission by 90%.

Adblue Abacus is a non-toxic, clear, synthetically manufactured solution. It is used as a reducing agent for SCR systems (Selective Catalytic Reduction) in diesel-powered vehicles. Toxic NOx emissions are reduced to the following component of air : nitrogen, water and carbon dioxide.

Adblue Abacus is transported in a supplementary tank on the bus or truck. It complies to DIN standard (DIN 70 070).



Abacus Corporation Pte Ltd

Blk 1, Defu Lane 10, #03-571 530182, Singapore
Tel 65-6285-6100 Fax 65-6281-7761
E-mail abacusmkt@gmail.com
URL <http://www.abacuscop.com.sg>

Available in : ASEAN / ASIA / WORLDWIDE

Eco-products

EP-2-031

Carriers / Automobiles

energy storage system for rolling stock

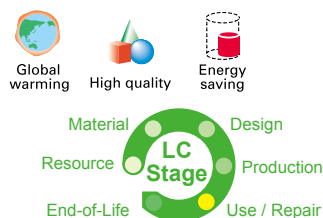
An accumulating system for railroad carriages which recycles discharged thermal energy

An accumulating system for railroad carriages is the equipment which accumulates the regenerative energy which the brakes discharged into the condenser and recycles the energy. By this system, recovered is 50% of the average mechanical brake energy at the time of no regeneration, and thereby the net energy consumption of motor car is restrained. In addition, the abrasion of the brake shoe is reduced, and the lives of the substitute parts are made to improve. In the joint development with the Central Japan Railway Co., running test was carried out in January, 2005.

- **Energy Saving:** The point of improvement is to absorb 8% of the inverter regeneration energy, and to reuse as a 2% of the vehicle acceleration energy.

TOSHIBA CORPORATION Industrial Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4556 Fax 81-3-5444-9276
E-mail
URL



Energy storage system(EDLC):COB015-A0,DC/DC converter system:COV068-A0

Eco-products

EP-2-032

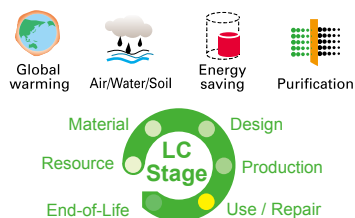
Carriers / Automobiles

automobiles

Eco-friendly vehicles Nissan SERENA 2WD

Nissan SERENA achieves 20% improvement above 2010 Fuel Economy Standards and 75% below 2005 Exhaust Emission Standards (SU-LEV), and meets the requirements of Green Taxation and Green Purchasing Law in Japan. In order to realize significant fuel-consumption improvement, following technologies are installed.

- Variable valve timing
- Alternator regenerative control mechanism
- Electric power steering
- Continuouslyvariable transmission



Nissan Motor Co., Ltd.

17-1, 6-chome, Ginza, Chuo-ku, Tokyo 104-8023, Japan
Tel 81-3-5565-2184 Fax 81-3-3546-3266
E-mail s-saegusa@mail.nissan.co.jp
URL <http://www.nissan.co.jp/>

Available in : Japan

Nissan SERENA 2WD

Eco-products

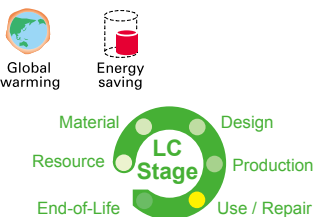
EP-2-033

Carriers / Automobiles

car navigation system

Ecological driving support system / Nissan CARWINGS NAVIGATION SYSTEM

Nissan CARWINGS service improves road congestion and driver-behavior by its fastest route guidance system and eco-driving advice and delivers sustainable results in fuel-consumption improvement. Eco-driving service available on NISSAN CARWINGS navigation system has won the Agency for Natural Resources and Energy Director-General's award in the 18th annual Energy Conservation Prize.



Nissan Motor Co., Ltd.

17-1, 6-chome, Ginza, Chuo-ku, Tokyo 104-8023, Japan
Tel 81-3-5565-2184 Fax 81-3-3546-3266
E-mail s-saegusa@mail.nissan.co.jp
URL <http://www.nissan.co.jp>



Available in : Japan

CARWINGS Navigation System

Eco-products

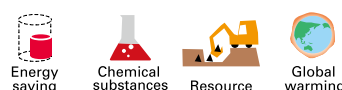
EP-3-001

OA / IT equipment
copying machines

Environment-conscious Multifunctional Copier iR3045 series

Print speed: 45ppm (A4/Letter)

- Power consumption of only 1W during sleep mode, by use of Canon's On-Demand fixing technology and improved controller; Warm-up time of 30 seconds; Recovery time from sleep mode of 10 seconds
- Compliant with the RoHS directive, which restricts or prohibits the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls(PBB), and polybrominated diphenyl ethers (PBDE)
- Compact body which reduces the resources used at the manufacturing phase; Duplexing and capability of use of recycling paper which contribute to saving consumable paper



iR3045F with optional accessories (Japan model)

Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>

Eco-products

EP-3-002

OA / IT equipment
copying machines

Environment-conscious Digital MFP, iR 6010-R

The used machines collected from the customers are disassembled, and only the units complied with the remanufacturing quality standards are selected and cleaned. The wasted components are exchanged.

The product quality of the remanufactured is equal to the new product. Exterior parts were previously difficult to reuse because of dirty surfaces, but Canon's own recycling technology makes it possible. The high rate of reused parts reduces environmental burden (converted to CO₂ emissions) up to the manufacturing stage.



iR 6010-R (for Japan)

Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>

Available in : Japan, Korea, Hong Kong, Thailand, etc.

Eco-products

EP-3-003

OA / IT equipment
copying machines

Digital Imaging System Ricoh Aficio 2015/2018/2018D

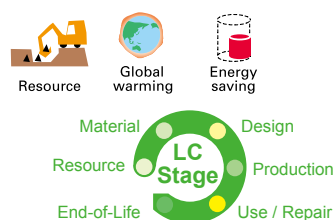
Compared with previous models, the Ricoh Aficio 2015/2018/2018D have improved recovery time (from energy saver mode back to print ready conditions) to less than 10 seconds, because of the same technologies, named as Quick Start Up (QSU), used in other Ricoh Aficio series.

At the same time, power consumption in energy saver mode has been reduced to 1W for basic copier models and to 10W for multifunction models. As the result, more energy saving becomes possible, while waiting less.

In the same manner as other Aficio series, Aficio 2018D has enhanced duplex productivity to reduce the time to complete duplex prints, so that the customers can use duplex mode more, to save paper.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio 2018

Available in : Asia Pacific Region

Eco-products

EP-3-004

EP-3-004

OA / IT equipment

Digital Imaging Systems Ricoh Aficio MP1500/1600L/2000L

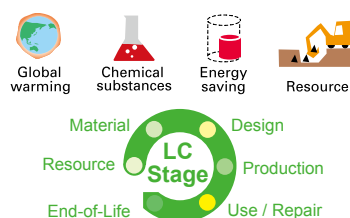
Energy Saving Digital Imaging Systems of 15, 16, and 20 images per minute with quick warm up and quick first copy delivery time: The Ricoh Aficio MP1500/1600L/2000L have such a short recovery time as less than 10 seconds from the off-mode (for copier version) and/or from the sleep-mode (for multi-function version) back to copy/print ready conditions, because of the same technologies, named as Quick Start Up (QSU) used in other Ricoh Aficio series.

At the same time, power consumption in the Off-mode is only 1W for the basic copier and is only less than 10W for multi-function versions. As the result, more energy saving becomes possible, while waiting less. To save paper, it is possible to make 2 or 4 original pages into one side of paper, as the grouping print function. Aficio MP2000L has the standard automatic duplex capability with leading duplex productivities to save paper resource and energy associated to the lifecycle of paper.

These models have a low ozone emission and have low operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1, Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio MP2000L

Available in : Asia Pacific Region

Eco-products

EP-3-005

OA / IT equipment

copying machines

Digital Imaging Systems Ricoh Aficio 3025/3030/MP2510/MP3010

Energy and Paper Saving Digital Imaging Systems of 25 and 30 images per minute: The Ricoh Aficio 3025/3030 have such a short recovery time as less than 10 seconds from the off-mode (for copier version) and/or from the sleep-mode (for multi-function version) back to copy/print ready conditions, because of the same technologies, named as Quick Start Up (QSU) used in other Ricoh Aficio series.

At the same time, power consumption in the Off-mode is only 1.2W for the basic copier and is 7.5W for multi-function versions. As the result, more energy can be saved, while waiting less.

These models have the standard automatic duplex capability with leading duplex productivities to save paper resource and energy associated to the lifecycle of paper. Using duplex and grouping print functions, it is possible to print up to 16 original pages into both side of single sheet of paper. Such paper saving modes can be easily set by using Ricoh original graphical printing screen, preventing mis-prints. These models have an internal toner recycling system, a low ozone emission & operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1, Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>

Available in : Asia Pacific Region



Ricoh Aficio 3030

Eco-products

EP-3-006

OA / IT equipment

copying machines

Digital Imaging Systems Ricoh Aficio 3035/3045/MP3500/MP4500

Energy and Paper Saving Digital Imaging Systems in 35 and 45 images per minute:

The Ricoh Aficio 3035/3045/MP3500/MP4500 have such a short recovery time as less than 10 seconds (3035/3500)/15 seconds (3045/4500) from the off-mode (copier version) and/or from the sleep-mode (multi-function version) back to print ready conditions, because of the same technologies, named as Quick Start Up (QSU) used in other Ricoh Aficio series. And, power consumption is 1.2W in the Off-mode (copier models) and is 8.5W in Sleep mode (multi-function versions). Thus, more energy can be saved, while waiting less.

These models have the standard automatic high speed duplex unit to save paper resource/energy associated to the lifecycle of paper. Using duplex and grouping print functions, it is possible to print up to 16 original pages into both side of single sheet of paper. Such paper saving modes can be easily set by using Ricoh original graphical printing screen, preventing mis-prints.

These models have an internal toner recycling system (no wasting toner), a low ozone emission, a low operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1, Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>

Available in : Asia Pacific Region



Ricoh Aficio 3035/3045

Eco-products

EP-3-007

OA / IT equipment

copying machines

Digital Imaging Systems Ricoh Aficio MP5500/6500/7500

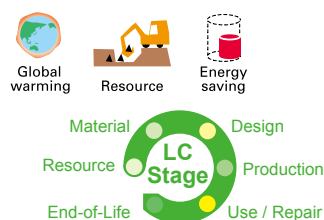
Energy and Paper Saving Digital Imaging Systems in 55, 65, and 75 images per minute: Typical warming-up time from Sleep/Off mode till print ready conditions was about 300 seconds. Because of such long waiting time, the operators had to be patient to save energy. Ricoh Aficio MP5500/6500/7500 have been improved to save more energy with less waiting time because of innovative Quick Start Up technologies (QSU). It is enhanced from 300 seconds to 30 seconds. For those who cannot wait for 30 seconds to wake it up, it is possible to set an optional 10 seconds mode. Thus, more customers can save more energy with less waiting time.

The unique dual scanning document feeder can scan both sides of original images at the same time, resulting in the same highest duplex productivity even from duplex originals. 16 original pages can be printed on both sides of single sheet of paper, using duplex and grouping functions.

These models have an internal toner recycling system (no wasting toner), a low ozone emission, a low operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Available in : Asia Pacific Region

Ricoh Aficio MP7500

Eco-products

EP-3-008

OA / IT equipment

full color copying machines

Multifunctional Color Copiers, iR C2550/C3080/C3580 Series

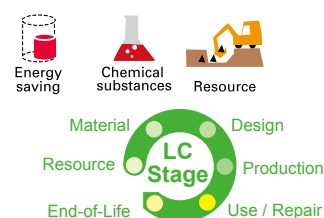
Print speed (A4/Letter):

iR C2550i/C2550F: 25ppm(B/W)/23ppm(Colour); iR C3080/C3080i/C3080F: 30ppm (B/W)/28ppm(Colour); iR C3580/C3580i/C3580F: 35ppm (B/W)/30ppm(Colour)

- Power consumption 3W during sleep mode by use of Canon's On-Demand fixing technology
- Compliant with the RoHS directive, which restricts or prohibits the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls(PBB), and polybrominated diphenyl ethers (PBDE)
- Compact body design of 565mm in width, which reduces the resources used at the manufacturing phase

Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>



iR C3580i with optional accessories

Eco-products

EP-3-009

OA / IT equipment

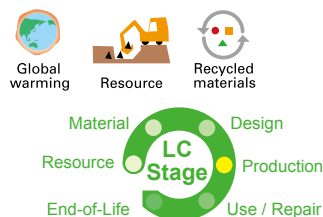
full color copying machines

Environment-conscious Color Digital MFP, iR C3200N-R

The used machines collected from the customers are disassembled, and only the units complied with the remanufacturing quality standards are selected and cleaned.

The wasted components are exchanged. The product quality of the remanufactured is equal to the new product.

Exterior parts were previously difficult to reuse because of dirty surfaces, but Canon's own recycling technology makes it possible. The high rate of reused parts reduces environmental burden (converted to CO₂ emissions) up to the manufacturing stage.



iR C3200N-R (for Japan)

Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>

Available in : Japan, Korea

Eco-products

EP-3-010

OA / IT equipment

full color copying machines

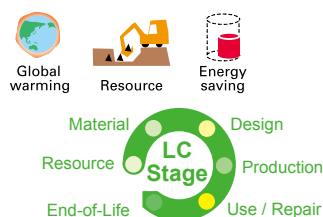
Full Color Digital Imaging Systems Ricoh Aficio MP C1500

Energy and Paper Saving Full Color Digital Imaging Systems in 15 images per minute (ipm) in black mode & 6 ipm in full color mode

The print engine of Ricoh Aficio MP C1500 is own unique Gel-Sprinter system, which requires much less energy than the conventional laser printing system. It takes only 5.5 seconds to be back to print ready conditions from Sleep mode, where power consumption is as low as 3.7 W. (230V model) So, it can be kept in Sleep mode as long as possible. The maximum power consumption is only 110W (Main body).

Unlike ink-base engine, the Gel-Sprinter engine requires no waiting time to dry printed image up on paper. So, just after the first side printing is completed, the second side printing can be done without image smearing problems. Thus, high speed duplex print can be made. Using both duplex and combined printing modes, it is possible to print 8 original images on to a single sheet of paper, which enable to save paper while maintaining productivity.

Like other Ricoh Aficio series, these models have a low ozone emission and have low operation noise, and use no chemical substances written in EU RoHS Directive.



Ricoh Aficio MP C1500

Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-4168 Fax 81-3-3543-9342
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>

Available in : Asia Pacific Region

Eco-products

EP-3-011

OA / IT equipment

full color copying machines

Full Color Digital Imaging Systems Ricoh Aficio MP C2500/C3000

Energy and Paper Saving Full Color Digital Imaging Systems in 25 and 30 images per minute both in full color and black/white modes

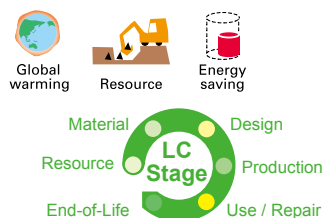
The Ricoh Aficio MP C2500/C3000 are the latest full color digital multi-function systems with energy saving modes. Power consumption in Sleep mode is 8W. From this mode, it takes less than 30 seconds to complete warming up. For those who need less waiting time, there are 20 seconds and/or 7 seconds recovery modes to conserve energy while keeping requested productivity by the customers. As the result, the customers can select a suitable setting for energy saving and recovery time.

These models have the standard automatic duplex capability with leading duplex productivities to save paper resource and energy associated to the lifecycle of paper. Using duplex and combined printing functions, it is possible to print up to 16 original pages into both side of a single sheet of paper. Such paper saving modes can be easily set by using Ricoh original graphical printing screen, preventing operators from making mis-prints.

These models have a low ozone emission, a low operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio MP C2500/C3000

Available in : Asia Pacific Region

Eco-products

EP-3-012

OA / IT equipment

full color copying machines

Full Color Digital Imaging Systems Ricoh Aficio MP C3500/C4500

The Aficio MP C3500 can print 35 images per minute (ipm) in both the full color and the black modes. And, the Aficio MPC4500 can print 40 ipm in the full color mode and 45 ipm in the black mode.

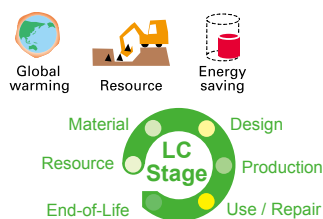
Even in high-speed full color digital imaging systems, more energy can be saved with less waiting time because of Ricoh's Color Quick Start-up (QSU) technologies. From the Sleep mode consuming 7-8W, it takes less than 45 seconds (C3500) or 60 seconds (C4500) to complete warming up. If it is too long to wait, there are 3, 10, and 16-19 seconds recovery modes to conserve energy while keeping requested productivity by the customers.

These models have the standard automatic duplex capability with leading duplex productivities to save paper resource and energy associated to the lifecycle of paper. Using duplex and combined printing functions, 16 original pages can be printed on both sides of a single sheet of paper. Such paper saving modes can be easily set by using Ricoh original graphical printing screen, preventing operators from making mis-prints.

These models have a low ozone emission, a low operation noise, and use no chemical substances written in EU RoHS Directive.

Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio MP C3500/C4500

Available in : Asia Pacific Region

Eco-products

EP-3-013

OA / IT equipment

full color copying machines

Full Color Digital Multifunctional Copier "WORKiO"

- Thanks to the Panasonic's IH(induction heating)technologies, the DP-C354/C264/C323/C263/C213 can be ready for printing in only approx. 15 seconds from the sleep mode or after power on.
- This realizes very quick color document output, and helps to conserve energy remarkably.
- These products use lead free solders, lead and cadmium free materials for harness and power codes, hexvalent chromium free screws and steel plates, heavy metal free toner and halogen free plastic components for casing.
- "2 in 1" printing function that two same-sized originals are printed out to a single sheet to reduce paper usage and power consumption.



Panasonic Communications Co., Ltd.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-431-2111 Fax
E-mail
URL <http://panasonic.co.jp/pcc/company/>

Full Color Digital Multifunctional Copier : "WORKiO" DP-C354/C264/C323/C263/C213

Eco-products

EP-3-014

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-2700N/2700G

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials, while the longer-life photoconductor delivers higher performance comparing with previous models. These products supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.



SHARP CORPORATION

22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>

MX-2700N(inc.Finisher)

Eco-products

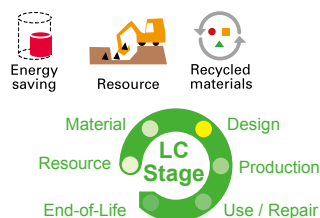
EP-3-015

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-7000N

This MFP has a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials. This product supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.



MX-7000N

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>

Eco-products

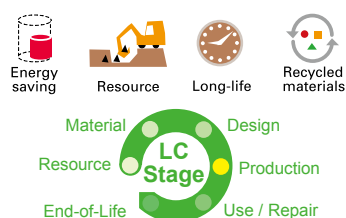
EP-3-016

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-3500N/3501N

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials, while the longer-life photoconductor delivers higher performance comparing with previous models. These products supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.



MX-3500N(inc.Finisher)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>

Eco-products

EP-3-017

OA / IT equipment

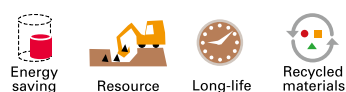
full color copying machines

Low toner consumption, Digital full color MFP, MX-4500N/4501N

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials, while the longer-life photoconductor delivers higher performance comparing with previous models. These products supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>



MX-4500N(inc.Finisher)

Eco-products

EP-3-018

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-5500N

This MFP has a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials. This product supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>



MX-5500N

Eco-products

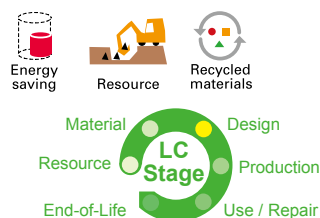
EP-3-019

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-6200N

This MFP has a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials. This product supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required Fax kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.



MX-6200N

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>

Eco-products

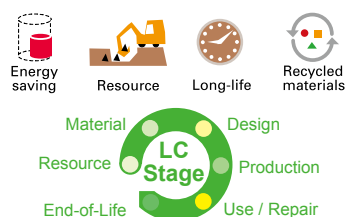
EP-3-020

OA / IT equipment

full color copying machines

Low toner consumption, Digital full color MFP, MX-2300N/2300G

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner in a smaller cartridge that uses less packing materials, while the longer-life photoconductor delivers higher performance comparing with previous models. These products support two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode (required FAX kit) is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. Recycled plastic is adopted for one component weighing 1.8kg and over.



MX-2300N(inc.Finisher)

SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>

Eco-products

EP-3-021

OA / IT equipment

full color copying machines

Eco-Friendly Digital Multifunction Devices for Offices

ApeosPort-III C3300/C2200, DocuCentre-III C3300/C2200 are equipped with two industry-first environmental technologies, as well as new print technology for high-resolution, high-quality images.

<Enhanced environmental performance with lead-free shafts and biomass plastic>

Industry-first environmental technologies include: (1) shafts that do not contain lead, a designated hazardous substance, in parts for the output unit, including paper feeder; and (2) a biomass plastic that comprises more than 30 percent of plant-derived constituent by weight in the moving part of the machine (drum cover).

<Enhanced energy saving performance>

An energy-saving controller, high-efficient lamp and temperature-controlling technology reduce power consumption in sleep mode from below 10W (existing machines) to below 2.0W (PF/PFS model). In terms of TEC, power consumption is cut to 1.78kWh a week (PF/PFS model, 25 ppm machine).

<LED printhead system for high-resolution, high-quality images>

A newly developed LED printhead is incorporated to write images on the photoreceptor drum. Fuji Xerox has realized high image quality of 1,200 x 2,400 dpi, which is equivalent to or better than laser systems.

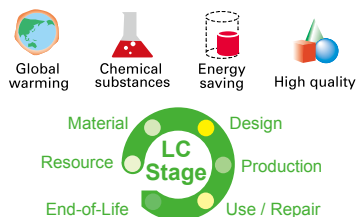
Fuji Xerox Co., Ltd.

9-7-3 Akasaka, Minato-ku, Tokyo 107-0052, Japan

Tel 81-3-6271-5111 Fax

E-mail

URL <http://www.fujixerox.co.jp/>



Available in : Japan

ApeosPort-III C3300/C2200, DocuCentre-III C3300/C2200

Eco-products

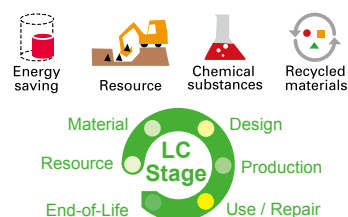
EP-3-022

OA / IT equipment

multi-functional peripherals

Low toner consumption, Digital full color MFP, MX-6201N/7001N

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate by 30% less than that of conventional toner with previous models. These products supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. On top of that, standby power consumption in night-time Fax reception mode is less than 1W which is among the lowest in the industry. The product is compliant with the RoHS directive which restricts the use of hazardous substances. And also for exterior cabinets and interior parts(except some parts of the interior parts),non-halogen-based plastic materials are used. Recycled plastic is adopted for several components weighing 1.8kg and over.



SHARP CORPORATION

22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan

Tel 81-6-6625-0434 Fax 81-6-6625-0153

E-mail eco-info@sharp.co.jp

URL <http://www.sharp.co.jp>

MX-6201N/7001N(inc. options)

Eco-products

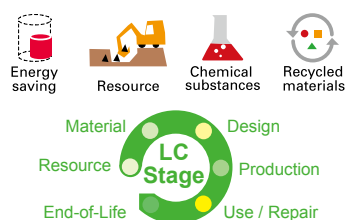
EP-3-023

OA / IT equipment

multi-functional peripherals

High Speed Digital MFP, MX-M850/M950/M1100

These MFPs have a revolutionary Mycrostoner technology offering a lower consumption rate than that of conventional toner with previous models. These products supports two steps energy saving modes to reduce power consumption after a set interval. And to cut down on energy consumption further, by pressing "the manual energy save key" after a job is finished, the product immediately enters auto shut-off mode anytime. The products is compliant with the RoHS directive which restricts the use of hazardous substances. And also for exterior cabinets and interior parts(except some parts of the interior parts),non-halogen-based plastic materials are used. Recycled plastic is adopted for several components weighing 1.3kg and over.



MX- M850/M950/M1100 (inc. options)

SHARP CORPORATION

22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0434 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp>

Eco-products

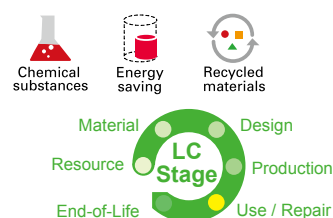
EP-3-024

OA / IT equipment

multi-functional peripherals

Digital multi-functional peripherals suitable for small offices

- e-STUDIO167/207/237 are Digital multi-functional Peripherals having function of scanner, printer, fax and copier, and these are suitable for small offices
- By using twin-halogen lamp method, energy consumption has been reduced to 50% comparing with the previous model, PREMAGE165.
- More than a half of plastics parts contain recycling material of non-halogen fire retardant plastics.
- These models have acquired environmental labels of international Energy Star and Japan Eco-mark.
- Toner is being recycled and reused by collecting remaining toner on photo-conductor drum by means of toner recycling mechanism.
- Integrated chassis and cover of the new structure design could reduce total machine weight.



TOSHIBA TEC CORPORATION

Oval Court Ohsaki Mark East 2-17-2, Higashi Gotanda, Shinagawa-ku, Tokyo 141-8664, Japan
Tel 81-3-6422-7160 Fax 81-3-6422-7121
E-mail
URL <http://www.toshibatec.co.jp/index.html.html>

e-STUDIO167 with an optional RADF(Reversible Automatic Document Feeder)

Eco-products

EP-3-025

OA / IT equipment

scanners

CanoScan LiDE 600F, Environmentally Conscious A4 Flatbed Scanner

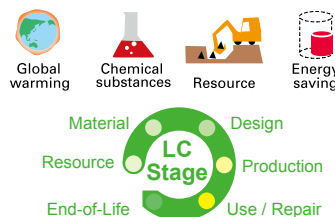
CanoScan LiDE 600F is a A4 flatbed scanner. It offers the excellent functions: up to 4800dpi high-resolution scanning, 35mm film scanning, 3-way positioning and others.

In addition, the environmental consideration for the scanner is being conducted positively. As for energy saving, LiDE (LED indirect exposure) technology was adopted. As a result, the power consumption of 93% has been reduced compared with the conventional scanner FB1210U.

As for resource saving, 59% reduction by volume and 32% reduction by weight have been achieved in comparison with those of FB1210U. As for the elimination of hazardous substances, the substitutes have been developed, hence the product conforms to the EU RoHS directive.

Canon Inc.

3-30-2, Shimomaruko, Ota-ku, Tokyo 146-8501, Japan
Tel 81-44-542-2111 Fax
E-mail
URL <http://www.canon.com>



CanoScan LiDE 600F

Eco-products

EP-3-026

OA / IT equipment

scanners

World's Smallest A4 Mobile Scanner

ScanSnap S300, Compact Color Scanner. It's the world's smallest duplex ADF¹ scanner designed to provide best-in-class performance inside or outside of the home or office. Easily digitizes your documents! A must have for the paperless era!

- Resource Efficient: Smallest - A4 Scanner with ADF²
- Energy Efficient: Energy star registered.
- Less than 3.2W at Sleep mode.

1: ADF: Automatic Document Feeder.

2: as of October 2007, according to PFU's investigations

PFU LIMITED

1Solid square East Tower, 580 Horikawa-Cho, Saiwai-ku, kawasaki-Shi, Kanagawa 212-8563, Japan
Tel 81-42-796-5211 Fax
E-mail scanners@pfu.fujitsu.com
URL <http://scansnap.fujitsu.com/>



ScanSnap S300, Desktop Scanner

Available in : Asia, North America, Europe, Middle East

Eco-products

EP-3-027

OA / IT equipment

scanners

Energy Saving Scanner, Epson Perfection V500 Photo

This product is a CCD-type image-scanner in which LED was adopted as the light source. It has a high resolution of 6400dpi, which is highest among the scanner series of this class. It can mount the adapter for scanning film and the automatic document feeder (ADF). It is workable for the multiple purposes from personal use to professional or business use.

<Energy saving>

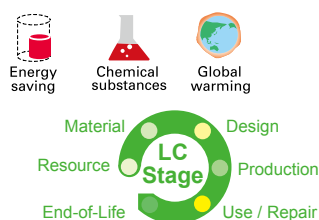
This product is capable of keeping the light quantity at a stable condition, immediately after switching on the electricity, and of switching off the light source immediately after scanning. Thereby, the power consumption of the ready period was reduced to 53% compared to that of the conventional model of our company.

<Elimination of hazardous substance>

"Mercury-less" has been realized by replacing the light source of a cold-cathode fluorescent lamp. The product conforms to the EU RoHS directive.

SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan
Tel 81-266-52-3131 Fax
E-mail
URL <http://www.epson.com>



Epson Perfection V500 Photo

Eco-products

EP-3-028

OA / IT equipment

scanners

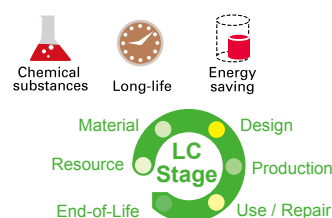
Desktop type OCR scanner S1500 for high-speed data entry from paper documents

Desktop OCR Scanner S1500 is capable of reading double-sided color documents at a high speed of 50 sheets per minute (A4 size, vertical orientation.) Featuring a highly accurate double-feed detection mechanism, it can handle stacks of documents with varying thickness. It is also easy to maintain, because wear-out parts have been reduced, and access is easy for parts that still need to be replaced periodically.

- **Energy saving:** Features an Energy Star compliant "low power consumption" mode.
- **Resource saving:** About 40% reduction in total weight; using fewer, thinner components, made of lightweight materials.
- **Elimination of harmful chemical substances:** Uses mercury-free, long-life light source; made of LED (Light-emitting Diodes) instead of fluorescent lamp.

Toshiba Solutions Corporation

1-1, Shibaura 1-Chome, Minato-Ku, Tokyo 105-6691, Jpan
Tel 81-3-3457-3260 Fax 81-3-5444-9429
E-mail eco-info@toshiba-sol.co.jp
URL <http://www.toshiba-sol.co.jp/>

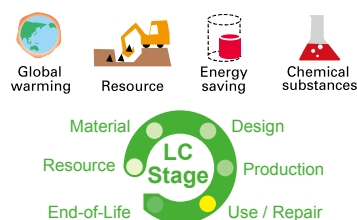


Desktop type OCR scanner S1500

Available in : Japan

Hi-speed Color Scanner, Energy-conservation and space-saving

- Versatile document handling for today's business needs
- Virtually any type of paper
- ID cards - including embossed hard cards
- Mixed paper and hard card batch scanning
- Long paper scanning (EKG & monitoring systems)
- Double feed prevention roller system
- Fits comfortably in most front-office environments due to a quiet and space saving design.
- Conforms to the international ENERGY STAR program.
- Environmentally conscious materials.
- Specific brominated flame retardants (PBB and PBDE) are not used in appearance plastic materials.
- Pb-free solder is used for circuit boards.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.



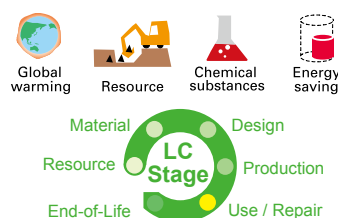
Hi-speed Color Scanner : KV-S1025C / S1020C

Panasonic Communications Co., Ltd.

1471 Murata-Machi, Tosu, Saga 841-8501, Japan
 Tel 81-942-81-2723 Fax 81-942-81-2682
 E-mail
 URL <http://panasonic.co.jp/pcc/index.html>

Hi-speed Color Scanner, Energy conservation and space saving

- "Direct & Colour "Office Solution:
- Reliable Ultrasonic Double-Feed Detection
- Full Color Duplex Scanning
- High Durability and Reliable Paper Handling
- Long paper scanning
- Business Card size to A3 ADF
- Space-saving compact design by adopting the curve path ADF. (Requires only 0.4 m² space for scanning size A3 sheet)
- Conforms to the international ENERGY STAR program.
- Environmentally conscious materials
- Specific brominated flame retardants(PBB and PBDE) are not used in appearance plastic material.
- Pb-free solder is used for circuit boards.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.



Hi-speed Color Scanner : KV-S3065CW

Panasonic Communications Co., Ltd.

1471 Murata-Machi, Tosu, Saga 841-8501, Japan
 Tel 81-942-81-2723 Fax 81-942-81-2682
 E-mail
 URL <http://panasonic.co.jp/pcc/index.html>

Eco-products

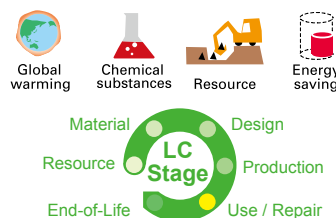
EP-3-031

OA / IT equipment

scanners

Hi-speed Color Scanner, Energy-conservation and space-saving

- "Direct & Color" Office Solution:
- Scanning speed (A4 size portrait) 41ppm/23ppm : KV-S2048C/KV-S2028C.
- Reliable Ultrasonic Double-Feed Detection
- Full Color Duplex Scanning
- High Durability and Reliable Paper Handling
- Space-saving compact design by adopting the curve path ADF.
- Conforms to the international ENERGY STAR program.
- Environmentally conscious materials:
- Specific brominated flame retardants(PBB and PBDE) are not used in appearance plastic material.
- Pb-free solder is used for circuit boards.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium is used for the sheet metals of the product.



Panasonic Communications Co., Ltd.

1471 Murata-Machi, Tosu, Saga 841-8501, Japan
 Tel 81-942-81-2723 Fax 81-942-81-2682
 E-mail
 URL <http://panasonic.co.jp/pcc/index.html>

Hi-speed Color Scanner : KV-S2048C / S2028C

Eco-products

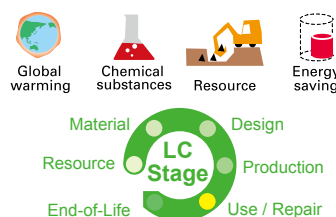
EP-3-032

OA / IT equipment

electronic board

Electronic board, Metallic design and easy to clean

- Standard model : UB-5325 Wide model : UB-5825 4-screen model : UB-7325
- Film board type
- Metallic frame
- Plain paper printing with multiple copies
- USB PC interface with Panasonic document management Software
- Environmentally conscious materials
- Specific brominated flame retardants(PBB and PBDE) are not used in appearance plastic material.
- Pb-free solder is used for circuit boards.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.



Panasonic Communications Co., Ltd.

1471 Murata-machi, Tosu, Saga 841-8501, Japan
 Tel 81-942-81-2723 Fax 81-942-81-2682
 E-mail
 URL <http://panasonic.co.jp/pcc/index.html>

Electronic Board : Panaboard UB-5325 / 5825 / 7325

Eco-products

EP-3-033

OA / IT equipment

electronic board

Color Electronic Board, Metallic design and easy to clean

- "Direct & Color" Office Solution: Wide model :UB-2815C. Standard model : UB-2315C.
- Steel Board Type
- Color Scanning System
- SD Memory Card/USB Flash Memory Storage
- Color Output Capability
- USB PC Interface with Panasonic Document Management Software
- Automatic Date & Time Stamp
- Colour LCD for Easy Operation
- Reduction of paper: Scanned data can be saved directly on the memory storage, and the data can be transmitted directly to PCs.
- Environmentally conscious materials:
 - Specific brominated flame retardants(PBB and PBDE) are not used in appearance plastic materials.
 - Pb-free solder is used for circuit boards.
 - Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.



Panasonic Communications Co., Ltd.

1471 Murata-Machi, Tosu, Saga 841-8501, Japan
 Tel 81-942-81-2723 Fax 81-942-81-2682
 E-mail
 URL <http://panasonic.co.jp/pcc/index.html>

Color Electronic Board : "Panaboard" UB-2815C / 2315C

Eco-products

EP-3-034

OA / IT equipment

projectors

Lightweight and compact mobile projector : EMP-1715

<Energy Saving>

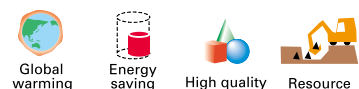
- Improving light use efficiency holds power consumption to 9.0W per 100 lm.
 (9.0W/100 ANSI lm)
 Power consumption of this model is 35% lower than Epson predecessor models.

<Resource Saving>

- Achieving a good balance between high brightness and miniaturization holds weight of this model to 63g per 100 lm.
 (63g/100 ANSI lm) Weight of this model is 56% lighter than Epson predecessor models.

<Elimination of harmful material>

- This model complies with EU-RoHS.
- Outer case of this model projector does not use halogenated fire retardant.



SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan
 Tel 81-266-52-3131 Fax
 E-mail
 URL <http://www.epson.com>

Mobile Projector EMP-1715

Eco-products

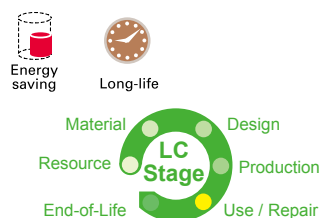
EP-3-035

OA / IT equipment

projectors

User-Friendly and Energy Saving Designed Mirror Projection Method Projector

NEC introduced the "WT610" projector, which adopts aspheric mirrors and an ultra short-focus projection system, developed by NEC Display Solutions Ltd. as a world leading device. By choosing "Lamp Eco-Mode", the life time of the lamp can extend by up to 4000 hours. And NEC could achieve 32dB operating noise level as well as energy saving designed.



NEC Corporation

7-1 Shiba 5 Cho-me, Minato-ku, Tokyo 108-8001, Japan
Tel Fax
E-mail <http://www.nec.co.jp/eco/en/inquiry.html>
URL <http://www.nec.com/>



Eco-products

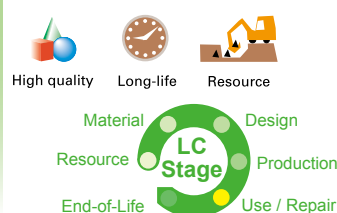
EP-3-036

OA / IT equipment

projectors

Multimedia Projectors SX7/X700

- These liquid-crystal projectors with SXGA+/XGA resolution at 4,000 ANSI lumens combine 0.7 type LCOS (Liquid Crystal On Silicon) and Canon's proprietary AISYS (Aspectual Illumination System) and a new lamp adapted to the new optical illumination system to deliver high-quality images and higher resolution. With these projectors, the effect of light quality control and the luminous efficiency of the lamp are improved. Furthermore, the lamp system extends operating life up to 50% so that it contributes to resource-savings. The feature of LCOS, fine images projected on the screen where no grid of horizontal and vertical lines exists, is upgraded at 4,000 ANSI lumens.
- Their compact body and weight of only 4.7kg contribute to resource savings.
- These products comply with RoHS Directive on the restriction of the use of certain substances in electrical and electronic equipment that came into force on 1 July 2006.
- Canon ISO14001 certified manufacturing sites now employ a newly developed closed system to recycle water using organic membrane filtration.
- Lead-free glass is utilized to produce the environmentally sound lenses.



Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>



Multimedia Projectors SX7/X700

Eco-products

EP-3-037

OA / IT equipment

projectors

Ultra-short throw projector

Main feature of product

- High performance lens with free shaped surface
- Ultra short throw projection with 80" @ 63cm
- Adopting optical mecha that correct the distortion of screen image by free shaped mirror
- Mirror is on the top of the projector and able to open/close with power on/off
- Not annoying by shadow when making presentation
- Being able to setup on the desktop and project 45" image on it
- Environment Conscious
- RoHS compatible model

Hitachi, Ltd.,

Shin-Otemachi Bldg.2-1, Otemachi 2-chome, Chiyoda-ku, Tokyo
100-0004, Japan
Tel Fax
E-mail
URL



Recyclable High quality



CP-A100

CP-A100

Eco-products

EP-3-038

OA / IT equipment

projectors

Portable LCD Projector, P1SD

- SD memory card can be used direct. It will be a projection start if the picture photoed with the digital camera is inserted in an SD memory card slot.
- Easy to give a PowerPoint® presentation without a PC.
- Just use Panasonic's Image Creator software to convert the Microsoft PowerPoint® file to a JPEG file, and then you can leave your PC at home or the office.
- Easy to carry, too. It's the world's lightest projector of its kind, and the smallest. It weighs only 2.9 pounds (1.3kg) and measures just 23.4 x 18.8 x 6.5cm (9.2 x 7.4 x 2.6 inches). Its footprint is around 30% smaller than a sheet of A4 or letter-sized paper.
- Circuits have been integrated to promote energy saving, and compactness of circuit boards and fundamental parts has been improved.
- Non-Use of Specific Chemical Substances*
(* Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma City, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>



Global warming



High quality



Resource



Energy saving



Portable LCD Projector : TH-P1SD

Available in : Japan

Eco-products

EP-3-039

OA / IT equipment

projectors

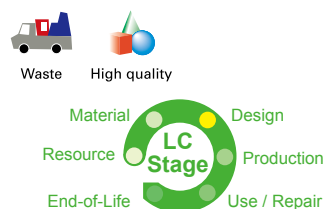
Projector equipped with a super-short focus lens of the new development

TDP-EW25 is equivalent to "a network projector" which was mounted on Windows Vista™ as standard equipment, and it is usable for WXGA projection. Super short focus lens of the new development was adopted, and the short focus which has a projection distance of about 1.2m to 100 type's large screen has been realized.

- **Energy Saving:** By the choice of the most suitable optical unit, the brightness and the efficiency of electric power were improved by 20%.
- **Resource Saving:** By the replacement of the packing cushioning material with carrying bags, the weight of packing materials was reduced by 50%.

TOSHIBA CORPORATION Digital Media Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel Fax
E-mail teruyuki.morimoto@dpg.toshiba.co.jp
URL <http://www.toshiba.co.jp>



TDP-EW25

Eco-products

EP-3-040

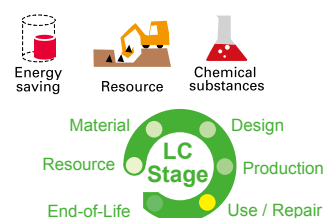
OA / IT equipment

LED projector

Personal LCD Projector, TH-AX200

High brightness and Contrast: Sharp and clear images

- High resolution vivid images even in a bright surroundings realized by newly developed "Light Harmonizer 2"
- High brightness and contrast by "Dynamic Iris"



Matsushita Electric Industrial Co., Ltd.

2-15 Matsuba-cho, Kadoma, Osaka 571-8503, Japan
Tel 81-6-6905-4363 Fax 81-6-6905-4376
E-mail
URL



Available in : Japan

Personal LCD Projector : TH-AX200

Eco-products

EP-3-041

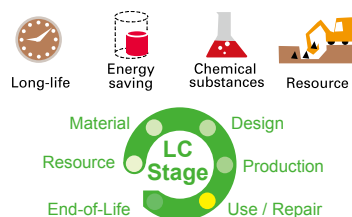
OA / IT equipment

LED projector

Stationary LCD Projector, PT-F100NT

Bright and vivid images for a long time with maintenance saving and easy to use

- Newly developed ARF (Automatic Rolling Filters) function
- New lamp drive system increasing the luminous efficiency
- "Daylight View 3" function compensating the contrast in bright surroundings



Matsushita Electric Industrial Co., Ltd.

2-15 Matsuba-cho, Kadoma, Osaka 571-8503, Japan
Tel 81-6-6905-4363 Fax 81-6-6905-4376
E-mail
URL



Stationary LCD Projector : PT-F100NT

Available in : Japan

Eco-products

EP-3-042

OA / IT equipment

automated teller machines

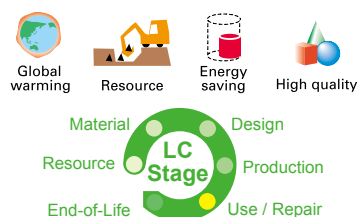
Automated Teller Machine(TS-E1B1)

[Product Feature]

High performance Automated Teller Machine (ATM) with a compact body and large capacity for convenience stores.

[Eco-design Point]

1. Reducing 32% of the product mass through optimal capacity design of unit mechanism (in comparison with the conventional models)
2. Reducing stand-by power consumption by 17% through low power design of control mechanism (in comparison with the conventional models)



ATM TS-E1B1-1

Hitachi-Omron Terminal Solutions, Corp.

Ohsaki New City 3rd Building, 7th Floor, 1-6-3 Osaki 141-8576, Japan
Tel Fax
E-mail
URL <http://www.hitachi-omron-ts.com/index.html>

Eco-products

EP-3-043

OA / IT equipment

cash dispense machines

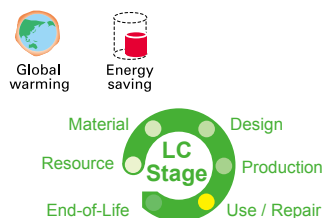
Cash Dispense Machine(TS-E141)

[Product Feature]

Large capacity and high performance with compact body

[Eco-design Point]

Reducing stand-by power consumption by 40% through low power design of control mechanism and suitable capacity design of bill feeding unit (in comparison with the conventional models)



Hitachi-Omron Terminal Solutions, Corp.

Ohsaki New City 3rd Building, 7th Floor, 1-6-3 Osaki, Shinagawa-ku,
Tokyo 141-8576, Japan

Tel Fax

E-mail

URL <http://www.hitachi-omron-ts.com/index.html>



CD TS-E141

Eco-products

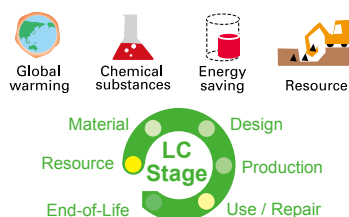
EP-3-044

OA / IT equipment

IP telephone system

Full-IP Telephone System, Energy conservation and resource saving

- Reduced power consumption by energy-conservation design.
- Eco-leaf (Product Environmental Aspects Declaration)
[No.BS-07-E007]
http://202.214.40.151/english/ecoleaf/pub_label.cfm
- Life Cycle Impact
Global Warming : CO₂ equivalent 4,876.49kg (256 ports system).



Panasonic Communications Co., Ltd.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan

Tel 81-92-477-1848 Fax 81-92-477-1452

E-mail

URL <http://panasonic.com.sg/web/pcatId/CatLev1/4>



Full-IP PBX : KX-TDE100

Eco-products

EP-3-045

OA / IT equipment

IP telephone system

Full-IP Telephone System, Energy conservation and resource saving

- Reduced power consumption by energy-conservation design.
- Eco-leaf (Product Environmental Aspects Declaration)
[No.BS-07-E008]
http://202.214.40.151/english/ecoleaf/pub_label.cfm
- Life Cycle Impact
Global Warming : CO₂ equivalent 6,035.32kg (352 ports system).



Full-IP PBX : KX-TDE200

Panasonic Communications Co., Ltd.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-477-1848 Fax 81-92-477-1452
E-mail
URL <http://panasonic.com.sg/web/pcatId/CatLev1/4>

Eco-products

EP-3-046

OA / IT equipment

IP telephone system

IP-PBX TM-STA-0A/TM-MTA-0A

[Product Description]

- Provide environments that fulfill the ability of individuals at forefront of business
- Help enterprises to save the cost of communication and network management IP telephony innovates the enterprise communication system by removing barriers between voice and data. Hitachi's IP telephony Server "IPTOWER-SP Series" enables constructing the network that fits every enterprise size and need and maximizes the effects of IP. It also ensures reliability necessary for the infrastructure.

[Development Concept]

- Integration of low voltage devices (3.3 V) for power reduction as well as FPGA and other technologies for the reducing amount of components have achieved total power consumption reduction by 44% compared to the conventional model.
- Reduction of the total volume of the product by 34% and the weight by 34% compared to the conventional model. (Products for market in Japan)



Hitachi Communication technologies, Ltd

Omori Bellport D Bldg., 26-3, Minami Oi 6-chome, Shinagawa-ku,
Tokyo 140-0013, Japan
Tel 81-3-6404-1221 Fax 81-3-6404-0555
E-mail web-com@hitachi-com.co.jp
URL <http://www.hitachi-com.co.jp/PBX/iptower.html>

Eco-products

EP-3-047

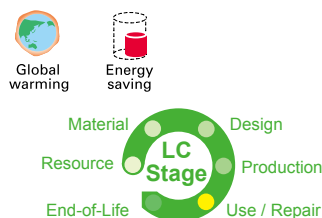
OA / IT equipment

tele-communication equipment for conference

Tele-communication equipment for conference

This product has light weight and compact body, and easy communication & conference is possible with the general telephone system and outlet.

- Power consumption is reduced by energy efficient design.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.
- Pb-free solder is used for circuit boards.
- Specific brominated flame retardants (PBB and PBDE) are not used in appearance plastic materials.



Panasonic Communications Inc.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-477-1103 Fax 81-92-477-1488
E-mail
URL <http://panasonic.co.jp/pcc/index.html>



Tele-communication equipment for conference : KX-TS745JPK

Eco-products

EP-3-048

OA / IT equipment

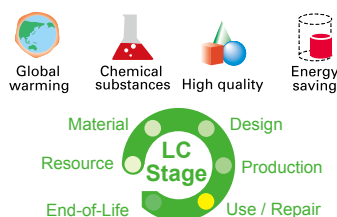
facsimiles

High-performance and Eco-friendly Fax Machine

The UF-A600/A500 features a power-saving mode, which sets the heater in the printer block down to the minimum required power in standby/energy-saving mode.

This design reduces power consumption at standby mode by approx 80% (compared to our conventional model, UF-A70).

In addition, the UF-A600/A500 uses lead free solders, lead and cadmium free materials for harness and power code, hexavalent chromium free screws and steel plates and halogen free plastic components for casing, which contributes to conserve environments. Furthermore, UF-A600/A500 has "2 in 1" printing function that two same-sized originals are printed out to a single sheet to reduce paper usage and power consumption.



Panasonic Communications Co., Ltd.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-431-2111
E-mail
URL <http://panasonic.co.jp/pcc/index.html>



High-performance Fax Machine : Panafax UF-A600/A500

Eco-products

EP-3-049

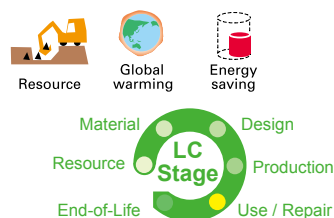
OA / IT equipment

facsimiles

Personal Facsimiles

Drive mechanisms of printing and circuit boards are successfully miniaturized for downsizing of the products.

- Power consumption is reduced by energy efficient design.
- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.
- Pb-free solder is used for circuit boards.
- Specific brominated flame retardants (PBB and PBDE) are not used in appearance plastic materials.



Personal Facsimiles : KX-PW506DL

Panasonic Communications Inc.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-477-1103 Fax 81-92-477-1488
E-mail
URL <http://panasonic.co.jp/pcc/index.html>

Eco-products

EP-3-050

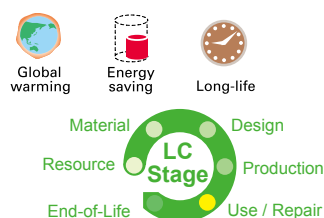
OA / IT equipment

adapters

PLC Adapter

Easy network communications by using house wires and outlets

- Chrome free surface treated steel plates that don't contain the hexavalent chromium are used for the sheet metals of the product.
- Pb-free solder is used for circuit boards.
- Specific brominated flame retardants (PBB and PBDE) are not used in appearance plastic materials.



Panasonic Communications Inc.

4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan
Tel 81-92-477-1103 Fax 81-92-477-1488
E-mail
URL <http://panasonic.co.jp/pcc/index.html>

PLC Adapter : BL-PA100KT

Eco-products

EP-3-051

OA / IT equipment

cellular/PHS telephone sets

Mobile phone: Resource saving, Easy to recycle, Reduction of chemical substances

'Titanium Slim' model about 12.9 mm*¹ thick with a wide variety of functions, including about 2 Mega pixel auto focus camera.

Mobile phone to use titanium for tough and lightweight body.

*¹: Maximum's 14mm.

- **Resource saving:** Slimmer products by making smaller and thinner components and modules, as well as reducing the size of boards. Smaller boards by reducing the number of components through optimization of circuits, as well as developing high density mounting technology.
- **Easy to recycle:** Replacing plastics with metals (stainless steel) in the housing cases.
- **Reduction and substitution of chemical substances:** Use of halogen-free printed circuit boards and polyvinyl chloride (PVC) free coating.

TOSHIBA CORPORATION Mobile Communications Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan

Tel Fax

E-mail

URL <http://www.toshiba.co.jp>



814T

Eco-products

EP-3-052

OA / IT equipment

cellular/PHS telephone sets

Mobile phone :Resource saving, Easy to recycle, Reduction of chemical substances

Mobile phone about 9.9 mm*¹ thick with a wide variety of functions, including 2.4-inch QVGA Clear-Screen LCD and about 2 Mega pixel camera.

'CARD SIZE SLIM'*² mobile phone in metallic design with sophisticated look.

*¹: Maximum's 13.1mm.

*²: The stainless steel upper panel is similar size with a credit card.

- **Resource saving:** Slimmer products by making smaller and thinner components and modules, as well as reducing the size of boards. Smaller boards by reducing the number of components through optimization of circuits, as well as developing high density mounting technology.
- **Easy to recycle:** Replacing plastics with metals (stainless steel) in the housing cases
- **Reduction and substitution of chemical substances:** Use of halogen-free printed circuit boards and polyvinyl chloride (PVC) -free coating.

TOSHIBA CORPORATION Mobile Communications Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan

Tel Fax

E-mail

URL <http://www.toshiba.co.jp>



W55T

Eco-products

EP-3-053

OA / IT equipment

cellular/PHS telephone sets

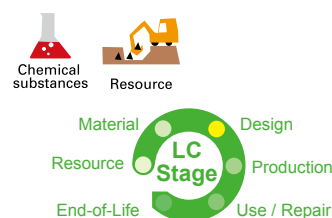
Mobile Phone

Feature of product

- 1seg phone that made the best use of technology of Hitachi high-definition television liquid crystal TV "Wooo".
- The high capacity battery of 1,100mAh is possible that continuously use about 7 hours.
 - * This is continuous attention time when View style, Earphone use, Brightness of liquid crystal:3, and DBEX™ function OFF are set.
- It corresponds to DBEX™. The high quality sound that listened naturally easily was achieved by the technical tie-up with Yamaha Motor Co., Ltd..
- DBEX™ is the trademark of DiMAGIC

Environmental consideration point

- Model for RoHS Directive
- The resin of the plant origin that uses the polylactic acid for the adaptor (charge stand) is adopted.
- The biomass degree 21.5% by weight was achieved. Biomass recognition of Japan Organics Recycling Association is acquired. (This resin has reduced CO₂ exhaust by the entire lifestyle by about 30% compared with past ABS resin.: Trial calculation by Toray Ltd.)
 - * The ratio of the dry weight of the biomass used against the dry weight of the commodity, saying that Biomass degree.
- No halogen system flame resisting medicine substrate is adopted for the substrate of the product.



W52H

Casio Hitachi Mobile Communications Co., Ltd.

2-229-1, Sakuragaoka, Higashiyamatoshi, Tokyo 207-0022, Japan
 Tel Fax
 E-mail
 URL <http://av.hitachi.co.jp>

Eco-products

EP-3-054

OA / IT equipment

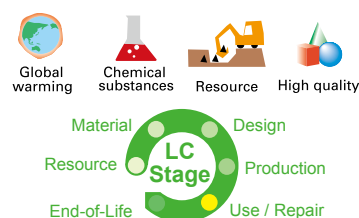
mobile terminal for settlement of accounts

Personal Digital Assistant (Mobile Terminal for Settlement of Accounts)

Personal digital assistant (Model: JT-H480MC) is connected to financial industry such as credit company or bank via settlement center. It meets the demand of expanding market (credit cards, debit cards or multi-payment account service.)

This product is convenient for various businesses such as life and non-life insurance company and delivery-to-home service company that must settle account on visits and deliveries.

- Compact and light weight (size reduced by 12% and weight reduced by 3% compared to our previous model)



Matsushita Electric Industrial Co., Ltd. Panasonic System Solutions Company

4-3-1 Tsunashima-higashi, Kohoku-ku, Yokohama, Kanagawa
 223-8639, Japan
 Tel 81-45-544-3613 Fax
 E-mail
 URL <http://panasonic.co.jp/pss/en>

Available in : Japan

Personal Digital Assistant : JT-H480MC-30

Eco-products

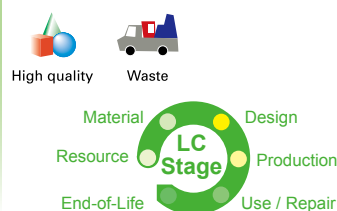
EP-3-055

OA / IT equipment

radio communication equipments

"Tag de Management", the management of assets, loan and documents with RF tag

This product supports the management of the customer's articles (assets and documents) by connecting the radio-frequency (RF) tags with the database. Since RF tags have the features of batch reading and non-contact reading, the user can do the inventory work speedily and reduce the workload significantly. The user can apply this product to various items: portable telephones, important documents, etc as well as OA equipment of the office and facilities of the factory. In addition, the user can finish the processing process effectively and safely, by letting the RF tag memorize the product information which is related to waste treatment and recycling: for example, constitution materials, parts, dismantle method, etc.



ISO radio portable reader

Mitsubishi Materials Corporation

1-297, Kitabukuro-cho, Omiya-ku, Saitama-shi, Saitama 330-8508, Japan
Tel 81-48-641-5995 Fax 81-48-641-5599
E-mail TAG-DE@mmc.co.jp
URL <http://www.kisp.jp> (Japanese Only)

Available in : Japan

Eco-products

EP-3-056

OA / IT equipment

integrated service platform

BladeSymphony 1000/320

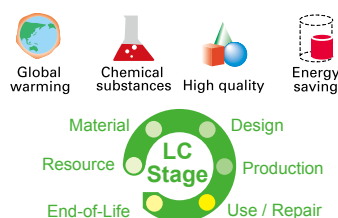
To sustain and support rapid business changes, BladeSymphony's new service platform concept supports the integration and management of the entire IT infrastructure covering server, storage and network systems.

The Enterprise-Class Blade Server "BladeSymphony 1000" and "BladeSymphony 320" which is suited for both data center and PC server integration are based on core blade server technologies. The BladeSymphony 320 provides about 90% fewer cables, 57% more space consolidation, and 34% power savings compared to 1U rack-mount servers.

BladeSymphony1000 and BladeSymphony320 have reduced energy consumption to less than 1/8 of the target energy consumption efficiency defined by Japan energy saving laws. In addition, BladeSymphony 1000 and BladeSymphony 320 comply with EU RoHS (Restriction of Hazardous Substances) Directive.

Hitachi,Ltd.

1, Horiyamashita, Hadano-shi, Kanagawa-ken 259-1392, Japan
Tel Fax
E-mail bds_global@ml.itg.hitachi.co.jp
URL http://www.hitachi.co.jp/products/bladesymphony_global/index.html



Integrated service platform "BladeSymphony"

Eco-products

EP-3-057

OA / IT equipment

office computers

Hitachi Secure Client Solution (SCS)

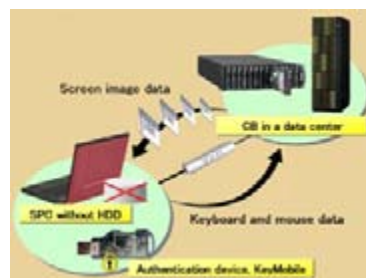
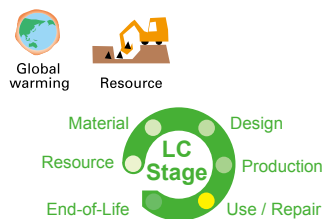
Hitachi SCS provides high security client-computing environments to reduce the risks of information leakage as well as energy consumption and CO₂ emission. The SCS consists of three characteristic products; a well-defined thin client computer named "Security PC" (SPC), a special-purpose authentication device, "KeyMobile™", and a blade PC, "Client Blade" (CB). Since the SPC has no hard-disk-drive and no output data, the SPC can reduce the risk of information leakage from the SPC itself. The KeyMobile™ authenticates the user of the SPC to reduce the risk of information leakage via unauthorized users. The CBs can be located in a secure data center to reduce the risk of information leakage from the data center. The SCS provides secure telework environment as well, which enables to work in their home or at other than their office location. This leads to the reduction of energy consumption and CO₂ emission, as teleworking can save energy-consuming commutation and optimize the number of office workers for their office space to reduce the office energy consumption and CO₂ emission.

Hitachi, Ltd., Platform Solution Division

Hitachi Systemplaza Shinkawasaki, 890 Kashimada, Saiwai, Kawasaki
212-8567, Japan
Tel 81-44-549-1111 Fax
E-mail
URL <http://www.hitachi.co.jp/spc>

Available in : Only the domestic sale

Hitachi Secure Client Solution



Eco-products

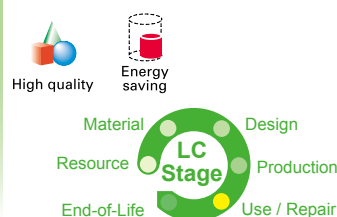
EP-3-058

OA / IT equipment

office computers

Smallest and Thin-type Server with Silent Water-Cooling System

Thin-type Server is 95mm wide, 420mm long and 341mm high and it is capable of carrying 1TB Hard Disk and 800GB AIT. Silent Water-Cooling System Server carries the newest CPU with 4GB memory and three Hard Disk of 250GB. Even in the maximum operating mode under the 35 degrees Celsius, this product could achieve 30dB operating noise, which is equivalent to whispering. So the product is best for offices, hospitals, libraries, schools as well as SOHO where the silence is required.



NEC Corporation

7-1 Shiba 5 Cho-me, Minato-ku, Tokyo 108-8001, Japan
Tel Fax
E-mail <http://www.nec.co.jp/eco/en/inquiry.html>
URL <http://www.nec.com/>

Eco-products

EP-3-059

OA / IT equipment

personal computers

Personal computer "VAIO"

The 868 grams*¹, 12.1 inch "VAIO type G" PC features carbon materials and a Mercury-free white LED backlight. The use of a slimmer, light guide panel and a compact, lightweight LCD system board have reduced display thickness by approximately 50% and weight by about 30% compared with conventional fluorescent tube LCDs.

Low power consumption, facilitated by a white LED backlight, energy-saving hardware design and software control of the CPU, LCD backlight drive voltages, memory, graphic accelerator optical drive and other features, give this notebook PC an incredible 12.5 hours of continuous battery life.*²

*¹ "VAIO Owner-Made Model," a customized model available in Japan, with no optical drive and with a small battery pack, 512MB or 1GB memory (on board), flash memory., no Felica Port and no fingerprint sensor/security chip.

*² The longest length of time within the specification of "VAIO Owner-Made Model" PC with large battery pack.

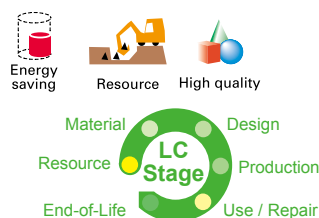
Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan

Tel 81-3-6748-2111 Fax 81-3-6748-2244

E-mail

URL <http://www.sony.net>



VGN-G2AANS/G2AAPS

Eco-products

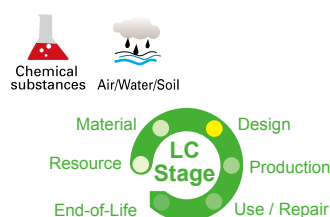
EP-3-060

OA / IT equipment

personal computers

Personal Computer "VAIO"

While PVC currently is not regulated by any laws that apply to chemical substances used in electronics products, Sony is working to eliminate PVC wherever a viable alternative is available. For example, Sony has succeeded in eliminating PVC from the casing and packaging materials used for its products. In addition, Sony has switched to Polyolefin materials for certain power cables, AC adapter cords and electrical cords used in its products. Sony plans to substitute PVC in all new models of Mobile products (excluding accessories) by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements. And also, Sony is promoting the use of alternatives to brominated flame retardants (BFRs), which can generate harmful substances if treated improperly after disposal. Sony plans to substitute BFRs in the casing and main PWBs of all new models of Mobile products by the end of fiscal 2010, provided that the substitute meets all product quality and technical requirements.



Personal Computer "VAIO" type-T(TZ)

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan

Tel 81-3-6748-2111 Fax 81-3-6748-2244

E-mail

URL <http://www.sony.net>

Eco-products

EP-3-061

OA / IT equipment

personal computers

Endeavor ST110 ---a new compact PC of environment-conscious type.

Endeavor ST110 is a MoDT product which drastically achieved a power and material resource saving. MoDT stands for "Mobile on Desk-Top", which is a desk-top personal computer composed with laptop PC devices including the Intel mobile processors.

This product's typical power consumption is only 22W, which satisfies the specification of the international ENERGY STAR program version 4.0. The size is very small; a 2.7 liter dimension at 75 x 185 x 195mm, and weighing approximately only 2.2kg. It also conforms to the J-Moss green mark where all specified substances (Pb, Hg, Cd, Cr(VI), PBB, PBDE) are controlled to be under the reference values. As a result, this system's global warming load throughout the machine's life cycle is just one-third of an ordinary desk-top PC, only 105.8Kg in terms of CO₂.

Laptop power consumption with desktop performance: The Endeavor ST110 - the leading edge of environment-conscious personal computer in a coming age.

EPSON DIRECT CORPORATION

1059, Muraimachi, Yoshikawa, Matsumoto City, Nagano,
399-8703, Japan
Tel 81-50-2000-3700 Fax 81-263-85-6024
E-mail
URL <http://epsondirect.jp>

Available in : Japan only



Endeavor ST110

Eco-products

EP-3-062

OA / IT equipment

personal computers

Adopted Bio-based Plastic to Notebook Personal Computer

BIBLO NX95X/D Employed bio-plastic for major housing: 30% of all the plastic. This bio-plastic, called polylactic acid is made from corn starch and reduces 15% less CO₂ than conventional plastics, PC-ABS over the entire product life-cycle. Since about 50% of the newly-developed plastic consists of natural materials, it can reduce the consumption of petroleum resources. Applied halogen-free resin for plastic chassis and recycled plastics for a part of components.



FMV-BIBLO NX95X/D

BIBLO NX95X/D

Fujitsu Limited

1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, Kanagawa
211-8588, Japan
Tel 81-44-754-3413 Fax 81-44-754-3326
E-mail <http://jp.fujitsu.com/about/csr/eco/contact/>
URL <http://jp.fujitsu.com/about/csr/eco/>

Available in : Japan

Eco-products

EP-3-063

OA / IT equipments

personal computers

World's Smallest Tablet-convertible Mobile PC

FMV-U8250/ LIFEBOOK U-1010

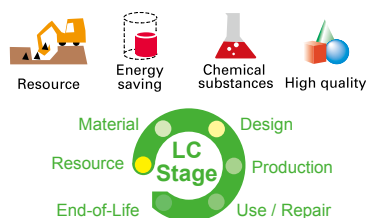
- World's Smallest* Tablet-convertible UMPC: only 580g/1.3 lbs.
- Intelligently designed to suit your working style. Interact with LifeBook U1010 like a Notebook, Tablet PC or Hand-held
- Versatile with convertible form factor and pen input capability
- Optimal internet connectivity via built-in Wireless LAN, LAN and Bluetooth®
- Applied halogen-free resin for plastic chassis and recycled plastics for a part of components
- Conformed to the International Energy Star Program

* As of 16 May 2007, according to Fujitsu's investigations.

Fujitsu Limited

1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, Kanagawa
211-8588, Japan
Tel 81-44-754-3413 Fax 81-44-754-3326
E-mail <http://jp.fujitsu.com/about/csr/eco/contact/>
URL <http://jp.fujitsu.com/about/csr/eco/>

Available in : Asia, North America, Europe, Middle East



FMV-U8250/ LIFEBOOK U-1010

Eco-products

EP-3-064

OA / IT equipments

personal computers

"Satellite", the TOSHIBA notebook PC which pursued high quality design and robustness

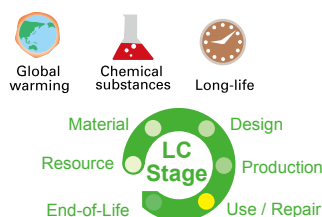
This hard-to-break PC reduces generation of waste.
By reducing the use of screws, Toshiba has improved resource saving and recycling.

Resource saving:

- Robust PC
Adoption of the HDD protection system.
Shock-absorbing structure for HDD, LCD panel, main printed board, etc;
Spill resistant keyboard delays water infiltration.
- Reduction in use of screws
By adopting slide/ hook fixation, the number of screws used was reduced by 30% compared with the benchmark product.

TOSHIBA CORPORATION Personal Computer & Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL http://dynabook.com/pc/index_j3.htm



dynabook Satellite K20

Eco-products

EP-3-065

OA / IT equipments

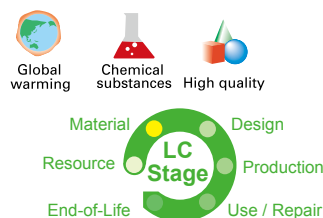
personal computers

"Qosmio", the AV notebook PC equipped with various advanced functions

The flagship AV notebook-PC fully equipped with various advanced functions: Full hi-vision 17-inch widescreen, Double-tuner for Terrestrial digital, HD DVD-R, 4-speaker system, web-camera, etc.

• Resource Saving:

By integrating all the functions of Note PC, TV, DVD player/recorder and picture phone into one "QOSMIO", energy saving has been realized as a whole



TOSHIBA CORPORATION Personal Computer & Network Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL http://dynabook.com/pc/index_j3.htm



Qosmio G40

Eco-products

EP-3-066

OA / IT equipments

personal computers

Lightweight and low-environmental-impact mobile PC

Adoption of LED backlight eliminates use of mercury.

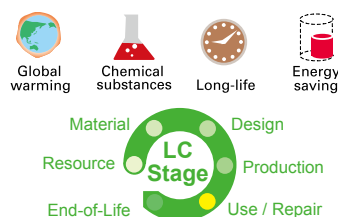
This PC offers not only cutting-edge mobile performance but also outstanding environmental performance.

• Energy saving: Low energy consumption achieved by low-voltage unit and power management system. (idle and/or standby)

• Resources saving:

- 0.45mm thick magnesium alloy case.
- Thin and light LCD with 0.2mm thick glass panel.
- High density surface-mounting technology reduces size of printed circuit board. (smaller pattern width, pattern pitch and parts size)
- Thin, light DVD super-multi-drive, only 7mm thick.

• Reduction in materials affecting the environment: LED LCD backlight realize a mercury-free PC.



TOSHIBA CORPORATION Personal Computer & Network Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL http://dynabook.com/pc/index_j3.htm



dynabook SS RX1

Eco-products

EP-3-067

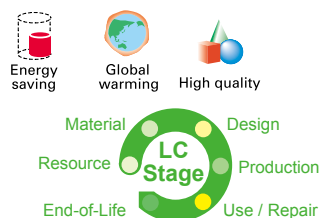
OA / IT equipments

PC server

Ultra-Compact and Energy Efficient Tower Server

The PRIMERGY TX120 tower server is a unique offering from Fujitsu

- Energy efficient and compact, yet powerful.
- Energy efficient: consumes 40% less power than a standard tower server
- Smallest footprint: 1/3 size of a standard tower server
- Virtually silent Operation: 32 dB
- "Intel Server & Storage Innovation Award" Winning product



PRIMERGY TX120

Fujitsu Limited

1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, Kanagawa
211-8588, Japan
Tel 81-44-754-3413 Fax 81-44-754-3326
E-mail <http://jp.fujitsu.com/about/csr/eco/contact/>
URL <http://jp.fujitsu.com/about/csr/eco/>

Available in : Asia, North America, Europe, Middle East

Eco-products

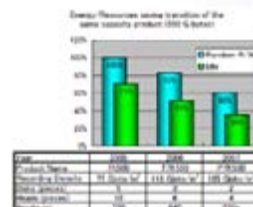
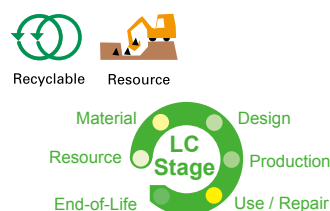
EP-3-068

OA / IT equipments

hard disk drive

Energy/Resource Efficient Hard Disk Drive

1. Energy Efficient Desktop Hard Drive with High Performance and High Recording Density
 - Through the innovative technologies improved recording density significantly
 - Achieved 14% resource saving by the reduction of heads and disks
 - By adoption of innovative technology, achieved 40% reduction of energy consumption at idle time
 2. Eco-Friendly Technologies
 - HiVERT* Technology
 - Replace linear regulators with switching regulators to achieve more efficient voltage conversion in the electronics
 - SOC (System on Chip) Technology
 - The use of LSI with more power-efficient profile, which further reduces power consumption.
 - Advanced Power Management Capabilities
 - Unloaded and lower the power consumption of hard drives in idle mode that constitutes most of the life time.
- * HiVERT means Hitachi Voltage Efficiency Regulator Technology



Hitachi Global Storage Technologies

1 Kiri-hara-cho, Fujisawa-shi, Kanagawa-ken 252-0811, Japan
Tel Fax
E-mail
URL <http://www.hgst.com/portal/site/en/>

Deskstar P7K500

Eco-products

EP-3-071

OA / IT equipments

magnetic disc equipments

Compact entry-level Disk Array

ETERNUS2000 M50/ M100/ M200

Compact, cost-effective entry-level storage systems with high-level system reliability. Ideal for small/medium size enterprises and distributed system environments.

- Save up to 40% in power consumption¹
- Supported Eco-mode using MAID² technology: This enables to reduce power consumption up to 15%³
- 60% less components means greater reliability¹
- Employed RAID-on-chip technology
- 65% Smaller printed circuit board¹
- Quiet operation: 42 dB equals library-level tranquility.
- Compact 2U design, just 89 mm high

1: Comparison with former model, ETERNUS4000 Model80.

2: MAID: An acronym for "Massive Arrays of Inactive Disks". This technology extends the life of disk drives as well as reducing power consumption by scheduling spinning off specific drives.

3: Comparison between all disk drives operating for 24 hours and backup disks operate for 5 hours.

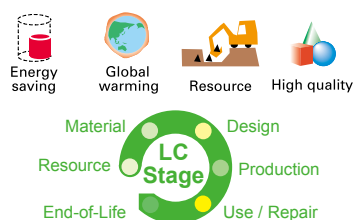
Fujitsu Limited

1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, Kanagawa
211-8588, Japan

Tel 81-44-754-3413 Fax 81-44-754-3326

E-mail <http://jp.fujitsu.com/about/csr/eco/contact/>

URL <http://jp.fujitsu.com/about/csr/eco/>



Available in : Asia, North America, Europe, Middle East

ETERNUS2000

Eco-products

EP-3-072

OA / IT equipments

printers

PIXMA MP600: A4 Inkjet All-In-One, Environmentally Conscious

Canon PIXMA MP600 is a A4 Inkjet All-In-One printer. It offers excellent functions: the high-definition photo-printing with exceptional resolution up to 9600dpi and ink droplets of 1pl (pico-liter), the 2400dpi high-resolution scanner, and the direct printing from a digital camera and a memory card, and other functions.

Consideration for the environment is actively taken up, too. As for energy saving, the power consumption of 90% has been reduced compared with the conventional printer PIXMA MP760 with the "On Demand Operation" technology and the energy saving technology for the power-off and standby mode.

As for resource saving, 44% reduction by volume and 19% reduction by weight have been achieved in comparison with those of the PIXMA MP760. As for the elimination of hazardous substances, the substitutes have been developed, hence the product conforms to the EU RoHS directive.

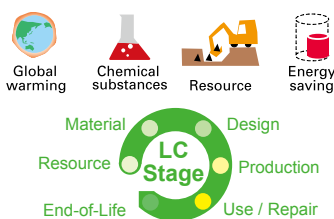
Canon Inc.

3-30-2, Shimomaruko, Ota-ku, Tokyo 146-8501, Japan

Tel 81-44-542-2111 Fax

E-mail

URL <http://www.canon.com>



Inkjet All-In-One Printer PIXMA MP600

Eco-products

EP-3-073

OA / IT equipments

printers

Canon PIXMA iP4300 Inkjet Printer, Environmentally Conscious

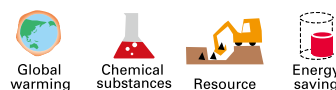
Canon PIXMA iP4300 is a A4 Inkjet printer. It offers excellent functions: the high-definition photo-printing with exceptional resolution up to 9600dpi and ink droplets of 1pl (pico-liter), and the direct printing from a digital camera and other functions.

Consideration for the environment is actively taken up, too. As for energy saving, the power consumption of 39% has been reduced compared with the conventional printer S600 with the energy saving technology for the power-off and standby mode. As for resource saving, 49% reduction by volume and 32% reduction by weight have been achieved in comparison with those of the i865 (under the condition that automatic two-sided printing unit and paper-feeding cassette were mounted).

As for the elimination of hazardous substances, the substitutes have been developed, hence the product conforms to the EU RoHS directive.

Canon Inc.

3-30-2, Shimomaruko, Ota-ku, Tokyo 146-8501, Japan
Tel 81-44-542-2111 Fax
E-mail
URL <http://www.canon.com>



Inkjet Printer PIXMA iP4300

Eco-products

EP-3-074

OA / IT equipments

printers

Color Laser Printer Ricoh Aficio SP C410DN/C411DN

Low Cost, Low Environmental Impact, & High Performance Full Color Laser Printer with 25 (C410DN) and 30 (C411DN) images per minute for both full color and black & white printing modes: These latest full color laser printers can stay at Sleep mode while not in use, consuming only 6W. It takes only 21 seconds for warming-up again from Sleep mode. So, with less waiting time, more energy can be saved.

The size of these models is rather small, but the duplex unit is a standard. So, it is possible to save paper by making duplex prints as well as grouping prints up to 32 pages into both sides of single sheet of paper. Print settings for duplex and grouping modes are very simple by using Ricoh's unique graphical printer driver screen, resulting in much less mistake to print what you need.

In line with all Ricoh products, these models can comply with EU RoHS requirements in chemical substances and are minimal ozone and noise emissions.

Ricoh Company, Ltd.

Ricoh BLDG, 8-13-1, Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio SP C410DN/C411DN

Available in : Asia Pacific Region

Eco-products

EP-3-075

OA / IT equipments

printers

Laser Printer Ricoh Aficio AP410/AP410N

Energy Saving High Performance Black & White Laser Printer with 27 images per minute:

These printers can stay at Sleep mode while not in use, consuming only 4.5W.

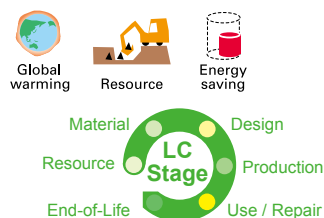
It takes less than 12 seconds for warming-up again from Sleep mode. So, with less waiting time, more energy can be saved.

The size of these models is rather small, but the duplex unit is an option. So, it is possible to save paper by making duplex prints as well as grouping prints up to 16 pages into both sides of a single sheet of paper. Even in such paper saving modes, operation is very simple by using Ricoh's unique graphical printer driver screen, resulting in much less mistake to print what you need.

In line with all Ricoh products, these models have minimal ozone and noise emissions.

Ricoh Company, Ltd.

Ricoh BLDG., 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan
Tel 81-3-6278-5209 Fax 81-3-3543-9347
E-mail envinfo@ricoh.co.jp
URL <http://www.ricoh.com/environment/>



Ricoh Aficio AP410/AP410N

Available in : Asia Pacific Region

Eco-products

EP-3-076

OA / IT equipments

printers

Energy Saving Inkjet Printer, Epson Stylus Photo RX585/595/610

This is an all-in-one printer having the functions of copier, scanner and printer itself.

<Energy saving>

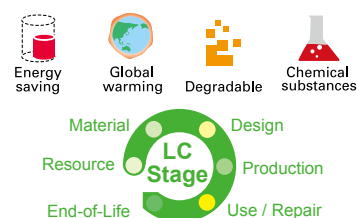
The design of energy saving was continually advanced, and thus 28% of the total power consumption per day was reduced in comparison with that of the conventional model of our company. Compared to the model of 4 years ago, 73% reduction has been achieved.

<Improvement of recyclability>

For plastic parts of the cover and the housing, the luster materials without paints were used in terms of recyclability.

<Elimination of hazardous substances>

The product conforms to the EU RoHS directive.



Epson Stylus Photo RX585/595/610

SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan
Tel 81-266-52-3131 Fax
E-mail
URL <http://www.epson.com>

Eco-products

EP-3-077

OA / IT equipments

printers

Energy Saving and Resource Saving Inkjet Printer, Epson Stylus C120/C110/D120

A high-speed printing of 37 pages per minute has been realized for A4-size monochrome document. In spite of an ink-jet printer, the adoption of high-speed "MACH head" and dual "Black" cartridges enabled a high speed printing of the laser beam printer level. It is cable of satisfying the sudden need of rapid output. Hence, it is a reliable printer for business work.

<Reduction of the global-warming load>

Reduction of the load given by the product was promoted throughout its life cycle, and CO₂ discharge was reduced by 11% compared to that of the conventional model of our company.

<Energy saving>

Energy saving was prompted, and 61% of the total power consumption per day was drastically reduced.

<Resource saving>

Miniaturization and lightening was promoted, and 21% reduction by volume and 7% reduction by weight have been achieved, respectively.

<Elimination of hazardous substances>

The product conforms to the EU RoHS directive.



Epson Stylus C120/C110/D120

SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan

Tel 81-266-52-3131 Fax

E-mail

URL <http://www.epson.com>

Eco-products

EP-3-078

OA / IT equipments

printers

Energy Saving & Resource Saving Inkjet printer, Epson Stylus Pro 3800/3800C/3850

This product is a large-format inkjet printer. Despite the available paper size of A2(+) at maximum, the product realized the size as the same as the A3-printers.

<Reduction of global-warming load>

Reduction of the load was promoted throughout the life cycle of the product, and CO₂ discharge was reduced by 44% in comparison with that of the conventional model of our company. The global-warming load at the stage of raw material production was reduced, too. The reduction is 55%.

<Energy saving>

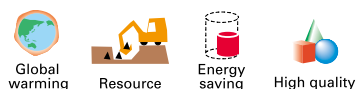
Energy saving was promoted, and the total power consumption per day was reduced by 33%.

<Resource saving>

Miniaturization and lightening was promoted, and 71% reduction by volume and 57% reduction by weight have been achieved, respectively.

<Elimination of hazardous substances>

The product conforms to the EU RoHS directive.



Epson Stylus pro 3800/3800C/3850

SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan

Tel 81-266-52-3131 Fax

E-mail

URL <http://www.epson.com>

Eco-products

EP-3-079

OA / IT equipments

printers

Energy Saving Laser printer, Offirio LP-S5000

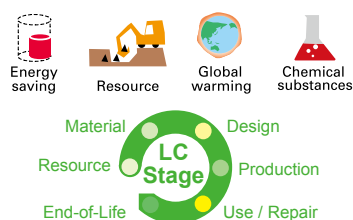
Quiet running of the product has been realized by the adoption of a cooling fan-less structure. On the basis of the design to offer countermeasures against heat, the cooling-fan that comes to be the source of noise was discontinued. Thus, we can concentrate on our business work without being annoyed by the sound of printing.

<Energy saving>

The total power consumption per day was reduced by 27% compared to that of the conventional model of our company.

<Elimination of hazardous substances>

The product conforms to the EU RoHS directive.



Color Laser printer Offirio LP-S5000

SEIKO EPSON CORPORATION

3-3-5 Owa, Suwa-shi, Nagano-ken 392-8502, Japan
Tel 81-266-52-3131 Fax
E-mail
URL <http://www.epson.com>

Eco-products

EP-3-080

OA / IT equipments

printers

Eco-Friendly A4 Color Laser Printer

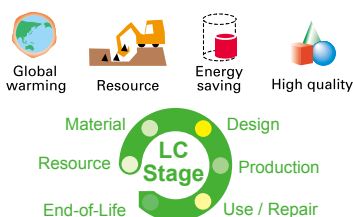
DocuPrint C1100 is a safely designed and eco-friendly A4 color printer, pursuing (1) global warming prevention, (2) natural resource conservation and (3) chemical risk reduction.

<Reduction in size and weight>

By adopting the small size lightweighted marking engine, frame, cover, and motor, DocuPrint C1100 realized lightweighting of 46% compared with the existing machine (DPC525A). The base machine is easy portable weighing 13.2 kg only (consumables excluded).

<Energy saving performance>

The power consumption per week is 1.2 kWh (International Energy Star Program) which is the highest energy saving performance of this class, 50% reduction from the existing model. It features 5 W of low power consumption in sleep mode and 20 seconds of recovery time.



Fuji Xerox Co., Ltd.

9-7-3 Akasaka, Minato-ku, Tokyo 107-0052, Japan
Tel 81-3-6271-5111 Fax
E-mail
URL <http://www.fujixerox.co.jp/>

Available in : Japan, Asia Pacific region

DocuPrint C1100 (Japan), DocuPrint C1110/C1110B (AP region)

Eco-products

EP-3-081

OA / IT equipments

printers

Eco-Friendly A3 Color Printer for Office

DocuPrint C2250 is equipped with two industry-first environmental technologies, as well as new print technology for high-resolution, high-quality images.

<Enhanced environmental performance with lead-free shafts and biomass plastic>

Industry-first environmental technologies include: (1) shafts that do not contain lead, a designated hazardous substance, in parts for the output unit, including paper feeder; and (2) a biomass plastic that comprises more than 30 percent of plant-derived constituent by weight in the moving part of the machine (drum cover).

<Enhanced energy saving performance>

An energy-saving controller, high-efficient lamp and temperature-controlling technology reduce power consumption in sleep mode from below 5W (conventional machines) to below 1.5W. In terms of TEC, power consumption is cut to 1.63kWh a week.

<LED printhead system for high-resolution, high-quality images>

A newly developed LED printhead is incorporated to write images on the photoreceptor drum. Fuji Xerox has realized high image quality of 1,200 x 2,400 dpi, which is equivalent to or better than laser systems.

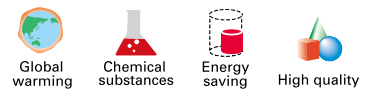
Fuji Xerox Co., Ltd.

9-7-3 Akasaka, Minato-ku, Tokyo 107-0052, Japan

Tel 81-3-6271-5111 Fax

E-mail

URL <http://www.fujixerox.co.jp/>



Available in : Japan (Available in Asia Pacific region in 2008)

DocuPrint C2250

Eco-products

EP-3-082

OA / IT equipments

printers

Kyocera Mita Ecosys Printer FS-2000D

Kyocera Mita's Monochrome Laser Printer, FS-2000D is Kyocera's leading product in environmental design. It incorporates Kyocera's proprietary long life technology to minimize the replacement of consumable parts. This approach makes it environmentally conscious and cost efficient because toner is the only consumable for this printer. We prioritize recycling of all parts after use of the products. That is why it incorporates easy to disassemble subsets and labels for all parts with their material names to make recycling easy.

The products use non-burnable, non-halogen type polycarbonate ABS compounds and packaging, so even in the case of incineration dioxins are not emitted.

The FS-2000D is compliant with the RoHS Directive that was initiated in Europe in 2006 to eliminate substances that are harmful to the environment and also with the standards of the International Energy Star Program.

KYOCERA MITA Corporation

2-28, 1-Chome, Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan

Tel 81-6-6764-3555

E-mail

URL <http://www.kyoceramita.com>



Ecosys Printer FS-2000D

Eco-products

EP-3-083

OA / IT equipments

multi function printer

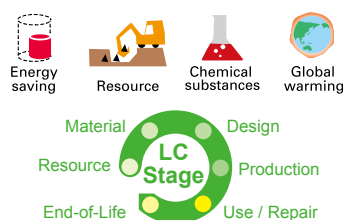
Compact Multi Function Printer with built-in networking features, MF4270

Energy saving and high speed are balanced using Canon's original On-Demand fixing technology.

The power consumption during sleep mode is about 3W, and the recovery time is just 10 seconds.

Output speed of 20 pages per minute for printing and copying, with a first copy output time in 9 seconds. Duplex and 2-in-1 printing functions reduces paper consumption. The slim body of 390mm wide saves the space and fits neatly on your desk.

Further, this product is compliant with the EU RoHS directive which restricts the use of hazardous substances, and it means reduction of environmental burden at the end-of-life.



MF4270

Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan
Tel 81-3-3758-2111 Fax 81-3-3758-1160
E-mail
URL <http://www.canon.com>

Eco-products

EP-3-084

OA / IT equipments

displays

Electronic Paper Display "Albirey"

Albirey is one of new generation displays applying electronic paper technologies. The display is reflective without the use of backlight, and it uses small power only when a static image is first displayed; the information remains on display for a long term without any power supply. This eye-friendly resolution display just like paper can be read easily in bright sunlight and can be viewed from any angles. Since this ultra-thin, lightweight display uses an embedded battery and uses wireless communications, it can easily be set up; there is no need for appurtenant work such as the laying of power and LAN cables. Albirey greatly contributes to the preservation of resources in various ways; providing rewritable digital solution instead of paper; running on a battery and so reducing electricity consumption; and avoiding the need for printing and transportation materials, which leads to the reduction of paper and carbon dioxide emission. Its effect is 87% reduction of carbon dioxide emission for five years.



Hitachi, Ltd.

Shinagawa InterCity B, 13th Floor 2-15-2, Kounan, Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-5495-7053 Fax 81-3-5495-7065
E-mail kaoru.suzuki.dh@hitachi.com
URL <http://www.hitachi.co.jp/Div/omika/solution/display/> (in Japanese Only)

Eco-products

EP-3-085

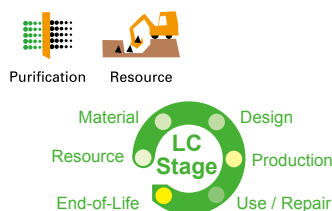
OA / IT equipments

digital pen

Digital pen

A digital pen is an interface device that converts analog data written on special paper into digital data. It can be used in a wide variety of applications.

Hitachi Maxell's digital pens have been designed so that their circuits become lead-free in compliance with the RoHS directive. The pens have also been integrated more compact in size and lightweight, and consequently the amount of plastic materials used has been reduced.



DP-201

Hitachi Maxell, Ltd.

1-1-88 Ushitora, Ibaraki-shi, Osaka 567-8567, Japan

Tel 81-72-623-8250 Fax 81-72-623-9014

E-mail kankyo@maxell.co.jp

URL <http://www.maxell.co.jp/e/products/industrial/digitalpen/index.html>

Eco-products

EP-3-086

OA / IT equipments

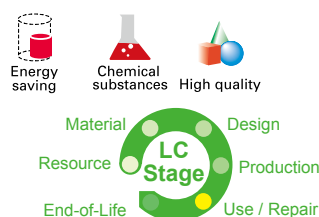
network server

Energy-efficient Network Server

IPCOM EX1000/ EX1200/ EX2000 The IPCOM EX series integrate the security function* into the server load balancer. Measures against the threat of security are concentrated on one-point, and a strong security environment is offered.

* Functions such as firewall, IPS, and VPN are installed, and strong security is offered as UTM.

- More than 57% energy efficient
- Lead-free
- RoHS compliant



Fujitsu Limited

1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, Kanagawa 211-8588, Japan

Tel 81-44-754-3413 Fax 81-44-754-3326

E-mail <http://jp.fujitsu.com/about/csr/eco/contact/>

URL <http://jp.fujitsu.com/about/csr/eco/>

Available in : Japan

IPCOM EX2000IN

Eco-products

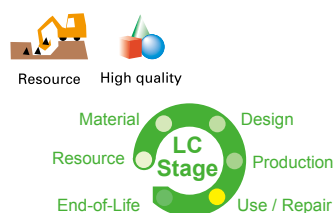
EP-3-087

OA / IT equipments

analytical instruments

Bioinformatics Software for DNA/RNA/Amino Acid Sequence Analysis DNASIS Pro

Life science research is making great advances in such broad applications as drug discovery, food safety and environmental conservation. DNASIS Pro bioinformatics software contributes to life science research by helping scientists be more productive. DNASIS Pro lets researchers edit, annotate and analyze DNA, RNA and amino acid sequences. It includes a comprehensive set of analytical tools that can be expanded with optional homology search, multiple alignment, and base calling and sequence assembly modules. Its unique, customizable features are designed to save researchers time and accelerate life science research.



Hitachi Software Engineering Co., Ltd.

4-12-7, Higashishinagawa, Shinagawa-ku, Tokyo 140-0002, Japan
Tel 81-3-5479-8831 Fax
E-mail sales24@hitachisoft.jp
URL <http://www.hitachisoft.jp/dnasis/>

Available in : Japan

DNASIS Pro

Eco-products

EP-3-088

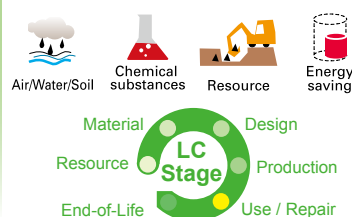
OA / IT equipments

information recording materials

Agriculture Information Management System: GeoMation Farm

GeoMation Farm manages cultivation-related information linking with the corresponding farmland. By utilizing this information, farmers can carry out efficient (low cost, high quality, high quantity) farming. This efficiency leads to the following nature-friendly farming.

- 1) By analyzing the relation between fertilizer and quality/quantity of the crop, farmers can judge the suitable amount of fertilizer. This leads to low environmental impacts.
- 2) Remote sensing technology can judge the percentage of dryness of the ears of wheat. By using this technology, farmers can harvest only dry wheat and this lead to energy-saving for additional drying.
- 3) By plotting affected area of the outbreak of disease or harmful insect on the farmland map, farmers can prevent and exterminate these pest with low agricultural chemical.



Hitachi Software Engineering Co., Ltd.

4-12-7 Higashishinagawa, Shinagawa-ku, Tokyo 140-0002, Japan
Tel 81-3-5479-8831 Fax
E-mail sales24@hitachisoft.jp
URL <http://hitachisoft.jp/geomation/farm>

Available in : Japan

Agriculture Information Mgmt : GeoMation Farm

Eco-products

EP-3-089

OA / IT equipments

electronic cash registers

Electronic register with enhanced visibility and energy & resource savings

The product is an electronic cash register which pursued the merit of usability. The visibility was improved by the twin screen of large liquid crystal & LED. The universal key board easy to use and the one-touch replacing device of paper were equipped. As well as these trials, we address the items of environment consideration.

- **Energy Saving:** Power consumption at the stand-by state was reduced by 43% by installing an energy saving function and a high integration circuit, (the ratio to the conventional equipment).
- **Resource Saving:** Setting areas were reduced by 16% by sizing down the parts of display, keyboard and drawers, (ibid).



Electronic cash registers MA-660

TOSHIBA TEC CORPORATION

Oval Court Ohsaki Mark East 2-17-2, Higashi Gotanda, Shinagawa-ku, Tokyo 141-8664, Japan

Tel Fax

E-mail

URL <http://www.toshibatec.co.jp/index.html.ja>

<http://www.toshibatec.co.jp/index.html.html>

Available in : JAPAN

Eco-products

EP-3-090

OA / IT equipments

pos terminal

Environment-conscious long life POS terminal for distribution business

This product is a POS terminal, which has realized the customer's demand, the environmental consideration, and the optimization of the cost, by the design based on the Life Cycle Planning (LCP) ^{*1} technique.

- **Improvement of recycling ability:** Adopted was the structure which was designed by considering disassembly was adopted, and thereby the number of screws was reduced by 33% compared to that of the conventional apparatus.
- **Extension of life:** On the basis of the value-life analysis, the separated structure of the engine board and 1/F region was adopted, for which upgrading is possible.
- **Improvement of maintenance:** A sliding mechanism was used, which makes it easy to replace the engine board units, HDD, and the back-up battery.
- **Elimination of harmful chemical substances:** Halogen-free plastic and halogen-free printed circuit board were adopted.

^{*1} **Life Cycle Planning (LCP):** A series of processes involving determination of target specifications for a product and its life cycle and determination of an environmentally conscious design concept in order to satisfy the determined target specifications



POS Terminal WILLPOS-Unity M-7000

TOSHIBA TEC CORPORATION

Oval Court Ohsaki Mark East 2-17-2, Higashi Gotanda, Shinagawa-ku, Tokyo 141-8664, Japan

Tel 81-3-6422-7160 Fax 81-3-6422-7121

E-mail

URL <http://www.toshibatec.co.jp/index.html.ja>

<http://www.toshibatec.co.jp/index.html.html>

Available in : JAPAN

Eco-products

EP-3-091

OA / IT equipments

decolorable toner

Decolorable toner for repeated use of OA paper

Decolorable toner "e-blue" is a solution for the reduction of the OA paper used in the office.

Printed-paper with decolorable toner can be reused repeatedly by using a heat eraser.

The utilization of this decolorable toner results in reduction of the purchase and disposal of paper, leading to reduced carbon dioxide emissions as well as the dissemination of environmental consciousness among employees. The introduction of e-blue into offices decreases paper consumption by 60 % (resulted at Toshiba). Decolorable toner will contribute to requirement of ISO14001 standards as well as environmental management of company.

- **Energy Saving:** With a small electric power, a large amount erasing can be performed. The design is an environment-conscious design not using the useless heat. The discharge of carbon dioxide was reduced by decreasing the paper consumption.
- **Resource Saving:** The purchase amount of paper, and the wasting amount of paper was reduced owing to the use of paper without waste.

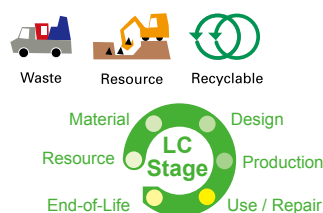
TOSHIBA CORPORATION Industrial Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan

Tel 81-3-3457-3760 Fax 81-3-5444-9188

E-mail

URL http://www.toshiba.co.jp/efort/product/ink/index_j.htm



Available in : JAPAN

Heat eraser, Decolorable Toner "e-blue", MFP suitable for e-blue

Eco-products

EP-3-092

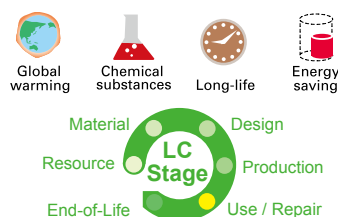
OA / IT equipments

intel architecture server

Compact server with minimal noise and greatly reduced power consumption

This server is resistant to vibration and dust because it uses Flash memory drive instead of HDD. It also offers greater energy saving and resource saving.

- **Energy saving:** 35% reduction in power consumption compared with the benchmark product.
- **Resources saving:** 60% reduction in the weight of the storage unit by Flash memory drive.
- **Reduction in materials affecting the environment:** Use of lead-free soldering for electronic packaging ahead of competitors. (In the server)



TOSHIBA CORPORATION Personal Computer & Network Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan

Tel Fax

E-mail

URL http://dynabook.com/pc/index_j3.htm

Available in :

MAGNIA Z330S (F model)

Eco-products

EP-3-093

OA / IT equipments

media player

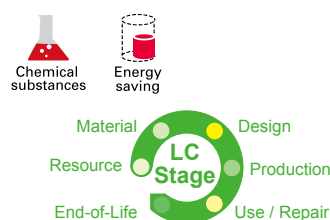
3.5 type LCD media player equipped with "One Seg." tuner and SD card slot

As for MEV41, "One Seg." tuner and "One Seg." picture correction technology are mounted on it. Moreover, MEV41 was equipped with a SD card slot, as well as 4GB built-in flash memory. Direct recording of "One Seg." program to the SD card became possible. The transfer of the program recorded in main body to the SD card also became possible. Furthermore, MEV41 is equipped with the high-resolution 3.5 type QVGA TFT-LCD which can reproduce about 260,000 colors at the maximum.

- **Energy Saving:** The power consumption for the audio regeneration reduced from 411mV of MET50JS to 200mV of MEV41
- **Resource Saving:** Though the LCD size was enlarged to 3.5 types owing to the adoption of thin type design and the NAND flash memory, the main body weight is nevertheless reduced to 167.5g which is about 71%

TOSHIBA CORPORATION
Digital Media Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel Fax
E-mail masafumi.ueda@dpg.toshiba.co.jp
URL <http://www.toshiba.co.jp>



gigabeat V41 MEV41

Eco-products

EP-3-094

OA / IT equipments

media player

Light and slim body, portable media player having a built-in flash memory

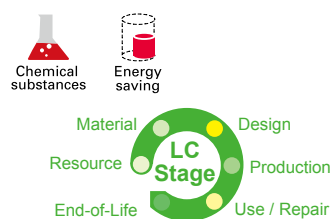
MET401 contains 4GB flash memory. If music, about 960 pieces is recordable, and if animated cartoon, up to 16 hour recording is possible.

It is equipped with a wireless LAN facility based on IEEE802.11b/g, and it is possible to use the "pod cast". Dimensions are 54.0mm width and 85.6mm length. These dimensions are almost the same as those of a credit card. The thickness is 9.9mm and the weight is about 58g. A lightweight slim body has been realized.

- **Energy Saving:** The power consumption for the audio regeneration reduced from 411mV of MEG50JS to 200mV of MET401.
- **Resource Saving:** The weight of main body was decreased to 1/4, namely 58g, by the adoption of a thin-type design and the NAND flash memory.

TOSHIBA CORPORATION
Digital Media Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel Fax
E-mail masafumi.ueda@dpg.toshiba.co.jp
URL <http://www.toshiba.co.jp>



gigabeat T401 MET401

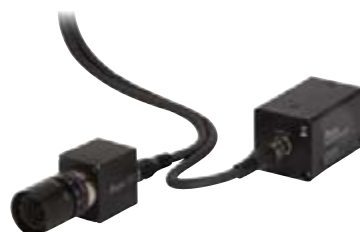
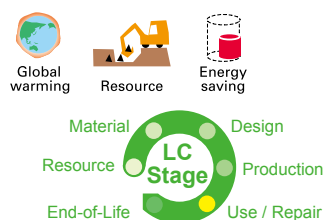
Compact-type business-use digital-method 3CCD camera for image processing

IK-TF9U is a 3CCD camera of head separate type. It is the smallest and the lightest in the optimum class for the image processing use, as of October, 2007. A 1/3 type 800000 pixel (the total number of all picture elements) progressive scan CCD has been mounted. By oblique pixel staggering and pixel interpolation processing, the image output of 20 frames per second is possible with the image of QXGA (2048×1536) equivalency.

- **Energy Saving:** The power consumption was reduced by 24% by selecting the low power consumption parts and by improving the circuit integration.
- **Resource Saving:** The product weight of the head plus CCU was reduced by improving the circuit integration and by selecting a small design.

TOSHIBA CORPORATION
Digital Media Network Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
 Tel Fax
 E-mail teruyuki.morimoto@dpg.toshiba.co.jp
 URL <http://www.toshiba.co.jp>



IK-TF9U/9H

Eco-products

EP-4-001

OA / Furniture

metal desks, tables and chairs

Okamura "Visconte" series office-chair for multifunctional seating.

"Visconte" series is the multifunctional office-chair of the middle class to which there is a great demand in the most company's office rooms. We are approaching to the environmental consideration as follows.

1. As for plastic parts which occupy 43% of the product by weight, the regenerated plastic materials of more than 10% has been used. Ten per cent is the standard value conforming to the green purchase method.
2. The product was designed in consideration for easy recycling, and the decomposition rate to single materials has exceeded 85%.
3. Raw material name was displayed on the surface of main parts.
4. In order to maximally draw out the characteristics and functions and of the engineering plastics to be used, the "finite element analysis" due to the computer simulation was conducted. Then, the product's life, quality and stability, and strength were tested under the condition to keep the beautiful form of the product.

Okamura Corporation

Tenri Bldg, 1-4-1, Kitasaiwai, Nishi-ku, Yokohama, Kanagawa
220-0004, Japan
Tel 81-45-319-3480 Fax 81-45-319-3482
E-mail
URL <http://www.okamura.co.jp>



Eco-products

EP-4-002

OA / Furniture

metal desks, tables and chairs

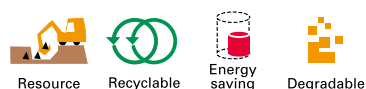
Okamura "Pro Unit - Freeway" desk for office system

The product is an office desk of the top-board connecting type. It forms as a structure by connecting each other. Thereby, the minimum parts composition that includes beams and legs can be realized. For the office users, it contributes to reduce the introduction cost and the parts to be placed under management.

1. The long span of 3m at the maximum has been realized without use of intermediate supports. In addition, the rate of use of steel has reached a high value of 94%.
2. Various features of the product have been realized: parts that is usable in common, layout change with minimum load, the use of the product for a long period, etc.
3. Minimum parts composition contributes to the resource saving.

Okamura Corporation

Tenri Bldg, 1-4-1, Kitasaiwai, Nishi-ku, Yokohama, Kanagawa
220-0004, Japan
Tel 81-45-319-3480 Fax 81-45-319-3482
E-mail
URL <http://www.okamura.co.jp>



Eco-products

EP-4-003

OA / Furniture

information paper

Top-quality clean paper, STACLEAN RC

STACLEAN RC, has a worldwide reputation among engineers in semiconductor, electronics and other industries for top-quality clean paper. STACLEAN RC, used for more than twenty five years in clean rooms, is impregnated with acrylic resin and generate virtually no dust particles, and yet capable for recycling as normal paper. STACLEAN RC does not contain any restricted or banned materials and chemical substances under environmental standard.

We recently added AS STACLEAN, ESD clean paper in our STACLEAN line of products. Users can enjoy very wide variety of STACLEN product family that is growing and keeps innovating every day.

SAKURAI CO., LTD.

MG Ikenohata Bldg., 1-2-18, Ikenohata, Taito-ku, Tokyo 110-0008, Japan
Tel 81-3-3827-4441 Fax 81-3-3827-4321
E-mail
URL <http://www.sakurai.co.jp>



STACLEAN RC /laser printers and PPC copiers

Eco-products

EP-4-004

OA / Furniture

mechanical pencils

Eco-friendly mechanical pencil for general use

This improved pencil can be used until only 0.5mm of lead remains (Previously, lead needed replaced at 12.4mm) In addition to extending its writing life by 20%, it minimizes waste of pencil lead, making more efficient use of resources. Recycled plastic is used for the barrel, making it environmentally-friendly.



Platinum Pen Co., Ltd.

2-5-10, Higashi Ueno, Taito-ku, Tokyo 110-8622, Japan
Tel 81-3-3831-3412 Fax 81-3-3835-7876
E-mail
URL <http://www.platinum-pen.co.jp/>

Zeroshin Glamour / mini/MGMQ-100

Eco-products

EP-4-005

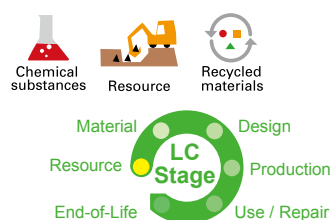
OA / Furniture

pencil lead and holders

Not only the case but also the lead itself !

Use of recycled materials helps to prevent global warming, reduces the environmental burden and makes more efficient use of resources.

In the process of lead production, we effectually use the by-product material which come from the chemical factory's products and generator-brush from thermal power station.



Tombow Pencil Co.,Ltd.

6-10-12, Toshima, Kita-ku, Tokyo 114-8583, Japan
Tel 81-3-3912-1181 Fax 81-3-3912-1536
E-mail
URL <http://www.tombow.com>

Available in : Japan

Recycled Spare Leads : R5-REW

Eco-products

EP-4-006

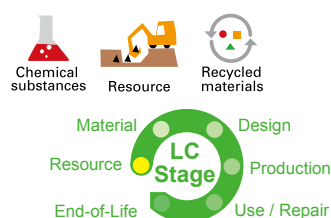
OA / Furniture

marking pens

Long lasting, refillable highlighter for offices and schools

We help to reduce the environmental burden and help to prevent global warming by using resources effectively. The product reduces waste by using recycled materials.

In addition, by using our "Highlighter Ink Charger" you can save 61% weight of the garbage, comparing with purchasing 10 new highlighters.



Tombow Pencil Co.,Ltd.

6-10-12, Toshima, Kita-ku, Tokyo 114-8583, Japan
Tel 81-3-3912-1181 Fax 81-3-3912-1536
E-mail
URL <http://www.tombow.com>

Available in : Asia

Twin Highlighter : WA-TC

Eco-products

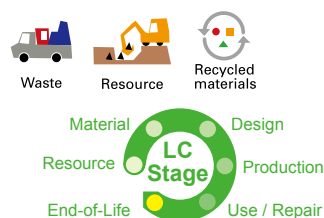
EP-5-001

Apparel / Textiles

dress shirts

Office Uniform after reduction of oil resources us

This garment contains a minimum of 55% PET bottle-recycled polyester, which means it saves oil resources and puts used PET bottles to good use.



CHIKUMA & Co., Ltd.

3-3-10, Awaji-cho, Chuo-ku, Osaka-shi, Osaka 541-0047, Japan
Tel 81-6-6222-3289 Fax 81-6-6222-3665
E-mail o-alpha@chikuma.co.jp
URL <http://www.chikuma.co.jp>

Eco-products

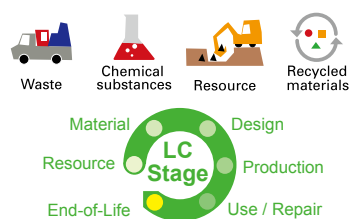
EP-5-002

Apparel / Textiles

uniforms

Office Uniform that saves oil resources and reduce

The cloth is made from material that incorporates at least 55% PET bottle-recycled polyester so it saves oil resources and make use of discarded PET bottles.

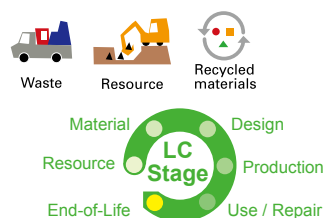


CHIKUMA & Co., Ltd.

3-3-10, Awaji-cho, Chuo-ku, Osaka-shi, Osaka 541-0047, Japan
Tel 81-6-6222-3289 Fax 81-6-6222-3665
E-mail o-alpha@chikuma.co.jp
URL <http://www.chikuma.co.jp>

Office uniform that saves oil resources and reduce

The clothing is made from material that uses a minimum of 55% PET bottle-recycled polyester. This means it doesn't use oil resources and it reduces waste by using PET bottles.



CHIKUMA & Co., Ltd.

3-3-10, Awaji-cho, Chuo-ku, Osaka-shi, Osaka 541-0047, Japan
 Tel 81-6-6222-3289 Fax 81-6-6222-3665
 E-mail o-alpha@chikuma.co.jp
 URL <http://www.chikuma.co.jp>



Eco-products

EP-6-001

Interior decoration / Exterior decoration or furniture

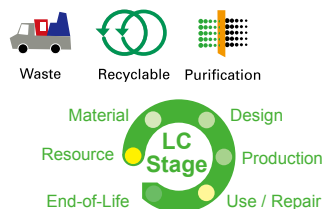
pillows

Good sleep pillow "HIBAMIN"

HIBA is a kind Japanese cypress tree; it's glowing abundantly in Aomori prefecture of Japan. When Aomori HIBA wood is sawed at the saw-mill, a large amount of waste wood is yielded. The stuffing material of a good-sleep pillow "HIBAMIN" is the waste wood of HIBA. Namely, the fragment of the wood is shaped into a pillar-like rod, and then the rod is cut into grains of 8 mm long, and finally the grains are polished to a shape that gives soft-touch feeling to user's head and neck. If you use "HIBAMIN", relaxing fragrance of HIBA that spreads throughout your bedroom sends you to good sleep and helps the progress of your comfortable sleep; waking up in a fresh mood is also assured. By the respiration effect of the HIBA wood itself, the perspiration in sleeping may be absorbed, and the absorbed sweat is removed on drying. HIBA is a wood material difficult to rot owing to its antibacterial property, so you can use "HIBAMIN" for a long period.

Hiba Development Co., Ltd.

76-2, Oma, Oma, Aomori 039-4601, Japan
Tel 81-175-37-4711 Fax 81-175-32-1011
E-mail hiba@jomon.ne.jp
URL <http://www.aomori-hiba.com/>



Eco-products

EP-6-002

Interior decoration / Exterior decoration or furniture

furniture and fixtures

"TARU-MONOGATARI" furniture made from whisky cask

Casks made from oak trees of could-be-100-year-old are used for as long as 70 years to mature Suntory whisky in the aging cellars, being refilled with freshly distilled new whisky several times.

After many years of duty as cradles of whiskies, however, the retired casks had formerly been used wastefully as firewood. Through 20 years of study of trial and error, Suntory had established the technique to change these laudable cradles of whisky into oak-wood-furniture of high-quality and long-life naming the series of furniture "Taru-Monogatari (the Tale of Cask)". We utilize, of course, the material to make small articles such as stationery and even the sawdust turns into the glaze for tasteful ceramics. Through this special technique to revive the forest resources, we may say that the carbon dioxide fixation in the oak trees would last over the centuries. It is possible that "The Tale of Cask" continues on "100 years in the forest, 70 years in the aging cellar and perhaps additional 100 years as furniture".

Suntory Limited

2-3-3, Daiba, Minato-ku, Tokyo 135-8631, Japan
Tel 81-3-5579-1513 Fax 81-3-5579-1755
E-mail
URL <http://www.suntory.com/>



A Taru-Monogatari Dinner Table and Chairs

Eco-products

EP-6-003

Interior decoration / Exterior decoration or furniture

furniture and fixtures

Knockdown furniture for outdoor use by the circulation type material

<Module design>

We designed 600 mm corner modules, which makes the parts common and reduces manufacturing loss. It enhances the efficiency of the maintenance which includes parts exchange. We took up a long life design which enables version up by exchanging only a part when the part was updated by the amending design.

<Use of recyclable materials>

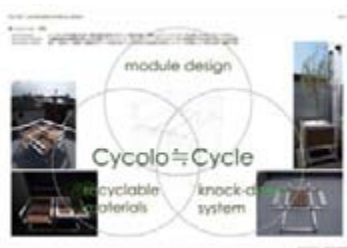
Aluminum is easily made up to a flame by the process of driving the ABS joints with plastic hammer; fractionation and disassembly are easy, too. Recycling wood is obtained from the waste wood of pulled down building, by crushing it, mixing with the thermoplastic resin, and molding the paste. As for the main constitution materials (aluminum, ABS and recycling wood), it is possible to do "Multiple" recycling.

<Knock-down system>

We selected knockdown style of which decomposition and assembly are easy, and promoted the efficiency of stock and transportation. It is possible to develop the original design by buying supplementary parts, for example, to make a bench by combining chairs side by side, or to make the table united with the chair, and so on.

Greeningworks Inc.

Mama 1-3-3, Ichikawa-shi, Chiba 272-0826, Japan
Tel 81-47-329-5200 Fax 81-47-329-5200
E-mail info@greeningworks.com
URL <http://www.greeningworks.com>



Cycolo-Symbiotic/Sustainable Furniture System

Eco-products

EP-6-004

Interior decoration / Exterior decoration or furniture

paper diaper for adults

Automatic Urine Collection System to Reduce the Use of Paper Diapers

This new excretion care product for elderly people requiring nursing care was cooperatively developed with Unicharm Corporation. This product consists of a urine receptacle and a disposable urine collection pad wherein the special sensor in the pad detects urination and then the urine in the pad is automatically suctioned into the urine tank of the urine receptacle.

Main features;

- (1) The urine does not remain in the diaper, so the skin can be maintained in a comfortable state while only needs to replace the pads about twice a day.
- (2) Compared to conventional paper diapers (urine pads) that are consumed at a rate of 5 to 7 pieces a day, this product reduces the labor required for nursing care while also greatly reduces the amount of waste (about 1/40 by weight).
- (3) This product is equipped with urine collection amount measurement and recording functions that can be used to create a urination chart to support high-quality nursing care, through providing information such as the timing to supply a user with water or to take the user to the bathroom.
- (4) The urine receptacle is small and lightweight and has a built-in battery, so it can be used to go out and with wheelchairs.

HUMAN Care Innovation Venture Company, Hitachi, Ltd.

18-13, Soto-Kanda, 1-chome, Chiyoda-ku, Tokyo 101-8608, Japan
Tel 81-3-4564-6869 Fax
E-mail
URL <http://www.hitachi.co.jp/products/humancare/>



Automatic Urine Collection System

Available in : Japan

Eco-products

EP-6-005

Interior decoration / Exterior decoration or furniture

paper diaper for adults

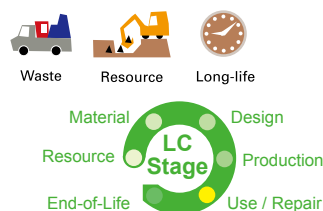
Disposable diaper: reduced environment impact of 12% than before product

When we compare a disposable diaper for adults with a baby disposable diaper, there becomes very much quantity that is disposed of after use greatly. Therefore we divide an outside diaper and an inside diaper. And it absorbs urine an inside diaper. We try to it's smallest, to do a waste by changing only a part of an absorption parts. In this case, outside diaper "LIFREE" and inside diaper "LIFREE pads" use together that make hard to have become stain with what we changed a diaper structure of an absorption parts.

Therefore there became a little change number of times of an outside diaper. (Outside diaper is 5times heavier than inside diaper) As a result of we compared environmental impact with an article in LCA of a product conventionally, and we apply LIME which was a LCIA tool for Japan, and having inspected numerical value, We reduced environment impact of 12% than before product.

Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>



Products/Model:Lifree

Eco-products

EP-6-006

Interior decoration / Exterior decoration or furniture

paper diaper for babies

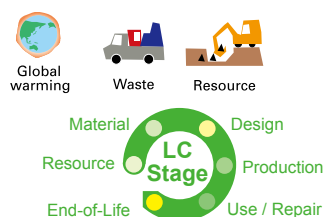
Paper diaper for baby use, with 35% reduction of CO₂ discharge

- This baby diaper was realized with keeping the function level as it is, the amount of the used raw material was reduced by 10%.
- By decreasing the thickness of the article to 2/3, the amount of packaging material was reduced by 20%.
- The loading efficiency in the transport of the article was improved by 20%. And thereby, the discharge of CO₂ which is a cause of the global warming was reduced by 35% in comparison with that of the conventional article.

(The data are round value compared with our company's conventional article. The numerals of CO₂ show the comparison of the CO₂ discharge of article per 1 piece through its life cycle.)

Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>



Moony Man

Eco-products

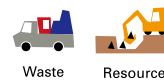
EP-6-007

Interior decoration / Exterior decoration or furniture

sanitary products

Sanitary napkin: Waste reduction that considers menstrual blood loss

This product is sanitary napkin that combine and use "Piece" placed between the groins and "Sheet" applied to the undergarment. The product can exchange only piece with one sheet paved in the undergarment because piece almost absorbs the blood of the menstruation. As a result, it came to be able to reduce the waste at the menstruation largely. About 85% in the weight of the product and about 70% by the amount of piece wrapping use has been reduced compared with a general sanitary napkin. (Comparison with our product for daytime of day when a lot of menstrual bloods are)



SOFY Body Piece

Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>

Eco-products

EP-6-008

Interior decoration / Exterior decoration or furniture

sanitary products

Baby wipes: Largely reduce a waste by using a box repeatedly

This article is repackable. We can largely reduce a waste by using a box repeatedly.

Harmful materials do not use it for an article, and it is made by the subject matter that harmful materials do not appear even if you burn it. And it is considered by raising functionality to reduce a waste.



Moony Baby Wipes

Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>

Eco-products

EP-6-009

Interior decoration / Exterior decoration or furniture

sanitary products

Wet tissues: Reduction of a waste by repacked

You can use the box of SILCOT Wet Tissues repeatedly by having you supplement a refill if the contents disappeared. It leads to reduction of a waste. In addition, it is the article which considered the universal design which can easily open out with one finger.



SILCOT Wet Tissues

Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita 3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>

Eco-products

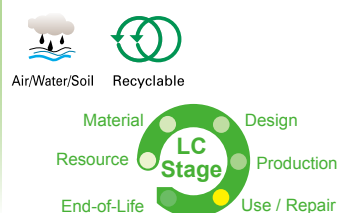
EP-6-010

Interior decoration / Exterior decoration or furniture

cleaning and scouring preparations

Spray-type sndeck kitchen-cleaner by use of "soda" electrolysis water

"Soda" electrolysis water is the aqueous solution obtained by the electrolysis of a sodium hydrogencarbonate (NaHCO_3) solution. The water thus produced does not contain synthetic surface-active agents at all. We often hear that the goods of eco-type detergent have not sufficient powers to remove stain. Compared with such products, the "soda" electrolysis water shows a great effect to remove the greasy stain of a kitchen and also to clean the well-thumbed wall of a living room. As for the spray-type sndeck kitchen-cleaner, the mixture of thickener and "soda" electrolysis water is put into an sndeck originally designed bottle. Addition of the inorganic thickener makes it easy for the electrolysis water to stick on the stain of the wall and to remove it effectively. Moreover, the bottle can be used repeatedly with refill.



HATTORI PAPER MFG.Co.,Ltd.

171-1 Yamadai, kinsei-cho, shikokuchuo-city, Ehime 799-0112, Japan
Tel 81-896-58-3005 Fax 81-896-58-3306
E-mail hattori@genki.ne.jp
URL <http://www.hattoripaper.co.jp>

Eco-products

EP-6-011

Interior decoration / Exterior decoration or furniture

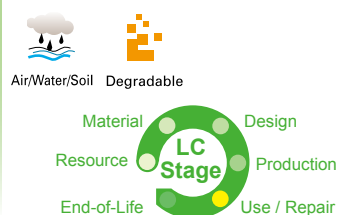
cleaning and scouring preparations

sndek Cleaning Cloth Series made from natural plant materials

There are various kinds for "a dirt". Even if we take a kitchen as an example, the quality of dirt is different with range, refrigerator and ventilator. As for the sndek cleaning cloth series, therefore, the fundamental cloth has been selected for each kitchen portion. The size of cloth has been changed for each portion. Moreover, the volume and concentration of the NaHCO_3 electrolysis water that is impregnated into the cloth has been changed. In general, the wet sheet product has a peculiar defect that the sheets dry up on the way of the use. In order to minimize such a defect, the sndek cleaning cloth series put its ingenuity in the opening and shutting part of its package. Furthermore, considering that the cleaning sheets are disposable, we were particular about natural materials and selected mainly biodegradable materials such as pulp, cotton and eucalyptus fiber. In the pretty compact package of the sndek cleaning cloth series, the particularly selected materials and user's reliance has been packed.

HATTORI PAPER MFG.Co.,Ltd.

171-1 Yamadai, Kinsei-cho, Shikokuchuo-city, Ehime 799-0112, Japan
Tel 81-896-58-3005 Fax 81-896-58-3306
E-mail hattori@genki.ne.jp
URL <http://www.hattoripaper.co.jp>



example of product

Eco-products

EP-6-012

Interior decoration / Exterior decoration or furniture

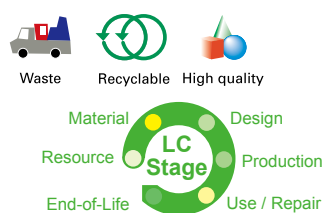
makeup and skin care products

"HIBA cream" from HIBA-woods

HIBA is a kind of Japanese cypress tree, which is glowing abundantly in Aomori prefecture of Japan. When Aomori HIBA wood is sawed at the saw-mill, a large amount of sawdust is obtained as the waste. From the sawdust thus obtained, the essence that is called "Aomori HIBA oil" can be extracted. The essence contains a natural component "Hinokitiol" at about 2% . "Hinokitiol" is useful for skin care because of its multi-function: antibacterial effect, whitening effect, UV light absorption, astringent action, etc. However, the duration of the effects is relatively short. As a stabilizing technique of "Hinokitiol", the method to blend it with zinc stearate has been developed. "HIBA cream" is the skin-care product that enhanced the stability and the antibacterial activity of "Hinokitiol". ("Hinokitiol": a custom name of isopropyl tropolone).

Hiba Development Co., Ltd.

76-2, Oma, Oma, Aomori 039-4601, Japan
Tel 81-175-37-4711 Fax 81-175-32-1011
E-mail hiba@jomon.ne.jp
URL <http://www.aomori-hiba.com/>



Eco-products

EP-6-013

Interior decoration / Exterior decoration or furniture

self cleaning glass coating

Cleaning technology "Aqua Coat" by the super-hydrophilic film

"Aqua Coat" is a new technology which TOSTEM developed originally. It forms a hydrophilic coat layer on the glass surface, and let the rain water enter between the glass and the dirt to wash the dirt away. It is the skylight industry's first self-cleaning technology. For its first technical development, it was applied to the transparent glass of the skylight "the sky theater" of our company goods. It can keep the place in a clean state where the hand had not reached until now. It can demonstrate the cleaning effect sufficiently even in night and shade, because the antifouling effect works without light. We estimate that the durability and the weather resistance of the "Aqua Coat" are effective for the period corresponding to 10 years from the experiments. We aim to expand its use to normal window, entrance door and others goods. Our final target is to apply the "Aqua Coat" to the whole of one house, to which we push forward a study.

TOSTEM CORPORATION

1-1, Ojima 2-chome, Koto-ku, Tokyo 136-8535, Japan
Tel 81-3-3638-8187 Fax 81-3-3638-8254
E-mail
URL <http://www.tostem.co.jp/>



Eco-products

EP-6-014

Interior decoration / Exterior decoration or furniture

aromatic

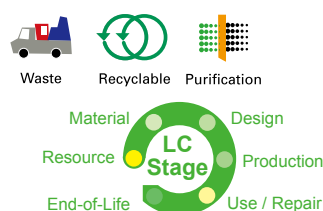
Natural Fragrance "HIBANOMORI"

Aomori HIBA is one of the three beautiful forests in Japan. When Aomori HIBA wood is sawed at the saw-mill, a large amount of sawdust is yielded as the waste. The sawdust thus obtained is the material of the natural fragrance "HIBANOMORI". Before packing the sawdust into bags, it is sieved to grains of desirable size and a small amount of the essence that was separately extracted from the saw-dust is added.

If you place a pack of "HIBANOMORI" in the warm water pool of your bathtub, the flavour that spreads throughout the bathroom will calm you. Moreover, the flavour will suppress the breeding of various germs in the bathroom. If you place a pack in your wardrobe, your clothes will be kept to be clean by the sterilizing power of "HIBANOMORI".

Hiba Development Co., Ltd.

76-2, Oma, Oma, Aomori 039-4601, Japan
Tel 81-175-37-4711 Fax 81-175-32-1011
E-mail hiba@jomon.ne.jp
URL <http://www.aomori-hiba.com/>



Eco-products

EP-6-015

Interior decoration / Exterior decoration or furniture

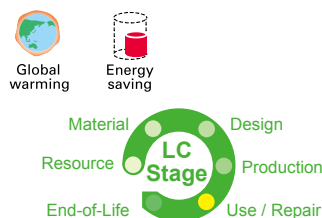
sanitary pottery, accessories

NEOREST AH type : A toilet saving electricity and water

This toilet is equipped with "Hybrid Ecology system", which is a cleaning system of water flow from direct water pipes and new pump developed for this product. This technology reduces a quantity of water for cleaning the toilet to 5.5 liters, resulting in significant saving water compared with 13 liters of existing products. In addition, "Wonder Wave Cleaning" function, technology of washing a hip, repeats strong and weak spouting more than 70 times a minute, reducing a quantity of water nearly half compared with existing products with feeling fully washed. Also, this toilet achieved saving electricity. The timer saving power function turns off a power of the seat heater at the every time users set. Additionally, the super automatic saving power function learns the use's life pattern, and turns down the surface temperature of the seat and turns off the power of the seat heater automatically at the time user almost never use, achieving farther saving electricity.

TOTO LTD.

2-24-2, Sakurashinmachi, Setagaya-Ku, Tokyo 154-8540, Japan
Tel 81-3-5451-1110 Fax 81-3-5451-1049
E-mail
URL <http://www.toto.co.jp>



NEOREST AH type CES9793Y

Eco-products

EP-6-016

Interior decoration / Exterior decoration or furniture

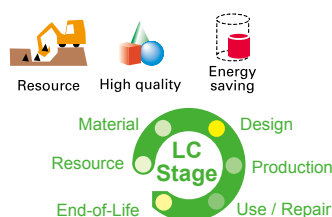
sanitary pottery, accessories

SATIS: A water saving toilet "ECO6"! World smallest water closet without tank

This stool features compact size and energy consumption reduction by 21% and CO₂ emission reduction by 24% compared to existing products. This stool can save water 6 liters for cleaning solid waste and 5 liters for liquid waste are available, thereby realizing about 60% water-saving and about 46% electrical energy-saving compared to existing products through the super energy-saving mode. Additionally, use of detergent is reduced by 72% at cleaning a toilet by pro-guard which features easier cleaning on the toilet surface. The way to hold on the toilet with welding is changed to screw method, so that it is easier to disassemble after discard. The stool is easier to be recycled because of the marking of plastic materials.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>



SATIS: GBC-901S/BW1, DV-218-R/BW1 etc

Available in : Japan

Eco-products

EP-6-017

Interior decoration / Exterior decoration or furniture

sanitary pottery, accessories

Sensor Urinal:Saves water and energy by AI Saving function and hydraulic power generator

The Sensor Urinal flashes automatically after use. This Sensor Urinal includes the power generation function that effectively converts spouting power into electrical energy. Accordingly, this urinal uses 1 to 2 liters of water to flush depending of the condition of use and saves about 70% water compared to existing products. And, the ceramics surface is antibacterial specifications designed with easy to clean rim shape.

This Sensor Urinal is not only designed stylishly but easy to maintain.



Sensor Urinal: AWU-506RAMP/BN8

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan

Eco-products

EP-6-018

Interior decoration / Exterior decoration or furniture

sanitary pottery, accessories

e-Modern:Substantial stylish design equipped with "eco-dial", a new water saving mode

e-Modern, a single lever faucet, saves water with high performance. In many case single lever faucet is fully opened (when discharging water) from it's easy operation of opening and closing . And single lever faucet discharges water more than required. This faucet equips "Eco Dial", which is newly developed water saving function to prevent water from running freely. All you have to do is to choose "eco mode" of "Eco Dial", and you can save water up to 50%.



e-Modern: LF-E340SC/SE etc

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan

Eco-products

EP-6-019

Interior decoration / Exterior decoration or furniture

sanitary pottery, accessories

Automage: Automatic faucet equipped with hydraulic power generation

Automage, a sensor faucet, supplies water just bringing your hand in front of the faucet.

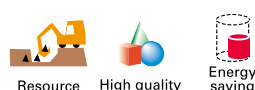
This sensor faucet includes the water generator that converts spouting power into electrical energy effectively; thereby this faucet operates with the energy from this self-power generation. Additionally, because of from spray stream spouting, splashing of water around the faucet is less and you can wash your hands well with less water.

"Automage" saves up to 30% of water compared to existing sensor faucets, and up to 80% compared to two handle faucets.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan



Automage: AM-91K etc

Eco-products

EP-6-020

Interior decoration / Exterior decoration or furniture

metal sanitary ware

Automatic faucet saving water and electricity

This automatic faucet is saving water and economical, because the sensor to spout and stop water flow automatically saves wasted water. The generation unit of water power covers electric power for the sensor and the electromagnetic valve, so this mechanism saves electric power.



TEN41AWX

TOTO LTD.

2-24-2, Sakurashinmachi, Setagaya-Ku, Tokyo 154-8540, Japan
Tel 81-3-5451-1110 Fax 81-3-5451-1049
E-mail
URL <http://www.toto.co.jp>

Eco-products

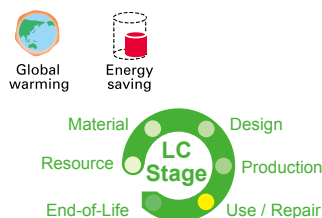
EP-6-021

Interior decoration / Exterior decoration or furniture

metal sanitary ware

Water-saving shower head attachment

This shower allows you to start and stop the water flow by simply pushing the button on the shower head. This function avoids water continuously running while you are washing your hair, resulting in significant saving water and energy of supplying hot water.



TMF40WQN

TOTO LTD.

2-24-2, Sakurashinmachi, Setagaya-Ku, Tokyo 154-8540, Japan
Tel 81-3-5451-1110 Fax 81-3-5451-1049
E-mail
URL <http://www.toto.co.jp>

Eco-products

EP-6-022

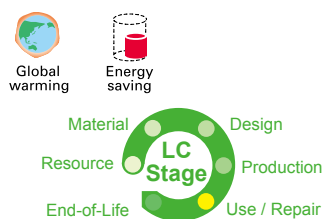
Interior decoration / Exterior decoration or furniture

bathrooms

Energy-saving bathroom

This product's wrapping the bathtub with double thermal insulation and an insulating cover can keep the water in the bathtub warm, similar to a structure of a thermos bottle.

This structure makes the temperature of water in the bathtub only two low degrees in six hours, and this insulating performance is four times as high as existing products. This means water in the bathtub does not need to be reheated when another person takes a bath, resulting in saving energy.



SPRINO HAQ1721UR

TOTO LTD.

2-24-2, Sakurashinmachi, Setagaya-Ku, Tokyo 154-8540, Japan
Tel 81-3-5451-1110 Fax 81-3-5451-1049
E-mail
URL <http://www.toto.co.jp>

Eco-products

EP-6-023

Interior decoration / Exterior decoration or furniture

thermal insulating window

Aluminum composite insulating window; energy-savin

The product is a composite structure insulating window frame, which uses aluminum material (with durability and fireproof functions) for outside and resin material (with thermal insulation and ornamental design functions) for inside. The product contributes to energy saving by reducing air-conditioner's load at a residential house with a help of double glazed glass. When saved amount of energy is converted into carbonic acid gas, a high-insulation/airproof house using Symphony can reduce carbonic acid gas by approximately 960 kg a year per house in contrast to a conventional house. Thanks to these effects, increased carbonic acid gas by increased materials of the product (such as for sash, glass, and thermal insulation) can be offset within approximately 1.6 years, thus showing enough efficiency in terms of LCA standard. Furthermore, to improve its recyclability, the product has a simple disassemble structure where aluminum/resin materials are fixed with our own "Type II Eco-Label", based on our internal standard.



TOSTEM CORPORATION

1-1, Ojima 2-chome, Koto-ku, Tokyo 136-8535, Japan
Tel 81-3-3638-8187 Fax 81-3-3638-8254
E-mail
URL <http://www.tostem.co.jp>

Eco-products

EP-6-024

Interior decoration / Exterior decoration or furniture

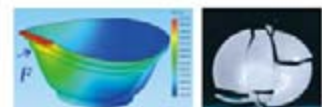
ceramic tableware

Structurally strengthened ceramic tableware

"Using one thing for a long time is important"

This product is the porcelain tableware which was developed only by this concept. Its structure was designed from the analysis of failure mechanism for the strongest shape of tableware. The intensity enhancement over 30% is possible in the margin which is weak point of the tableware even in the same weight and same material. The aiming thing is this word.

"strength" for "gentleness".



SANSHIN KAKO CO.,LTD.

MaruishiShinbashi BLDG. 7F ,5-7-12, Shinba-shi, Minato-ku, Tokyo 105-0004, Japan
Tel 81-3-3433-0084 Fax 81-3-3433-0069
E-mail info@sanshin-kako.co.jp
URL <http://www.sanshin-kako.co.jp>

StructuralStrengthenPottery"RibLine", "CeraCules"

Eco-products

EP-6-025

Interior decoration / Exterior decoration or furniture

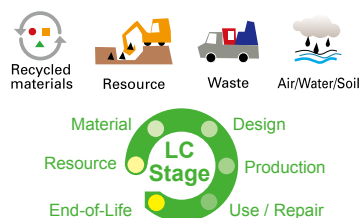
ceramic tableware

Strengthened porcelain tableware using a recycled raw material

At present, the resin is most mainly used as the material of the tableware for the school catering of Japan. However, from the viewpoint of a feeling of security/ culture to the accustomed material, the case that the ceramic tableware is used also increases, and it is said that the about 30% is the strengthened porcelain. However, the present status shows that the breakage occurs at a rate of 10-25% per year in the actual use places, because the material is strong but weak to the impact. Fortunately, the strengthened porcelain which is the main stream is aluminum porcelain, and it contains the alumina which is relatively expensive in the ceramic raw materials, at a per cent of 30-40. Recycling by a relatively low cost is therefore possible. We can design a low-load ecology system for the resource which has a limit.

SANSHIN KAKO CO.,LTD.

MaruishiShinbashi BLDG. 7F, 5-7-12, Shinbashi, Minato-ku, Tokyo
105-0004, Japan
Tel 81-3-3433-0084 Fax 81-3-3433-0069
E-mail info@sanshin-kako.co.jp
URL <http://www.sanshin-kako.co.jp>



Eco-products

EP-6-026

Interior decoration / Exterior decoration or furniture

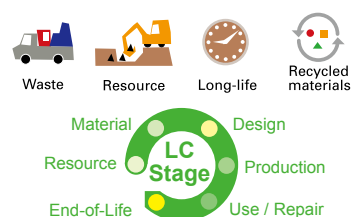
ceramic tableware

Recycling Ceramics "Rebirth of tableware - Re-shokki"

- The product is the ceramic tableware "RE-shokki" which used circulating-type resources for the first time in Japan. It is yielded by the recycling technology and the regeneration system at the place of manufacture, and by the network between the users in land. The green life 21 project was set up by the collaboration of 32 companies.
- The product in the photograph contains 20% of regeneration material, namely the crushed product of the spent tableware. The bending strength is 131MPa, which is 1.6 times large compared to that of the conventional tableware. The product has safety and practicability in the point of the water-absorbing capacity and the thermal shock resistance. The CO₂ discharge at the production is 2450kg/t, which is 3% less than that of the conventional tableware. The reduction effect is larger, as the blend ratio of the regeneration material is higher.
- We intend to contribute to the environment efficiency through the ceramic circulation system. It includes the simplification of manufacturing process, the restraint coloring agent, the loading efficiency at the distribution, the design considering life and washability, the repair service, etc.

Gifu Prefectural Ceramics Research Institute

3-11 Hoshigadai, Tajimi City, Gifu Pref. 507-0811, Japan
Tel 81-572-22-5381 Fax 81-572-25-1163
E-mail hasegawa-yoshikazu@pref.gifu.lg.jp
URL <http://www.gi21.org/>



Available in : Japan, France and other countries

Recycled-Tableware "GL21-Oliva"

Eco-products

EP-6-027

Interior decoration / Exterior decoration or furniture

tableware for outdoor

Environmental-friendly dishes designed for out-door

Raw materials used for the dish are plants such as corns and potatoes, thereby efficiently reducing global warming influence. Also, the dish needs as low as approximately 4,000 calories when incinerated, causing no contamination of the aright dish is biodegradable, being resolved by natural microorganism under the soil.



Resource



Eco One Spoon, fork, and glass

ENTEC Co.,Ltd

375-1, Oseki, Tubame-shi, Niigata 959-1287, Japan
Tel 81-256-63-3515 Fax 81-256-64-4530
E-mail info@k-entec.co.jp
URL <http://www.k-entec.co.jp>

Eco-products

EP-6-028

Interior decoration / Exterior decoration or furniture

tableware (occidental-type)

Biomass resin tableware for the supply of group food

This product is the reuse tableware made of the environment-friendly plant-origin plastic, which does not use the exhaustible resource "petroleum" as raw material. Most plastics can finally change to the CO₂ which is 3 times self-weight. Biomass plastic also generates CO₂ when burnt, but it is not outbreak of new CO₂, because the CO₂ is equivalent to the CO₂ which was absorbed into the body of source plant by photosynthesis from the air. For example, at the school lunch center treating 3,000 meals, if the conventional plastic tableware is replaced with a bio-plastic one, we can reduce CO₂ as follows: 3,000 x 205g (tableware) x 3 = 1.845 kg CO₂. This corresponds to the quantity of the CO₂ absorbed by artificially planted 131 trees of Japanese cedar.



Global warming



Resource



Long-life



High quality



SANSIN KAKO CO.,LTD.

MaruishiShinbashi BLDG. 7F, 5-7-12, Shinbashi, Minato-ku, Tokyo 105-0004, Japan
Tel 81-3-3433-0084 Fax 81-3-3433-0069
E-mail info@sanshin-kako.co.jp
URL <http://www.sanshin-kako.co.jp>

Eco-products

EP-6-029

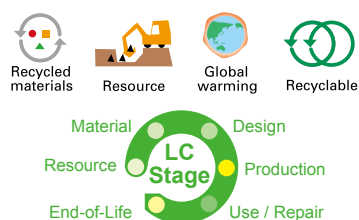
Interior decoration / Exterior decoration or furniture

trays and chopsticks

Chopsticks and tray made from the recycled material of the spent tableware

These products are the recycling goods which were made by using the raw material recovered from the spent tableware which were collected from the group lunch market.

Through the whole life cycle from the production of the commercial goods to the disposal of them, the load to the environment is small owing to material recycling. It is possible to contribute to the saving of resources such as petroleum and the reduction of wastes.



SANSHIN KAKO CO.,LTD.

MaruishiShinbashi BLDG. 7F, 5-7-12, Shinba-shi, Minato-ku, Tokyo
105-0004, Japan
Tel 81-3-3433-0084 Fax 81-3-3433-0069
E-mail info@sanshin-kako.co.jp
URL <http://www.sanshin-kako.co.jp>

Tray[RET-56], Chopsticks[RH-195S]

Eco-products

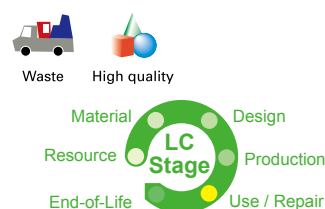
EP-6-030

Interior decoration / Exterior decoration or furniture

cooking sheet

Cooking sheet: Reduces a waste.

This cooking sheet is the first sheet which take in only extra water of vegetables, and protect the freshness. When you store vegetables with a bag, you spread a sheet under vegetables and absorb only unnecessary water appearing from vegetables and protect vegetables from breeding of bacteria and drying to keep a bag to the moderate humidity. When you save vegetables in a refrigerator 6 °C, mold occurs only in the case of a save bag two weeks later, but when you use this sheet with a save bag, outside leaf changed color a little after two weeks. You can eat it that the inside was edible enough if you take one piece of outside. In this way it seems to be eaten the vegetables which have been disposed of conventionally by keeping it long the freshness of vegetables and reduces a waste.



Unicharm Corporation

Sumitomofudousan Mita Twin Building West Tower, 5-27, Mita
3-chome, Minato-ku, Tokyo 108-8575, Japan
Tel 81-3-6722-1041 Fax 81-3-6722-1018
E-mail
URL <http://www.unicharm.co.jp>

Cook Up

Eco-products

EP-6-031

Interior decoration / Exterior decoration or furniture

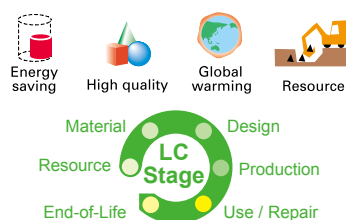
gas ovens

Energy-saving residential-use gas cooking stove exe+S

Our company has long been working to expand the assortment of residential-use gas cooking stoves installed with high-efficiency burners. This product features burners that greatly increase the thermal efficiency by lessening the flame over-flow from the bottom of pots and pans. It attains a high total thermal efficiency of 55.6%. As such, it acts to conserve energy and reduce CO₂ emissions. It also has a top made of glass for easy cleaning. Furthermore, for increased safety, all three burners are equipped with sensors to prevent over-heating, and the two front burners, with sensors to detect the absence of pots and pans on the burners and prevent lighting in that case. For higher levels of convenience, there is also a function for voice notification to confirm settings and notify users of misoperation.

Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp>



HR-P873B-VXABHL(R)

Eco-products

EP-6-032

Interior decoration / Exterior decoration or furniture

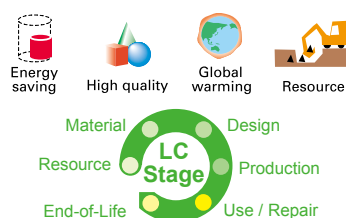
gas ovens

Energy-saving residential-use gas cooking stove

Our company has long been working to expand the assortment of residential-use gas cooking stoves installed with high-efficiency burners. This product features internal-multiple-flameport burners that greatly increase the thermal efficiency by directing flames inward to lessen the flame over-flow from the bottom of pots and pans. It attains a high total thermal efficiency of 55.6%. As such, it acts to conserve energy and reduce CO₂ emissions. Improvements were hardly confined to the burners; the broiler, too, has a higher thermal efficiency as compared to former models, thanks to a change in the inner coating. In addition, the top is made of glass and easy to clean. For saving of energy and time, a rice cooking function is equipped. Furthermore, for increased safety, burners are automatically extinguished when seismic tremors above a prescribed intensity are detected. For higher levels of convenience, there is also a function for voice notification to confirm settings and notify users of misoperation.

Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>



RN-P873-DXHBHL(R)

Eco-products

EP-6-033

Interior decoration / Exterior decoration or furniture

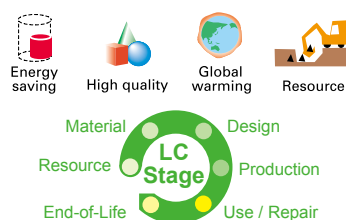
gas ovens

Energy-saving residential-use gas cooking stove

Our company has long been working to expand the assortment of residential-use gas cooking stoves installed with high-efficiency burners. This product features burners that greatly increase the thermal efficiency by lessening the flame over-flow from the bottom of pots and pans. It attains a high total thermal efficiency of 55.6%. As such, it acts to conserve energy and reduce CO₂ emissions. It also has various features for easy cleaning, including a top made of glass, a burner structure sealed with heat-resistant packing to prevent the infiltration of grime into the range, and coverage of the broiler mesh with grime-resistant fluoroc ceramic film. In design, we offer a variety selection of colors to coordinate with kitchens. In addition, all three burners are equipped with sensors to prevent over-heating and increased safety.

Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>



HR-P873B-XIBHL(R)

Eco-products

EP-6-034

Interior decoration / Exterior decoration or furniture

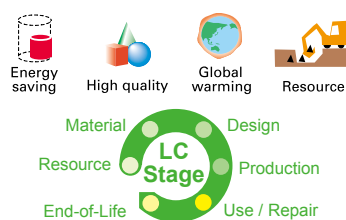
gas ovens

Energy-saving residential-use gas cooking stove

Our company has long been working to expand the assortment of residential-use gas cooking stoves installed with high-efficiency burners. This product features burners that greatly increase the thermal efficiency by lessening the flame over-flow from the bottom of pots and pans. It attains a high total thermal efficiency of 55.6%. As such, it acts to conserve energy and reduce CO₂ emissions. It has a Dutch oven in the grill port and enables easy and enjoyable cooking. As the grill port is compact, this product can continue cooking with remaining heat of Dutch oven and use less energy than normal oven. In addition, the top is made of newly developed metal and easy to clean. In addition, all three burners are equipped with sensors to prevent over-heating and increased safety.

Tokyo Gas Co., Ltd

1-5-20 Kaigan, Minato, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>



RN-P873-AUL(R)

Eco-products

EP-6-035

Interior decoration / Exterior decoration or furniture

gas ovens

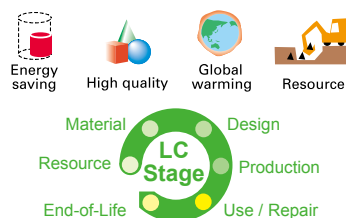
Energy-saving residential-use gas cooking stove

Our company has long been working to expand the assortment of residential-use gas cooking stoves installed with high-efficiency burners. This product features internal-multiple-flameport burners that greatly increase the thermal efficiency by directing flames inward to lessen the flame over-flow from the bottom of pots and pans. It attains a high total thermal efficiency of 55.6%. As such, it acts to conserve energy and reduce CO₂ emissions. In addition, the top is made of glass and easy to clean. Furthermore, for increased safety, all two burners are equipped with a timer to address neglect to extinguish burners, a device to prevent flame failure, and a function for lowering the flame and automatically extinguishing when the pot or pan is removed from the burners.

To facilitate use even by the aged, the control panel has large buttons and letters, color-based differentiation, and other elements deriving from universal design.

Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>



RN-PS862-XHL(R)

Eco-products

EP-6-036

Interior decoration / Exterior decoration or furniture

gas ovens

Gas Cooking Stove with high efficiency burners

The burner with 56% thermal efficiency has produced economic and energy-saving advantages over conventional cookers. With the glass surface, it is easy to clean and maintain.

Compared with induction heating cookers, the gas cooking stove has reduced annual CO₂ emission by 60%.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>

Eco-products

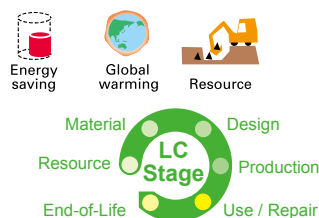
EP-6-037

Interior decoration / Exterior decoration or furniture

gas water boilers

Household energy-saving latent heat recovery-type

Our company has developed a high-efficiency water heater system that recovers previously wasted latent heat contained in the exhaust's water vapor. With this system, water heating efficiency is improved from about 80%(at most) to about 95%, and the efficiency of a unit used for room heating is also increased from about 80% to about 87%. This system contributes to energy savings and to the reduction of CO₂ emissions by cutting gas consumption by(up to) about 13%.



Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp>



TP-S824RFWA-RA

Eco-products

EP-6-038

Interior decoration / Exterior decoration or furniture

central heating boilers

Prior Eco-Jozu - highly efficient central heating boiler

Employing a heat exchanger of latent heat recovery type, the system utilizes the thermal energy of exhaust gas which was previously wasted, achieving high thermal efficiency of 95% in hot water supply and 89% in space heating.

With its smaller energy consumption, Eco-Jozu has reduced annual CO₂ emission by 224kg.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>



Eco-products

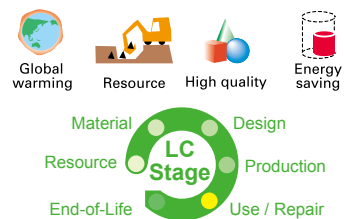
EP-6-039

Interior decoration / Exterior decoration or furniture

heat pump hot-water supply system

Eco-friendly water heater for residential use

Eco Cute is a household water heater that offers dramatic energy savings on the use of hot water, which normally accounts for about a third of a household's entire energy consumption. It generates hot water using atmospheric heat by means of a heat pump system and offers energy savings of around 30% compared with a conventional combustion type water heater together with a reduction in green house gas emission. The use of natural refrigerant CO₂ contributes to environmental conservation including the prevention of global warming.



Tokyo Electric Power Company

1-1-3 Uchisaiwai-cho Chiyoda-ku, Tokyo 100-8560, Japan
Tel 81-3-4216-1111 Fax 81-3-4216-3479
E-mail kawashima.toshiyuki@tepco.co.jp
URL <http://www.tepco.co.jp/en/index-e.html>



Available in : Japan, Europe

CO₂ refrigerant heat pump water heater (Eco Cute)

Eco-products

EP-6-040

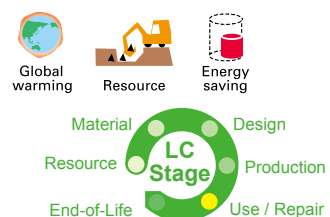
Interior decoration / Exterior decoration or furniture

heat pump hot-water supply system

Heat pump water heater using CO₂ refrigerant "Eco Cute"

"Eco Cute" is a water heater worked by a heat-pump. It is an environment-friendly machine which uses CO₂ as a natural refrigerant. There are no smell and no smoke, because the water is boiled not with fire but with the heat of air. If you make hot water with "Eco Cute", you can contribute to CO₂ reduction and also save the running cost of hot water supply.

- Energy Saving: Power consumption is reduced by 15% by use of the new-type heat pump. CO₂ is a coolant that has a global warming coefficient of 1 and an ozone depletion coefficient of 0
- Resource Saving: Product weight was reduced by 10kg.



TOSHIBA ELECTRIC APPLIANCES CO.,LTD.

24-8, Higashiueno 5-chome, Taitoh-ku, TOKYO 110-0015, Japan
Tel 81-3-5806-9043 Fax 81-5828-192
E-mail info@kiki.toshiba.co.jp
URL <http://www.toshiba-kiki.co.jp/>



Available in : Japan

HPE-FB364SC

Eco-products

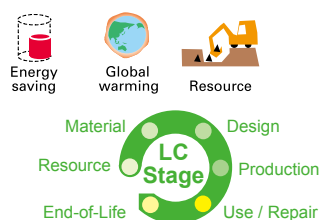
EP-6-041

Interior decoration / Exterior decoration or furniture

fuel cell co-generation system for residential use

Fuel cell co-generation system for residential use

Our company has developed residential cogeneration systems based on Polymer Electrolyte Fuel Cells (PEFC). Jointly developed with Ebara Ballard Corporation is fueled by hydrogen extracted from city gas to supply electricity and hot water. Compared with conventional thermal power plant and hot water boiler, these systems contribute to energy savings by up to 31% and to the reduction of CO₂ emissions by up to 45% with its high efficiency. (Electrical efficiency:33%, Heat recovery efficiency:45% in high heat value)



Tokyo Gas Co., Ltd

1-5-20 Kaigan, Minato, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp>



Eco-products

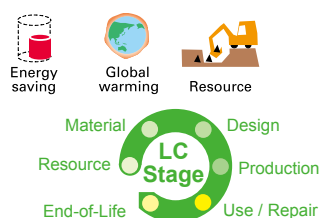
EP-6-042

Interior decoration / Exterior decoration or furniture

fuel cell co-generation system for residential use

Fuel cell co-generation system for residential use

Our company has developed residential cogeneration systems based on Polymer Electrolyte Fuel Cells (PEFC). Jointly developed with Matsushita Electric Industrial Co., Ltd., is fueled by hydrogen extracted from city gas to supply electricity and hot water. Compared with conventional thermal power plant and hot water boiler, these systems contribute to energy savings by up to 31% and to the reduction of CO₂ emissions by up to 45% with its high efficiency. (Electrical efficiency:33%, Heat recovery efficiency:45% in high heat value)



Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>



Eco-products

EP-6-043

Interior decoration / Exterior decoration or furniture

gas co-generation system

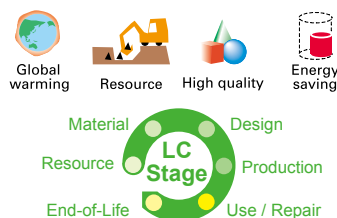
EcoWill - energy-saving gas cogeneration system

EcoWill is an energy-efficient household-use cogeneration system fueled by environment-friendly natural gas.

It generates electricity and supplies hot water by utilizing waste heat from the gas engine.

EcoWill has realized reduction of primary energy consumption by 22% and CO₂ emission by 32% as it utilizes the exhaust heat from power generation for hot water supply and space heating.

The system supports the comfortable living while contributing to the environmental conservation.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan

Tel 81-6-6205-4605 Fax 81-6-6202-1040

E-mail

URL <http://www.osakagas.co.jp/indexe.html>



Eco-products

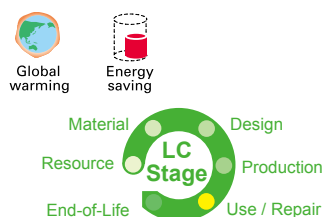
EP-6-044

Interior decoration / Exterior decoration or furniture

dishwashers

Washing and dry dishes machine, saving water

This washing and drying dishes machine is equipped with a bowl which makes the spout narrow in the nozzle, and it realize high-pressure washing. Consequently, a quantity of water used for washing and rinsing is 10 liters, accomplishing significant saving water compared with 80 liters of hand washing.



TOTO LTD.

2-24-2, Sakurashinmachi, Setagaya-Ku, Tokyo 154-8540, Japan

Tel 81-3-5451-1110 Fax 81-3-5451-1049

E-mail

URL <http://www.toto.co.jp>



KHEUF100S

Eco-products

EP-6-045

Interior decoration / Exterior decoration or furniture

dishwashers

Dishwasher - hot water heated by gas for economical/energy-saving dishwashing

The energy efficient gas water heater supplies water for the dishwasher and, compared with handwashing, water consumption is reduced to 1/8 and gas consumption to 1/4.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>

Eco-products

EP-6-046

Interior decoration / Exterior decoration or furniture

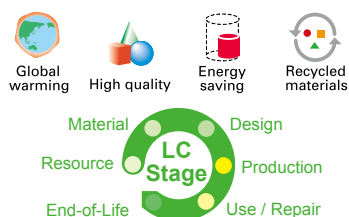
solar modules

Solar Modules

In Germany, the world's largest market, we have an excellent reputation. In the "Stiftung Warentest"^{※1} Kyocera's module KC-170GT-2^{※2} received to honors, Winning the GUT1.9 among 15 competitor's modules in May 2006. Even in Germany's highly competitive market Kyocera's reputation shines.

※1 "Stiftung Warentest" is an independent organization founded by the German government to examine and rate foods, cosmetic preparations, electrical appliance, and various consumables.

※2 Modules for European specifications.



KYOCERA Corporation

6 Takeda Tobadono-cho, fushimi-ku, Kyoto 612-8501, Japan
Tel 81-75-604-3855 Fax 81-75-604-3475
E-mail
URL <http://www.kyocera.co.jp/>

Solar Modules

Eco-products

EP-6-047

Interior decoration / Exterior decoration or furniture

photovoltaic

Solar Lamp

Solar lamp is able to power up independently without on-grid power supply. Solar lamp is designed with classic wrought iron structure coupled with advanced solar energy technology. It stores 4 hours of sun energy in the day and will power up the light automatically for 12 hours in the night, 7pm to 7am.

In addition, Solar lamp is portable and environmentally friendly. It can be placed anywhere in your landscape and produces 12 hours of illumination with zero carbon dioxide emission. With designing and manufacturing in Singapore, customization of Solar lamp is possible to suit your distinct requirements and environment.



Grenergy Pte Ltd

Blk 22 Woodlands Link, #01-44 Woodlands East Industrial Estate
738734, Singapore
E-mail info@grenergy.com.sg
URL <http://www.grenergy.com.sg>

Available in : Singapore

Eco-products

EP-6-048

Interior decoration / Exterior decoration or furniture

photovoltaic

Solar Table

Solar table is able to power up independently without on-grid power supply. Solar table is designed with classic wrought iron structure coupled with advanced solar energy technology. It stores 4 hours of sun energy for a 5 hours use of laptop in the night. Solar table has an IP66 outdoor power socket suitable for any low power applications liked laptop, fans, lights etc.

In addition, Solar table produces 5 hours of laptop power with zero carbon dioxide emission. With designing and manufacturing in Singapore, customization of Solar table is possible to suit your distinct requirements and environment.



Grenergy Pte Ltd

Blk 22 Woodlands Link, #01-44 Woodlands East Industrial Estate
738734, Singapore
E-mail info@grenergy.com.sg
URL <http://www.grenergy.com.sg>

Available in : Singapore

Eco-products

EP-6-049

Interior decoration / Exterior decoration or furniture

elevators

Machine room-less elevator, featuring space & energy savings

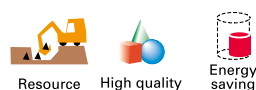
"SPACIAL-EX™" is a machine room-less elevator system which adopted the "winding-machine upper-installation method". The feature of this system is that the driving device and the control equipment are hard to be exposed to water, when water flows into the up and down road by disasters.

- **Energy Saving:** Adopted was a newly developed compact-winding machine in which PMSM (a permanent magnet synchronous motor) was incorporated. The motor capacity was reduced by 20% compared to the rope-type elevator of 20 years ago. (5.5kW to 4.5kW)
- **Resource Saving:** Machine room indispensable until now has become unnecessary. The newest lighting system was installed for the ceiling light. It has 50000 hours life, 8 times of the conventional fluorescent lamp. Mercury amount was reduced to 93% for 10 years.
- **Elimination of harmful chemical substances:** Fixation method was changed from the rope to the wedge; the lead used for the terminal processing of the rope was abolished. Vinyl chloride used for floor tiles and basket-room make-up steel-plates was altered to poly-olefin.

TOSHIBA ELEVATOR AND BUILDING SYSTEMS CORPORATION

5-27, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo 141-0001, Japan
Tel 81-3-5423-3330 Fax 81-3-5423-3425
E-mail
URL http://www2.toshiba-elevator.co.jp/elv/index_j.jsp

Available in : JAPAN



Machine-Room-Less Elevator "SPACEL-EX™"

Eco-products

EP-6-050

Interior decoration / Exterior decoration or furniture

wood products

Container Support Wood for Safety Choking

Our Technical wood will act as alternative of natural wood. Suitable for container Support Wood with higher strength and able cut to customer requirement sizes. All our Technical Wood does not require fumigation or heat treatment. Ensure able to clear all country quarantine

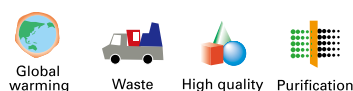
The quality is better than natural wood. The advantages of the Container Support Wood for choking the container gate.

- 1.) No cracks
- 2.) No pest
- 3.) Low moisture
- 4.) High nailing holding power
- 5.) No wastages
- 6.) Fast turnaround time
- 7.) Precision of sizes
- 8.) Does not require fumigation or heat treatment. ISPM15 compliance.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

EP-6-051

Interior decoration / Exterior decoration or furniture

wood products

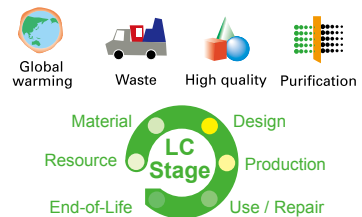
Dunnages for Sea Freight support purpose

The LHT Technical Wood dunnages is a brilliant outcome of waste wood recycling innovation. Wood waste is being crushed and mechanically shaped into a wide range of specially design recycled wooden products. The LHT Technical Wood dunnages is not only environmentally friendly but also cost effective. It is strong due to its high density and is consistent in texture and colour. In addition, LHT Technical Wood is chemical and pest resistant, fire retardant and is low in moisture content. Technical Wood is also a trademark of LHT Holdings Limited. Technical Wood are also Green Label Products awarded by Singapore Environment Council and Innovation award by Senoko Power Of Singapore.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

EP-6-052

Interior decoration / Exterior decoration or furniture

wood products

ECR/RFID Pallet for FMCG Industry

Kim Hiap Lee Co. Pte Ltd a subsidiary of LHT Holdings Limited, a pallet leasing company which lease the Efficiency Consumer Response (ECR)/ Radio Frequency Identification (RFID) pallets to Fast Moving Consumer Goods (FMCG) industry. The ECR/RFID pallet is also a maintenance-free finished product and is certified to the ISO 6780 'General-purpose flat pallets for through transit of goods - Principal dimensions and tolerances' and SS 334 'Specification for Timber Pallets'.

The benefits of the ECR/RFID pallet rental scheme helps customer to reduce

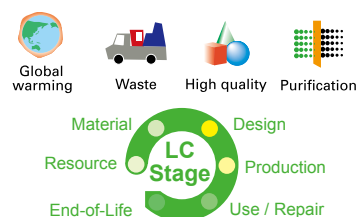
- 1) capital investments
- 2) warehouse storage costs
- 3) pallet maintenance costs
- 4) exchangeable & share assets etc..

With the RFID tagging to the ECR pallets, it helps to identify the rightful customer gives accurate tracing, verification of endorsement in receiving, lower inventory and reduce manpower in stock-take.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail thomasyeo@ecrpallet.com
URL <http://www.ecrpallet.com>

Available in : Worldwide



Eco-products

EP-6-053

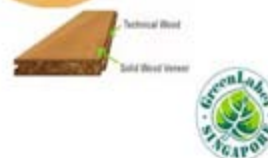
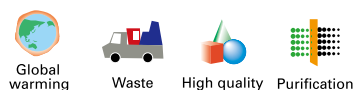
Interior decoration / Exterior decoration or furniture

wood products

Greenflo Flooring, Doors and Door frame system

In 1999, LHT Holdings Limited developed the world first Greenflo Doors & Flooring system.

Greenflo doors are made using high density Technical Wood topped with specially designed door skin which enhances its durability and stability. It rated E1 standard core material to give green environment. Greenflo flooring is making using high density Technical Wood as the base and topped a 100% grade solid wood veneer. The Greenflo products have eliminated the natural wood defects, such as environment friendly, no cracks, pest free, low moisture etc. Greenflo Products are also Green Label Products award by Singapore Environment Council (SEC).



LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.greenflo.com>

Available in : Worldwide

Eco-products

EP-6-054

Interior decoration / Exterior decoration or furniture

wood products

IPPC Box

Yet another value-added product by LHT, the IPPC box is made from environmentally-friendly processed wood that is ISPM No15 compliant. It does not require any fumigation or heat treatment and it is light-weight and convenient for packaging and shipping. LHT believes in investing for the quality and efficiency. Which is why the design of the IPPC box is well designed with highly quality Technical wood and efficient mode of does it yourself assembly. The IPPC Box able to collapsible to save transportation cost, man powers and storage charges etc. By ensuring more controlled and consistent assembly standard, customers can be assured of precision and quality of every box. This is suitable for Dangerous good Example : Chemical etc



LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide

Eco-products

EP-6-055

Interior decoration / Exterior decoration or furniture

wood products

IPPC Pallet

According to International Standards for Phytosanitary Measures (ISPM) No. 15 "Guidelines for Regulating Wood Packaging Material in International Trade" of International Plant Protection Convention (IPPC). Wood packaging made of wholly of wood-based products such as plywood, particle board, oriented strand board or veneer that have been using glue, heat and pressure or a combination there of should be considered sufficiently processed to have eliminated the risk associated with the raw wood. All our IPPC pallets are made of process wood and conform to ISPM No.15.

IPPC Pallets is made of LHT Technical Wood and original tropical hardwood fibres that undergo a high-pressure and high-temperature steaming process. Hence it share similar characteristics of natural solid wood but has the added advantages of being pest and fungus-resistant in accordance to the international standard. The Technical Wood enhances its performance in being fire and water resistant. The moisture content of lower than 10% means strengthened stability and hence the further reduction of thickness swelling.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

EP-6-056

Interior decoration / Exterior decoration or furniture

wood products

Mould Pallets

LHT Mould Pallets are the result of shaping the crushed chips into various forms with specially designed moulds. Through such versatility in usage, we are able to enhance our products to suit diverse need. All the Technical wood moulded pallets are IPPC ISPM15 compliance our mould pallet is nest-able and rack-able by adding on our LHT Technical wood planks.

These add on features are also convenience and handle well by conveyor movement safely. Moulded pallets are able to do stacking in between on another pallets without damages of any cargoes purpose.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

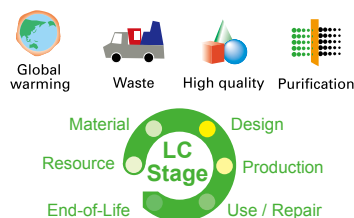
EP-6-057

Interior decoration / Exterior decoration or furniture

wood products

Technical Wood Made by Waste Wood

The LHT Technical Wood is a brilliant outcome of waste wood recycling innovation. Wood waste is being crushed and mechanically shaped into a wide range of specially design recycled wooden products. The LHT Technical Wood is not only environmentally friendly but also cost effective. It is strong due to its high density and is consistent in texture and colour. In addition, LHT Technical Wood is chemical and pest resistant, fire retardant and is low in moisture content. Technical Wood is also a trademark of LHT Holdings Limited.



LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>



Available in : Worldwide

Eco-products

EP-6-058

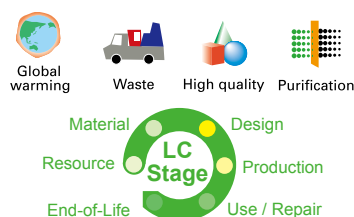
Interior decoration / Exterior decoration or furniture

wood products

Technical Wood Beams

The best solutions for all kinds of USA pallets with cut holes feature. The quality is better than natural wood. The advantages of the Technical wood blocks

- 1.) No cracks
- 2.) No pest
- 3.) Low moisture
- 4.) High nailing holding power
- 5.) No wastages
- 6.) Fast turnaround time
- 7.) Precision of sizes
- 8.) Does not require fumigation or heat treatment. ISPM15 compliance.



LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>



Available in : Worldwide

Eco-products

EP-6-059

Interior decoration / Exterior decoration or furniture

wood products

Technical Wood Blocks

The quality is better than natural wood. The advantages of the Technical wood blocks are

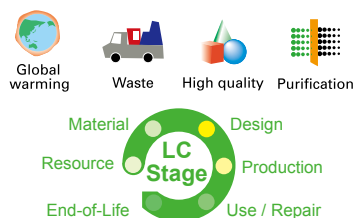
- 1.) No crack
- 2.) No pest
- 3.) Low moisture
- 4.) High nailing holding power
- 5.) No wastages
- 6.) Fast turnaround time
- 7.) Precision of sizes
- 8.) Does not require fumigation or heat treatment. ISPM15 compliance.

The LHT Technical Wood is a brilliant outcome of waste wood recycling innovation. Wood waste is being crushed and mechanically shaped into a wide range of specially design recycled wooden products. The LHT Technical Wood is not only environmentally friendly but also cost effective. It is strong due to its high density and is consistent in texture and colour. In addition, LHT Technical Wood is chemical and pest resistant, fire retardant and is low in moisture content. Technical Wood is also a trademark of LHT Holdings Limited.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

EP-6-060

Interior decoration / Exterior decoration or furniture

wood products

Technical Wood Pallets

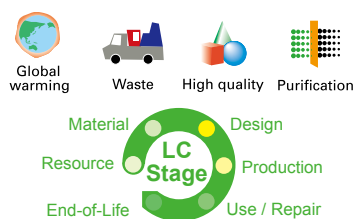
Technical Wood Pallets is made of original tropical hardwood fibres that undergo a high-pressure and high-temperature steaming process. Hence it share similar characteristics of natural solid wood but has the added advantages of being pest and fungus-resistant in accordance to the international standard. The Technical wood enhances its performance in being fire and water resistant. The moisture content of lower than 10% means strengthened stability and hence the further reduction of thickness swelling. The quality and supply of LHT Technical Wood pallet is stable and produced base on the required measurement density and other specifications. This is also helps to reduce wastage and keep production costs low and stable. This is no further process of kiln dry is necessary.

Our Technical Wood pallets are made of process wood and conform to ISPM No.15. Thus does not require fumigation or heat treatment. This is able to clear all country quarantine without questioning.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>

Available in : Worldwide



Eco-products

EP-6-061

Interior decoration / Exterior decoration or furniture

wood products

Technical Wood Planks

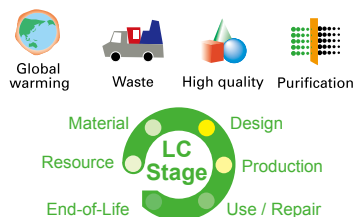
The LHT Technical Wood is a brilliant outcome of waste wood recycling innovation. Wood waste is being crushed and mechanically shaped into a wide range of specially design recycled wooden products. The LHT Technical Wood is not only environmentally friendly but also cost effective. It is strong due to its high density and is consistent in texture and colour. In addition, LHT Technical Wood is chemical and pest resistant, fire retardant and is low in moisture content. Technical Wood is also a trademark of LHT Holdings Limited.

The quality is better than natural wood. The advantages of the Technical wood blocks

- 1) No cracks
- 2) No pest
- 3) Low moisture
- 4) High nailing holding power
- 5) No wastages
- 6) Fast turnaround time
- 7) Precision of sizes
- 8) Does not require fumigation or heat treatment. ISPM15 compliance.

LHT Holdings Limited

No.27 Sungei Kadut Street 1 729335, Singapore
Tel 65-6269-7890 Fax 65-6367-4907
E-mail enquiry@lht.com.sg
URL <http://www.lht.com.sg>



Available in : Worldwide

Eco-products

EP-6-062

Interior decoration / Exterior decoration or furniture

warm water floor heater

An energy saving heat pump-type warm water floor heater system

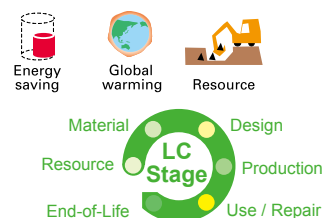
ECO NUCOOL PICO is the compact type water floor heater using heat pump pursuing energy saving.

-----<< E : Energy >>-----

The heat source of the system is heat pump that takes solar thermal energy in and use it for heating. The system can restrain 69% a year CO₂ outbreak in comparison with the electric heater-style heating machine (our test calculation).

-----<< M : Material >>-----

Also a sealing up type adopts a water supply disused method. Using Mitsubishi Electric's original long life circulation liquid, it does not take the trouble with longer life.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

Heat exchange unit : VEH-406HCU-M3, Outdoor unit : VEH-406HPU3

Eco-products

EP-6-063

Interior decoration / Exterior decoration or furniture

hand dryer

JET TOWEL the hand dryer - environment friendly facility

It eliminates paper waste and fewer natural resources are consumed.

-----<< M : Material >>-----

DC brushless motor has the durability of seven years by 1,000 times of use per one day, which realizes its longer life.

-----<< E : Energy >>-----

Low consumption electricity, reduced 15% compared with that of the conventional model, is industry No. 1. (our investigation as of February 1, 2007)

It is equipped with a newly developed "hyper slit nozzle" that blows off drops of water on hands with a filmy jet blow at a stretch and improves its dry efficiency.

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



JT-SB116GN

Available in : Japan, see:<http://www.mitsubishijettowel>

Eco-products

EP-6-064

Interior decoration / Exterior decoration or furniture

generators

Highly Efficient Photovoltaic Module

-----<< E : Energy >>-----

This module for house in Japan realizes 185W output, which marks industrial best (in our investigation at June 2007, in polycrystalline silicon type), by enlarging each photovoltaic cell and devising to take more in the reflecting light from back film. 38% larger output from conventional model. When installing 3.7kW system in Tokyo, about 3808kWh power is to be generated per year, which reduces about 1198kg-CO₂, corresponding more than 60% of CO₂ emission from a general house per year (1980kg-CO₂)

-----<< M : Material >>-----

This module does not need horizontal rack, which is conventionally used for installation, which contributes about 61kg (13%) reduction of weight and resource consumption from conventional installation.

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



PV-MX185G

Available in : Japan

Eco-products

EP-6-065

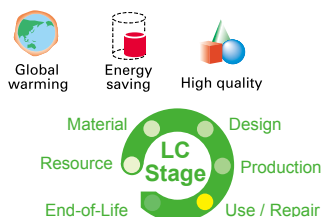
Interior decoration / Exterior decoration or furniture

generators

Power Conditioner with Industry Best Conversion Efficiency

-----<< E : Energy >>-----

This power conditioner for house use in Japan by mass production realizes the industry highest 97.5% in power conversion efficiency (in our investigation at September 2007). The industry first "gradation control inverter method " generates pseudo sine wave nearly the same as alternating current using tree inverter units. Newly developed MOSFET module for the gradation control reduces 44% of power conversion loss from conventional model.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



Available in : Japan

PV-PN40G

Eco-products

EP-6-066

Interior decoration / Exterior decoration or furniture

air conditioners

Compact Design "City Multi" Air Conditioner

Due to the compact design of the outdoor unit, industry leading space saving is realized.

-----<< M : Material >>-----

The manageability of the outdoor unit has been improved due to a drastic reduction in it's weight, leading to easy transportation, installation, and reduction in withstand load. Approx. 33kg reduction in weight from the previous model.

-----<< E : Energy >>-----

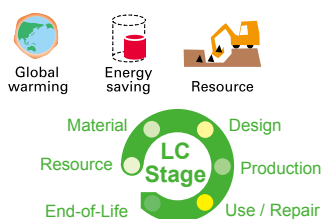
VRF (Variable Refrigerant Flow) is a multi and direct expansion type air conditioning system where by one outdoor unit can be connected with multiple indoor units. The amount of refrigerant can be regulated freely according to the load on the indoor unit by the inverter driven compressor in the outdoor unit. Energy conservation is easily handled because individual indoor units can stop and start their operation as needed.

-----<< T : Toxicity >>-----

R410 refrigerant is zero ODP (Ozon Depletion Potential)

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



Available in : Asia, Oceania, Europe, Americas

PUHY-P250YHM-A

Eco-products

EP-6-067

Interior decoration / Exterior decoration or furniture

air conditioners

"Replace Multi" Air Conditioner Reusing Existing Refrigerant Pipe

"Replace Multi" is an air conditioning system for building using existing refrigerant pipe, which basically contributes resource saving.

-----<< M : Material >>-----

Compact design in outdoor unit enables to be carried by an elevator for 6 people.

Automatic refrigerant charge and automatic mineral oil collection enables great shortening of term of onstruction.

It collects oil through general air conditioning operation.

-----<< E : Energy >>-----

R410 refrigerant marks COP 4.01.



Replace Multi E ECO

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

Eco-products

EP-6-068

Interior decoration / Exterior decoration or furniture

air conditioners

Energy and Resource Saving Packaged Air Conditioner

-----<< M : Material >>-----

Following technologies are developed to dispense with pipe washing or replace of pipes.

- (1) High quality active carbon filter named replace filter removes chlorinations remained in pipes.
- (2) Alkylbenzene refrigerator oil, which is originally developed and is stable and hard to decay, gives refrigerant circuit longer life.
- (3) The wide strainer catches 30% more iron powder enables replacement caused by compressor destruction accident.

Compact design in outdoor unit contributes also to resource saving (11kg weight reduction, 407mm high shortening for 140 type).

-----<< E : Energy >>-----

The scroll compressor in outdoor unit with the originally developed "flame compliance mechanism", which greatly reduces friction loss.

"Move Eye 360 degrees" detects floor temperature all around and controls temperature to feel with a body which prevents uneven temperature distribution and needless cooling and warming operation.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

MPUZ-WRP140HA6, MPLZ-WRP140BEL

Eco-products

EP-6-069

Interior decoration / Exterior decoration or furniture

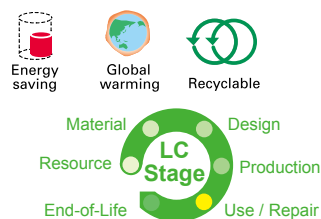
ventilators

"Lossnay" Recycling Air-conditioning Energy by Heat Exchange Ventilation

-----<< E : Energy >>-----

Lossnay is the energy saving ventilation system through the heat exchange ventilation that collects and reuses heat energy of both cooling and warming.

Lossnay Central ventilation system ventilates a whole house by one unit. It won't lose comfortness of cooling or warming because it ventilates with heat exchange. Big amount of wind and 6 ways separation can ventilate 1 floor by 1 system for multifamily housing that has many and wide rooms.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

VL-200PZMS

Eco-products

EP-6-070

Interior decoration / Exterior decoration or furniture

hot-water supply system

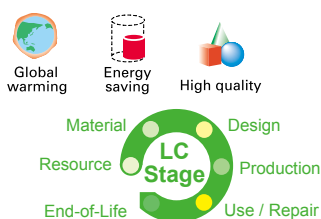
"Eco Cute" Water Heater Using Natural Refrigerant

-----<< E : Energy >>-----

The single rotary compressor for water heater using CO₂ refrigerant, same as used for our air conditioner, and twist and spiral gas cooler with high heat transfer efficiency in heat exchange at water heating unit enables highly efficient running.

-----<< T : Toxicity >>-----

CO₂ natural refrigerant does not deplete ozone layer.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>

Available in : Japan

SRT-HP55W2

Intelligent Energy Saving Air Conditioner "Kirigamine" with New Move-eye Sensor

-----<< E : Energy >>-----

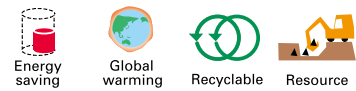
The "New Move-eye sensor" finds where a person is, measures the floor temperature, and catches the action of the person. Then it conducts three level energy saving running, which enables at most approximately 50% energy conservation compared from the same output model released in 1996.

- (1) One leaf ECO level reduces about 30% : monitoring the floor temperature and control air conditioner by the temperature that a body feels.
- (2) Two leaves ECO level reduces about 10% : monitoring where one person is and concentrates air condition to the only area he is in.
- (3) Tree leaves ECO level reduces about 10% : monitoring the person's acting behaviour and control the power for the temperature that he needs.

Adding to these functions, it has the automatic cleaning function, which keeps the indoor unit ever clean, reduces approximately 30% energy consumption compared to the one with dirty heat exchange unit and fan.

Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
 Tel 81-3-3218-9024 Fax 81-3-3218-2465
 E-mail eqd.eco@pj.MitsubishiElectric.co.jp
 URL <http://www.mitsubishielectric.co.jp/>



Available in : Japan

MSZ-ZW408S

Eco-products

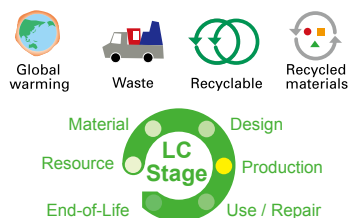
EP-7-001

Building and civil engineering

particle board, glued laminated timber

Woodchip-board [Artificial soil for re-vegetation]

This product recycles woodchips from trees that have been cut down and abandoned after land formation. A grout coating ensures that the chips combine firmly, producing a woodchip board with outstanding durability. It has consecutive voids, providing an environment where plants can grow even in severe conditions such as acid soil or concrete walls.



Obayashi Corporation

Shinagawa Intercity Tower B, 2-15-2, Konan, Minato-ku, Tokyo 108-8502, Japan
Tel 81-3-5769-1311 Fax 81-3-5769-1829
E-mail hamai.kunihiko@obayashi.co.jp
URL <http://www.obayashi.co.jp/>



tip-board (500 × 500 × 30mm)

Eco-products

EP-7-002

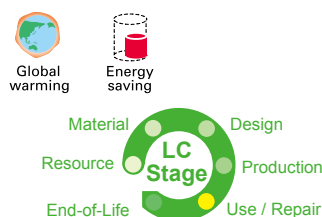
Building and civil engineering

water synthetic resin paint

This product efficiently reflects the solar energy radiated from solar light.

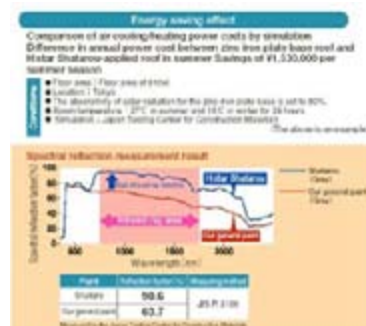
Features

- This is a water-based type of paint and an environment-friendly product.
- The product is provided with a thermal screening function.
- The product is nonflammable. Therefore, operations can be safely performed.
- This paint can be applied regardless of the old film of paint and offers high durability.
- This product contains a very low volatile organic compound content.



Hitachi Chemical Industrial Materials Co.,Ltd.

5-12-15, Namekawa Honcho, hitachi-shi, Ibaraki Prefecture 317-0051, Japan
Tel 81-294-22-1313 Fax 81-294-22-1782
E-mail newinfo@hc-kozai.co.jp
URL <http://www.hc-kozai.co.jp>



Energy saving effect

Eco-products

EP-7-003

Building and civil engineering

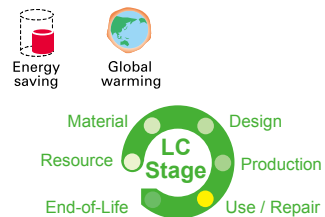
paints and related products

Building exterior paint invented with energy conse"Miracool"

Coating with "Miracool" reflects sunlight about 90%, which curb the rise of the temperature at building roof and well. In addition, it drastically reduces heat quantity of transmission owing to its low coefficient of thermal conductivity and high long-wave emissivity. Because of these functions, "Miracool" can contribute to energy conservation by making building's cooling load reduced. Not only for energy conservation of building itself, it can also be helpful for mitigating the heat island phenomenon, an extraordinary high temperature in the urban area as a whole, as it is able to control the absorption of solar energy. We can provide "Miracool way" for asphalt-paved road, other than the one for building.

MIRACOO Co., Ltd.

1-11-15-4F, Nihonbashi-horidomecho, Chuo-ku, Tokyo 103-0012, Japan
Tel 81-3-3249-0272 Fax 81-3-3249-0270
E-mail info@miracool.jp
URL <http://www.miracool.jp>



Miracool

Eco-products

EP-7-004

Building and civil engineering

polymers, plastics, plastic products

High-performance Acoustic Material for Traffic noise "FIBLIGHT"

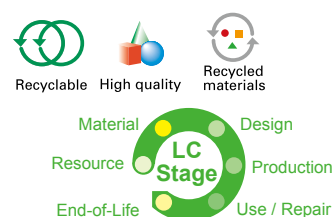
FIBLIGHT is a high-performance acoustic material consist of polyester staples binded by special fibers (low-melting point polyester).

It is used for noise barriers on highway or railway.

- 1) "FIBLIGHT" has good sound absorption characteristics.
- 2) "FIBLIGHT" has good durability and weatherability for outdoor use.
It shows stable performance for long time.
- 3) "FIBLIGHT" has good water-repellent efficiency by using special water-repellent teratment. It shows stable performance at all weather condition.
- 4) Using recycle polyester fiber. Reduce environmental effect at disposing. Acquired an Eco mark in Japan.

Bridgestone Corporation

10-1, Kyobashi 1-chome Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-6871 Fax 81-3-5202-6874
E-mail
URL <http://www2.bridgestone-dp.jp/civil/>



FIBLIGHT (Sound insulating wall of expressway)

Eco-products

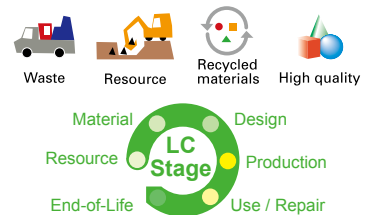
EP-7-005

Building and civil engineering

rubber products

Caisson Mat

The caisson mat is the rubber mat which increases the friction between caisson and foundation. It enables the caisson smaller as it has to be without caisson mat. The caisson mat uses the rubber waste from the tire manufacturing process which is called "spu". So, the caisson mat recycles the tire spu as the material and reduce the amount of concrete for caisson block.



Caisson Mat

Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-6871 Fax 81-3-5202-6874
E-mail
URL <http://www2.bridgestone-dp.jp/civil/>

Eco-products

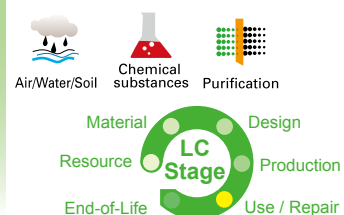
EP-7-006

Building and civil engineering

concrete products for roads

Pavement block "NOXER" for preventing air pollution by photo-catalysis

NOXER is a pavement block that has a function to decompose harmful substances by oxidation in the surface layer of concrete block. The function is based on the photocatalytic reaction that is caused by titanium oxide. Formation of active oxygen takes place by the action of photocatalytic reaction when titanium oxide in the surface layer of the block is exposed to ultraviolet ray in the sunlight. The formed active oxygen oxidizes the harmful substances, and decomposes them.



Chigasaki City

Mitsubishi Materials Corporation

19F WEST OFS 1-5-1, Ohtemachi, Chiyoda-ku, Tokyo 100-8117, Japan
Tel 81-3-5252-5331 Fax 81-3-5252-5344
E-mail noxer@mmc.co.jp
URL <http://www.mmc.co.jp/english/product/construct/index.html>

Available in : JAPAN

The Newest Road Pavement together Soil-Bags with Photo-catalyst Porous-Concrete

This product is developed to solve the environmental problems example earth-warming, heat-island, air pollution by automobile or factory outlet-gases, traffic noise, tremor. Concrete structure is that Photo-catalyst porous concrete on surface layer and piled up Soil-bags layer in underground.

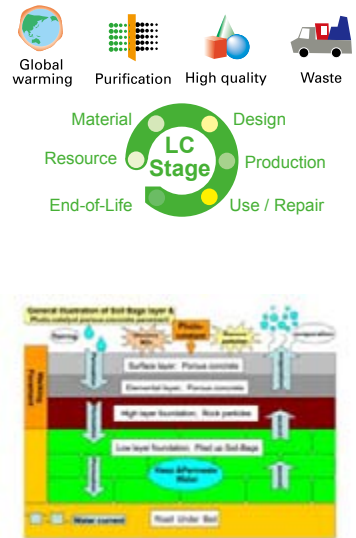
- The effect of surface layer (Photo-catalyst porous concrete)
 1. Permeation of rain water because of porous structure. (Prevention of the urban flood)
 2. Decrease traffic noise. (tire noise)
 3. Prevention of road heating (because of reflection of sun light and evaporation by photo-catalyst action. The differ is 10°C)
 4. Dissolution of bad gasses such like NO_x or SO_x by emitted automobiles.
- The effect of Underground layer (Piled up Soil-bags layer)
 1. The progress of durability on the foundation, prevention of layer gaps and subsidence
 2. Save the working cost (Because of decrease of dig depth of the road)
 3. Decrease of traffic tremor (Because of replacing vibration-frequency)
 4. Decrease of an earthquakes vibration. Also it can be used the recycled materials in Soil-Bags, such as the melting slug of the living or industrial dust. So it contributes to reduce garbage.

Taiyu concrete industry Co., Ltd.

Kanayama 5-14-2, Naka-ward, Nagoya City, Aichi Pref 460-0022, Japan
 Tel 81-52-882-6291 Fax 81-52-882-6221
 E-mail taiyucon@taiyu-con.jp
 URL <http://www.taiyu-con.jp>

Available in : Japan, (Provide technique) Asia, Europe, USA

General illustration of The Newest pavement structure



Concrete Crab-Panel

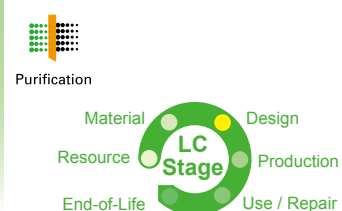
Crab-Panel is a concrete panel, which capable of creating an abundant of living space and also improving habitat condition for aquatic creatures.

Recovering food chain of coastal area: Conventional concrete revetment is unable to provide a sustainable habitat for living creatures (especially crabs which live near water), as a result decreasing of the coastal resources occurred. Crab-Panel is developed to overcome this situation.

- Worth points
 - This panel is established in front of the existing revetment or retaining wall.
 - Coarse surface of the panel could allow algae grow densely on it.
 - Joint of the panel is a suitable part for crabs to hide and move around.
 - Holes are set on the panel, which were allowed the crabs burrow and hibernate during winter.
 - To reduce the light reflection, surface color of the panel is adjusted.
 - Surface color could be adjusted to harmonize the surrounding.

Kajima Corporation

6-5-1 Akasaka, Minato-ku, Tokyo 107-8348, Japan
 Tel 81-3-5544-0734 Fax 81-3-5544-1733
 E-mail env-act@ml.kajima.com
 URL http://www.kajima.co.jp/tech/env_planning/seitaike



Crabs on Concrete Crab-Panel

Eco-products

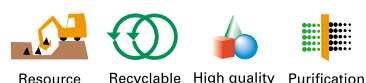
EP-7-009

Building and civil engineering

cement products

Building material "MOISS" having symbiosis with the environment

MOISS is flame retardant building material for the architecture. It's an epoch-making building material for interior decoration, which has functions of adsorption and decomposition of the volatile organic compounds (VOC) that are the cause of sick house syndrome. In addition, function of humidity control can be used to resolve the problem of dew condensation. And, it is acknowledged as proof-stress side material for wooden house because of its workability and nail-holding force like the quality of wood. As a result, the use of MOISS is increasing rapidly. And, recycling of MOISS is possible after crushing, when it becomes waste wood. Besides, it was accredited as fertilizer in 2005; it consists of silicic acid compound.



Mitsubishi Materials Corporation

19F WEST OFS 1-5-1, Ohtemachi, Chiyoda-ku, Tokyo 100-8117, Japan
Tel 81-3-5252-5331 Fax 81-3-5252-5344
E-mail
URL <http://www.mmc.co.jp/english/product/construct/index.html>

Available in : Japan

MOISS is used for the interior material

Eco-products

EP-7-010

Building and civil engineering

building bricks

Recycled non-burned brick

"Earthen Bricks" are non-burned bricks using recycled materials from the by-products and waste products discharged from businesses and local autonomies. Recycled material accounts for over 80% of the total ingredients. Furthermore CO₂ emission is reduced by about 40% with this product, compared with conventional burned bricks thanks to a new technology called "non-burned caking technology", which enables densification and caking with air-drying. This product plays an important part in building a recycling-based society with zero emissions.



Tokyo Electric Power Environmental Engineering CO. INC.

4-6-14 Shibaura, Minato-ku, Tokyo 108-8537, Japan
Tel 81-3-3452-4748 Fax 81-3-3452-4617
E-mail eigyuu-honbu@mail.tee-kk.co.jp
URL <http://www.tee-kk.co.jp>

Available in : Japan

Earthen Bricks

Eco-products

EP-7-011

Building and civil engineering

tiles

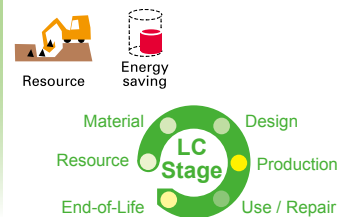
SOIL CERAMICS: Not burn new material ,Energy-saving building products

These are blocks that are made from quarrying abolishment clay and others. These blocks are symbiosis materials which can be recycled and return to the soil after the use. Moreover, more than 50% energy-saving for cement and 80% for ceramics at production are realized because of high-pressure steam curing process with no burning. These blocks contribute to energy-saving and low environmental load. SOIL CERAMICS that keep original characteristics of natural soil, absorb atmospheric moisture and discharge it and keep the indoor humidity comfortable, and deodorize the odor and storage heat.

SOIL CERAMICS has clearly proved that the softness with gentle appearance is kind for foot and that keeps away from tiredness.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>



Available in : Japan

SOIL CERAMICS: SOIL-300SB/12E etc

Eco-products

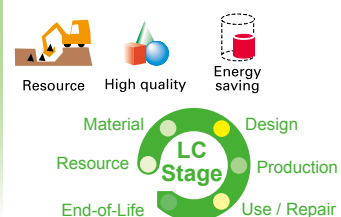
EP-7-012

Building and civil engineering

tiles

ECOCARAT:The superior healthy building materials support comfortable healthy space

"ECOCARAT" automatically controls humidity of a room where it is used by absorbing moisture in the air when it gets humid and giving off moisture when it gets dry. It also has the function of absorbing VOC that would cause sick house syndrome, providing much better environment for our health. This is the first product approved as the construction material decreasing formaldehyde concentration in the domestic industry. In addition, we have reduced energy consumption and CO₂ emission with the low-temperature firing and recycled glass waste and other waste material.



INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan

ECOCARAT: ECO-275NET/RO1 etc

Eco-products

EP-7-013

Building and civil engineering

tiles

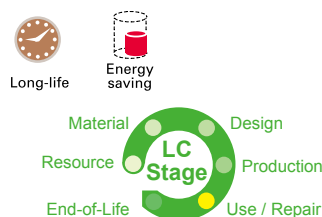
Thermo-tile, bathroom tile with a hollow-ballon heat-insulation layer

THERMO-TILE is the floor tile for bathroom, which offers the function to suppress the chilly sense that we feel when our foot touches the floor tile. It does not need the energy of electricity or fuel gas. The principle is to form a heat-insulating layer on the surface of tiles. THERMO-TILE has a surface layer in which many hollow ballon-like small bubbles were dispersed. Such a structure lowers the thermal conductivity of tile, itself, and reduces the heat transfer rate (the value of thermal flux). Consequently, the coldness comes to be difficult to be sensed. While, the surface of THERMO-TILE has a large hydrophilicity (the property that water spreads out on the surface of material), hence its drainage is good. In addition, the micro-structure of its surface is rugged and not slippery even with wet feet. Coefficient of slip resistance for bathroom (CSR-B) is adjusted to the value usable at a large bathhouse.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan



TERMO TILE : IFT-300/ML-201,ML-301

Eco-products

EP-7-014

Building and civil engineering

tiles

SANDROCK: Permeability ceramics building materials with recycle materials

Made by porous ceramics, high water permeability returns rain water to soil. Avoids underground drought, and lighten the input to the river.

Gives soft walking feel and absorbs heat of road surface temperature.

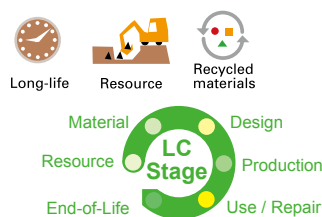
The large number of micro-pores lose puddles and water spatters, make hard to slip.

SANDROCK is a recycle product and uses abolished tiles, sewage grime ash destroyed by fire, etc. as production raw materials. And that is authorized as an ECO MARK PRODUCT with an environmental symbiosis function.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan



SANDROCK

Eco-products

EP-7-015

Building and civil engineering

tiles

MICROGUARD, INAX anti-fouling technology for the external wall of housing and building

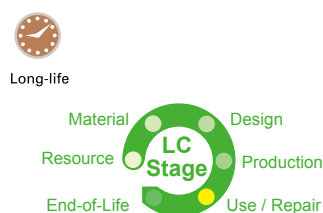
The tile that was treated with MICRO-GUARD has the function to prevent the fouling of the external wall of house and building and to maintain the beautiful appearance of the wall for a long period. MICRO-GUARD is the technology to process tiles with INAX original anti-fouling method in order to keep the landscape of city in the severe environment including air-pollution.

MICRO-GUARD enhances the surface hydrophilicity of the conventional tile. Thereby, it makes up the condition under which the surface of tile is always covered with water film which absorbs the water molecule in the air. As a result, it prevents the generation of the static electricity which attracts dust in the air. Moreover, it becomes easy for the dust on tile to flow down with the rain, because the surface of the MICRO-GUARD treated tile is familiar with water.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan



MICROGUARD STANDARD MGS-108

Eco-products

EP-7-016

Building and civil engineering

tiles

RE-TILE, reforming tile for "tile-lap" construction method

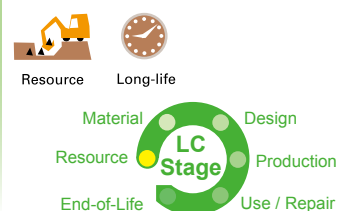
RE-TILE is a light tile which is used when the exterior wall of housing is reformed by the newly developed "tile-lap construction method". The feature of the construction method is to stick RE-TILES directly on the existing exterior wall. INAX developed the light tile of half-weight, while keeping the original tile's performance such as function, strength and material feeling as it is. The lightening of tiles reduced the load given to the body of construction. In the "tile-lap construction method", firstly special wire-nets are fastened on the exterior wall with screws, and then the tiles are stuck on the wire-net. Peeling off of the tiles is therefore fully prevented.

RE-TILE satisfies the severe anti-fouling INAX standard "the nano hydrophilicity", so it is hard to be stained. The fine fouling of dust, automobile exhaust gas, etc. is allowed to cleanly flow down by rainfall. Since RE-TILE is a ceramic product of mineral matter, it has a good weatherability including high-resistance to ultra-violet rays, and its color does not fade out even after the period corresponding to 40 years.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>

Available in : Japan



RE-TILE : (JR)RTL-2/DAR-4

Eco-products

EP-7-017

Building and civil engineering

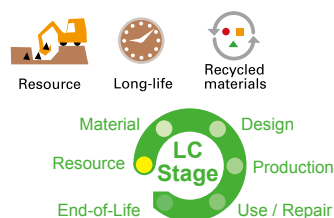
tiles

Recycled Material Tile: wall and floor materials made from waste resources

"Recycled material tile" is the wall or floor tile that was made by use of the materials reclaimed from waste resources. INAX is making efforts to use up the various materials without emitting wastes, and the materials ranges from the waste emitted from the production line of the factory to the clay included in the drainage. The materials which are used in large quantities are "ceramic-industry waste-mud" which is recovered when digging out ceramic raw materials, "KIRA" which generates in the mining of the silica sand that is the raw material of glass, and "pottery chip" which is the crushed product of the ceramics such as tile. Besides them, various regenerated materials are being used to make housing materials. Those includes the "waste glass" which has been abolished so far, the "sewage-sludge incinerator-ash" which generates at the municipal sewage-treatment plants, the "blust-furnace slag" which is formed in the blust furnace of iron-making plant, "fly-ash" which is the dust from the boiler of power plant and trapped in the dust-collecting apparatus.

INAX Corporation

3-6-18 Kyobashi, Chuo-ku, Tokyo 104-0031, Japan
Tel 81-3-4332-5164 Fax 81-3-4332-5160
E-mail inaxpr@i2.inax.co.jp
URL <http://www.inax.co.jp/>



Available in : Japan

Recycled Material Tile : IPF-150/KS-1etc

Eco-products

EP-7-018

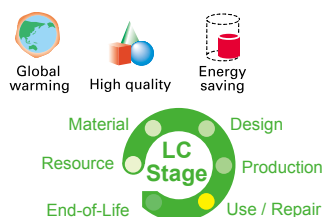
Building and civil engineering

pavement system

Earth-cool Block Pavement System with a long-term water-holding function.

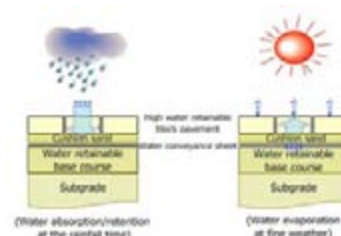
It is often said that one of the reasons for the heat island phenomenon in urban area is high surface temperature of the asphalt pavement, which reaches above 60 °C when the air temperature is 30 °C. As an anti-heat island measure, MITSUBISHI MATERIALS Corp. and TOKYOHOSO Co. developed jointly the "Earth-cool Block Pavement System" that integrates water retainable block, water conveyance sheet and water retainable base course. The system has the following features.

1. Under the weather condition in which the surface temperature of asphalt pavement is over 60 °C, "Earth-cool Block Pavement System" makes it possible to lower the temperature by 15 °C and more in comparison with the case of asphalt pavement.
2. Water retention ability is about 56 liters per 1 m², and depression effect of road surface temperature is durable for two weeks.
3. It does not need to greatly change the conventional pavement structure, and it is applicable to the renewal of the existing pavement.



Mitsubishi Materials Corporation

1-5-1, Ohtemachi, Chiyoda-Ku, Tokyo 100-8117, Japan
Tel 81-3-5252-5331 Fax 81-3-5252-5344
E-mail
URL <http://www.mmc.co.jp/>



Available in : Japan

System outline chart

Eco-products

EP-7-019

Building and civil engineering

light weight steelworks

Tio system construction products

Tio is a construction system with a small environmental load specifically designed for one-story structures such as factories, warehouses, and stores. Reducing the weight of materials used in construction through building modularization and materials standardization helps save energy, while the volume of soil excavated during construction can also be reduced significantly. Consequently, the amount of CO₂ emitted and soil excavation can both be reduced by about 30% compared with the former products (comparison with proprietary products).



Resource



High quality



Sumitomo Metal Industries, Ltd.

1-8-11 Harumi, Chuo-ku, Tokyo 104-6111, Japan
Tel 81-3-4416-6183 Fax 81-3-4416-6793
E-mail chikyu-can@sumitomometals.co.jp
URL <http://www.sumitomometals.co.jp/>

Available in : Japan

Warehouse using Tio system

Eco-products

EP-7-020

Building and civil engineering

prefabricated architectural metal products

"TOUGH GRIP" Steel fiber for concrete reinforcement

"The TOUGH GRIP" is the steel fiber which improves the strength and the durability of the concrete structure. The followings are the characteristics in the environmental aspect.

1. Each fiber of the TOUGH GRIP are pre-bound with adhesive to improve the dispersion in concrete while mixing. This saves the mixing time and energy.
2. The TOUGH GRIP can replace some of the reinforcing steel rod assembly work, shorten the construction period and save energy and steel material consumed in the construction work.
3. The TOUGH GRIP has the unique shape which enables the short fiber length. As the result, the fibers entwine less each other and it can be mixed easier in a gloss of concrete in shorter time.
4. The TOUGH GRIP can save the concrete material and enables the thinner structure.
5. The durability of the concrete is improved. As a result, the life of the concrete structure will be prolonged.
6. The TOUGH GRIP can be separated with concrete and can be used as a reproduction materials.



Resource



Recyclable



Long-life



Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-6871 Fax 81-3-5202-6874
E-mail
URL <http://www2.bridgestone-dp.jp/civil/>

TOUGH GRIP Steel fiber for concrete reinforcement

Eco-products

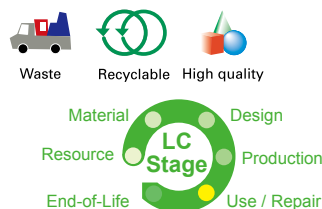
EP-7-021

Building and civil engineering

prefabricated architectural metal products

Geo-wing pile: steel tube pile

Geo-wing pile is a steel tube with low environmental load for use in the foundations of low to medium-height buildings. We have also developed Geo-wing pile II, which can be used for medium-height to tall buildings. The construction method for both products generates no waste soil as well as very little vibration or noise. It is possible to easily pull out the pile by means of reverse rotation, which substantially reduces the cost of removing foundations when buildings are demolished.



Sumitomo Metal Industries, Ltd.

1-8-11 Harumi, Chuo-ku, Tokyo 104-6111, Japan
Tel 81-3-4416-6183 Fax 81-3-4416-6793
E-mail chikyu-kan@sumitomometals.co.jp
URL <http://www.sumitomometals.co.jp>



Available in : Worldwide

Geo Wing Pile

Eco-products

EP-7-022

Building and civil engineering

elevators

Machine-Room-Less Elevator

This elevator saves spaces in the elevator shaft to allow for more flexibility in building design.

-----<< M : Material >>-----

Uses plastic made primarily from corn in a portion of the control panel.

-----<< E : Energy >>-----

Uses inverter for lighting to reduce electric power consumption by as much as 35%.

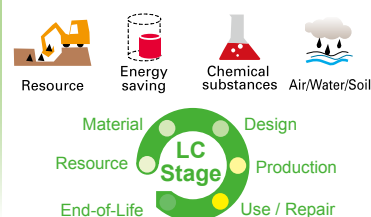
Regenerative electric power from the elevator reused to cut electric power consumption by about 20% when equipped with the optional "EL-Save".

-----<< T : Toxicity >>-----

Reduces the amount of chemical substances like toluene and xylene released in the atmosphere or ground.

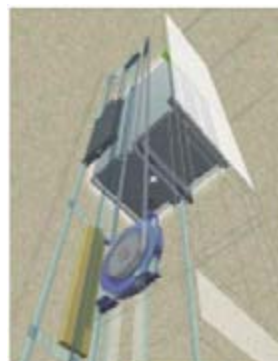
The generation of chemical substances limited for the elevator as a whole to at least the levels prescribed in "sick house" related laws and regulations.

Formaldehyde density at or less than the prescribed level (0.0001g/m³).



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



Available in : worldwide except controlled region

AXIEZ series

Eco-products

EP-7-023

Building and civil engineering

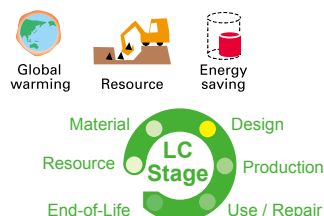
elevators

Machine Room-Less Elevator

Machine Room-Less Elevator realizes "Human-Friendly Environment for the Next Generation".

The operation power consumption (CO₂ exhaust) has decreased of 12.6% compared with model in 1994.

Density of formaldehyde in the elevator car is less than 0.08ppm.



Hitachi, Ltd., Urban Planning and Development Systems

4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-8010, Japan

Tel 81-3-4564-9324 Fax 81-3-4564-3882

E-mail

URL <http://www.hitachi.co.jp/Prod/elv/en/index.html>

Eco-products

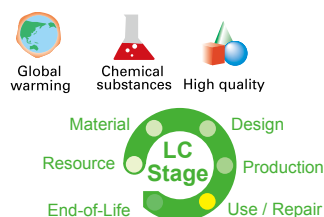
EP-7-024

Building and civil engineering

valves and cocks

Bellows Seal Valves

These valve products are available in a wide range of materials, including malleable iron, stainless steel, cast steel and forged steel, and are suitable for a broad array of applications. Hitachi Metals' bellows seal valves prevent leaks of a various types of gases, including steam, general gas, odorous gas and corrosive gas, thereby saving energy, protecting people from hazardous substances and contributing to a better environment.



Stainless Steel Bellows Seal Valve

Hitachi Valve, Ltd.

200 Obuke, Asahicho, Mie-gun, Mie 510-8102, Japan

Tel 81-593-77-4711 Fax 81-593-77-2714

E-mail yoichiroh_kazama@hitachi-metals.co.jp

URL <http://www.hitachi-valve.co.jp/english/product/pr02.htm>

Eco-products

EP-7-025

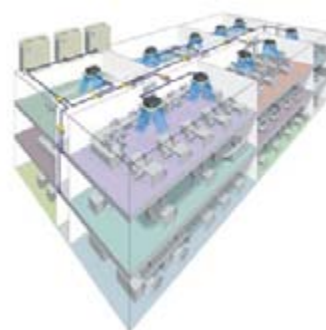
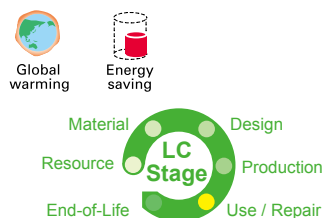
Building and civil engineering

air conditioners

High performance, energy-saving air conditioner

To respond precisely to customer needs, a lineup of outdoor units is available with power ranging from 5 to 54 HP. Up to 64* indoor units can be individually controlled in a single refrigerant piping system. The system also can air condition each room individually, which is ideal for the constantly changing occupancy of a typical building.

* Using 40-54 HP outdoor unit.



VRV III Series

DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Eco-products

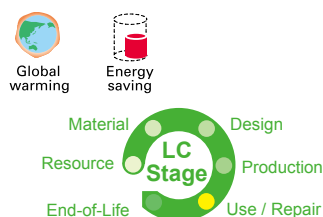
EP-7-026

Building and civil engineering

air conditioners

High performance, energy-saving air conditioner

A special version of the VRV III for small offices and shops Daikin have remodeled the acclaimed VRV III system aiming to provide the precise power and compactness required by small offices and shops.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in : Out of Japan

VRV III-S Series

Eco-products

EP-7-027

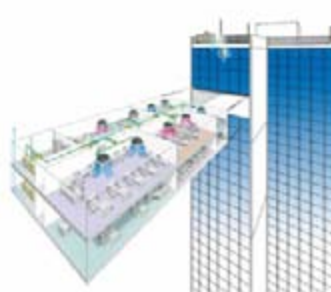
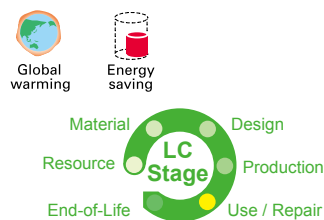
Building and civil engineering

air conditioners

High performance, energy-saving air conditioner

A water cooled intelligent individual air conditioning system suitable for tall multistoried buildings.

Water cooled VRV II is an individual air conditioning system that utilizes water as a heat source. In this unique system, water is piped from a cooling tower or boiler to the VRV-WII (which is the equivalent of the outdoor unit of an air cooled conditioning system) and after heat exchange, refrigerant is piped from the VRV-WII to each indoor unit.



VRV-WII

DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi, Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in : Out of Japan

Eco-products

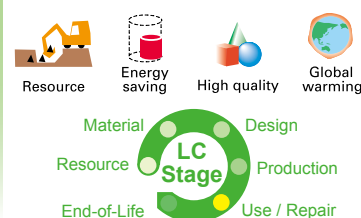
EP-7-028

Building and civil engineering

air conditioning and household equipments

Thermal Storage Systems in Building Mass

By using our building mass thermal storage technologies and systems, you are able to reduce energy costs by 7%, CO₂ emissions by 10% and running costs by 15%. This is primarily achieved by shifting part of the day-time cooling/heating process to night-time, where discount utility rates apply. Based on our experimental test results, we achieved a 20% reduction in peak-time energy usage levels. Furthermore, you are able to reduce the amount of equipment needed by "splitting" the system, hence, reducing capital expenditure, maintenance costs and space required.



Hitachi Plant Technologies, Ltd.

5-2, Higashi-Ikebukuro 4-chome, Toshima-ku, Tokyo 170-8466, Japan
Tel 81-3-5928-8100 Fax 81-3-5928-8701
E-mail koho-senden@hitachi-pt.com
URL www.hitachi-pt.com

Thermal Storage Systems in Building Mass

Eco-products

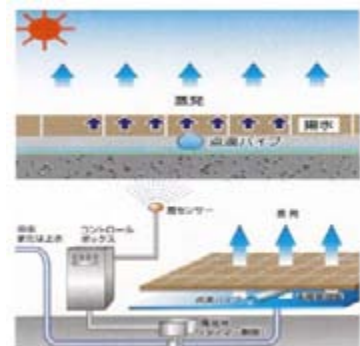
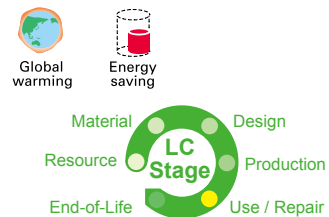
EP-7-029

Building and civil engineering

wet pavement system

Sidewalk'Wet'pavement system to counter heat island phenomenon

The "wet pavement" system (water sprinkling road system), can reduce summer daytime temperature of road surfaces by approximately 25 degree Celsius lower than asphalt pavement. The wet pavement surface reduces sunlight reflection, relieving both heat and glare. A dripping water supply pipe provides a continuous cooling effect even if fine weather continues for several days. Water quantity required is 5-6 ℓ/m^2 for a typical fine day in summer.



Wet Pavement System (Uchimizu-Pave)

Obayashi Corporation , Technical Research Institute

640, Shimokiyoto 4-chome, Kiyose-shi, Tokyo 204-8558, Japan
Tel 81-42-495-1044 Fax 81-42-495-1260
E-mail komiya.hidetaka@obayashi.co.jp
URL <http://www.obayashi.co.jp/>

Eco-products

EP-7-030

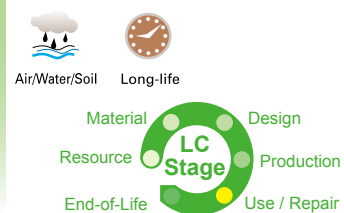
Building and civil engineering

silt barrier

Silt Barrier

The "Silt Barrier" is the floating boom with net to stop the diffusion of mud to keep the environmental water clean out of the marine construction area.

The portable type has the foam blocks inside and most widely used. The sink-and float type is the fixed type moored around the certain area and floats only when it is necessary. The self-stand type is fixed at the bottom of the water and stands up to stop the bottom diffusion.



Silt Barrier

Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-6871 Fax 81-3-5202-6874
E-mail
URL <http://www2.bridgestone-dp.jp/civil/>

Eco-products

EP-7-031

Building and civil engineering

building automation system

Energy Saving Technology by Location Information of Wireless Phones in Buildings

We developed local positioning technology and its application system using internal wireless phones.

This system can detect human location in buildings and improves energy conservation. These location data are used for controlling lightings and air-conditioning equipment.

Location server obtains information of the base station each phone connects to, calculates the number of people in each area, and sends data to the building automation system.

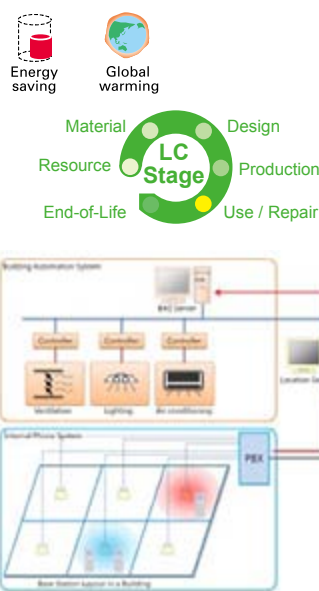
Air ventilation control, based on the number of people, enables 10% of energy saving compared to standard buildings.

Infrared sensors or CO₂ sensors are required for the same control in general case. However, this system uses internal phone infrastructure as sensors, and can be installed at a low cost.

SHIMIZU CORPORATION

SEAVANS SOUTH No.2-3, Shibaura 1-chome, Minato-ku, Tokyo 105-8007, Japan
Tel 81-3-5441-1111 Fax
E-mail
URL <http://www.shimz.co.jp/>

Available in : JAPAN



System Configuration

Eco-products

EP-7-032

Building and civil engineering

bamboo flooring

Eco-Friendly 100% Solid Bamboo Hardwood Flooring

Star Bamboo (S) Pte Ltd is an award-winning manufacturer and distributor of eco-friendly bamboo flooring from Singapore.

Bamboo is one of the world's most renewable and strongest natural resources, and an ideal alternative to wood.

Bamboo is ready for harvesting in 4 to 6 years, while trees take 20 to 80 years to mature. There is also no need to replant bamboo as it grows out from its own shoots, in direct contrast with forests which require expensive and time-consuming reforestation efforts.

We only use mature bamboo harvested from government-certified forests.

Our eco-flooring is made of 100% solid bamboo using European technology and comes prefinished with German scratch-resistant polyurethane coating.

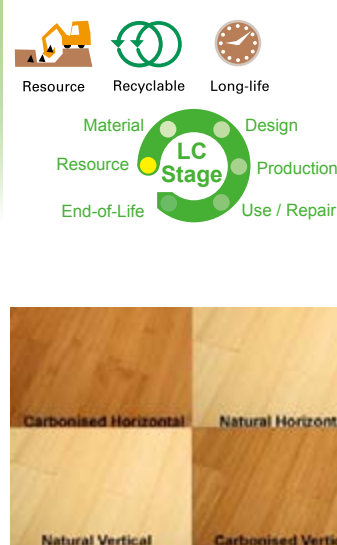
The products exceed the strictest international E0 standard for formaldehyde emissions, ensuring a healthy environment for our customers.

Our fully-owned manufacturing plant obtained international environmental standard ISO14001 certification in December 2006.

Star Bamboo (S) Pte Ltd

2 Jurong East St 21, #02-143 IMM Building 609601, Singapore
Tel 65-6565-9217 Fax 65-6565-0508
E-mail info@starbamboo.com
URL <http://www.starbamboo.com>

Available in : Europe, Asia, Australia



Solid Bamboo Flooring

Eco-products

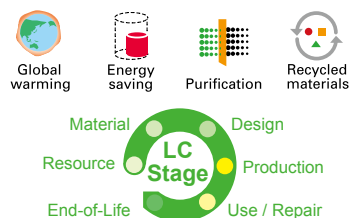
EP-7-033

Building and civil engineering

green roof

ZinCo Green Roof Systems

The green roof systems conceives high recycled content of exceeding 60% through re-engineering construction wastes such as clay bricks and roof tiles, fibres from the textile industry and plastics from the consumer industries.



ZINCO SINGAPORE PTE LTD

19, Keppel Road, Unit 07-01, Jit Poh Building 08958, Singapore
Tel 65-6396-7220 Fax 65-6396-8592
E-mail admin@zinco.com.sg
URL <http://www.zinco.de>



Available in : Worldwide

Eco-products

EP-7-034

Building and civil engineering

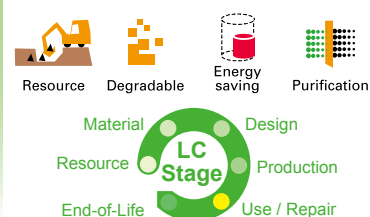
solar control films / safety & security films

Spectrally Selective Solar Control Films / Safety & Security Films

Engineered by V-KOOL, IQue offers an extensive range of applied films for the architectural market. Combining high performance solar control with high visible light transmission, IQue architectural films can reject as high as over 98% of infra-red rays responsible for heat build-up while letting in over 73% of visible light. 60% of the total solar energy is prevented from entering the interior, thereby reducing air-conditioning loads and achieving significant savings in energy bills. Visible clarity also means that daylight can be "harvested", reducing artificial lighting requirements in buildings significantly.

IQue also offers Safety & Security films which are easily applied onto any existing glass surface to hold broken glass shards in the event of breakage. It holds broken glass in place greatly reducing the likelihood of glass being propelled at high speeds into interior areas.

Results from the Bomb Blast Mitigation Test have demonstrated the effectiveness of IQue Safety & Security films in mitigating glass fragment hazards when subjected to blast loads. Our films have met the stringent US General Services Administration (GSA) testing requirements.



V-KOOL (S) Pte Ltd

12 Jalan Kilang Barat, #01-01 Globamatrix Building 159354, Singapore
Tel 65-6276-6282 Fax 65-6276-7271
E-mail info@v-kool.com.sg
URL <http://www.v-kool.com.sg>



Available in : Worldwide

Eco-products

EP-7-035

Building and civil engineering

insulating panel for residential houses

Energy/resource-saving oriented insulating panel

The insulating panel not only contributes to energy-saving through load reduction of air-conditioners at residential houses, but also promotes high durability of the houses through its earthquake-proof panel structure. Its insulation materials deploy "non-CFC forming polyurethane", which uses carbonic acid gas with ozone layer depletion coefficient 0 and global warming coefficient 1. In consideration of measures against sick house, the materials also use OSB(oriental stand board) with F four stars(F [four stars]) grade which emits least formaldehyde. The product is selected as one of the products with our own "Type II Eco-Label", based on our internal standard.



TOSTEM CORPORATION

1-1, Ojima 2-chome, Koto-ku, Tokyo 136-8535, Japan
Tel 81-3-3638-8187 Fax 81-3-3638-8254
E-mail
URL <http://www.tostem.co.jp>

Eco-products

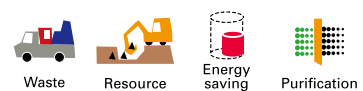
EP-7-036

Building and civil engineering

continuous subterranean diaphragm wall members

Continuous subterranean diaphragm wall members for

Nippon Steel's NS-BOX (continuous subterranean diaphragm wall members) for the walls of urban subterranean structures reduces the generation of waste soil by reducing wall thickness. It also shortens the construction period by eliminating the need for concrete reinforcing bars, reduces the space required at construction sites, and eases traffic congestion in urban areas.



Nippon Steel Corporation

2-6-3, Otemachi, Chiyoda-ku, Tokyo, Japan
Tel 81-3-3275-5144 Fax 81-3-3275-5979
E-mail kankyo@nsc.co.jp
URL <http://www0.nsc.co.jp/kankyou/index.html>

Eco-products

EP-7-037

Building and civil engineering

rainwater storage

Rainwater storage/Infiltration & re-use system

To solve this environmental problem which is floods or a shortage of water or global warming, our system (CrossWave, RainStation) is useful. Our system stored rainwater underground is able to control flow volume into sewers and rivers and to reuse the rainwater.

- Saving water (Global Warming, Energy Saving) To reuse the stored rainwater vastly decrease the consumption of reticulated fresh water. For example, if a 1,000m³ rainwater storage tank is set up in a shopping center used by 5,000 people a day, and collected rainwater is used to flush the toilets, the amount of reticulated water used decrease its 45%. And energy saving by load reduction of water purification plant is enabled. In addition, it can be lower temperature of the ground by sprinkling.
- Prevent a flood Our system stored rainwater underground to control flow the rainwater out.
- Excellent durability (Longevity, Recyclability) The material has an excellent durability, and is thus suitable for long-term use. The materials are recyclable. In addition, a RainStation automatically collects contaminants such as sand through its water-flow control structure.

Sekisui Chemical Co., Ltd.

2-3-17, Toranomon, Minato-ku, Tokyo, Japan

Tel Fax

E-mail kankyo@sekisui.jp

URL <http://www.sekisui.co.jp/>



above: "Cross Wave" below: "Rain Station"

Eco-products

EP-7-038

Building and civil engineering

residential house

Zero-utility-cost Houses

Combination of the above mentioned technologies can realize zero utility cost. While utility cost/year at an ordinary residential house amounts to 226,000 yen, that at highly heat insulated house adopting highly effective hot water unit, all electrification and mounting the photovoltaic generation system of 5.5 kW capacity amounts to minus 1,000 yen.

Annual CO₂ emission as environmental value can be reduced to 580 kg from 3090 kg of an ordinary residential house.

Evaluating by life cycle cost, the initial costs increase by approximately 2.6 million yen in total in order to equip the house with these systems, but considering the increased costs to be depreciated by the reduction of the utility charges, they can be repaid by approximately 13 years, which may be able to be proposed to possible users as economical advantages.

This house is becoming an important housing model, leading to the expansion of renewable energy and to the reduction of CO₂ emissions in Japan.

Sekisui Chemical Co., Ltd.

2-3-17, Toranomon, Minato-ku, Tokyo, Japan

Tel Fax

E-mail kankyo@sekisui.jp

URL <http://www.sekisui.co.jp/>



Eco-products

EP-7-039

Building and civil engineering

architectures

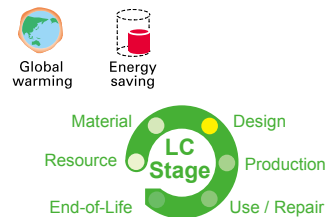
Japan Aerospace Exploration Agency Tsukuba Space Center Headquarters Building

The Mirror duct system captures light from on the outside walls or the roof, then reflects it along the highly reflective, mirrored inner surfaces of the ducts to places where light is needed in the interior. Mirror ducting is a long-lasting system, requiring almost no energy or maintenance after installation as it carries on bringing in light through the lifespan of the building. In terms of lifecycle CO₂, the CO₂ equivalent of the initial installation is recouped in around five years through reduced electricity consumption, after which, it continues to deliver substantial effects in reducing CO₂ emissions for the lifespan of the building without significant further cost. In an office building, light collected on the south side can be conveyed to the north side through the ducts and released into rooms along the way through diffusers. Light fixtures are placed below the diffusers, so light released to the interior is a blend of natural light and automatically regulated artificial light, maintaining a uniform level of light at all times.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Guiding natural light into the interior

Eco-products

EP-7-040

Building and civil engineering

architectures

NEC Tamagawa Renaissance City

This office is designed so that it has high earthquake performance and adequate capacity of building facilities for IT environment as well as comfortable indoor environment. From the planning and conceptual design stage, our way of thinking is based on “the environment management cycle”. The concrete targets for the environment countermeasure was set up and practiced through the life cycle of design, building, management, renovation and disposal. Taking the phrase “the thing we can do for the global environment” as a keyword, we are promoting the construction of ecology building, which contributes to maintenance and preservation of the global environment.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



An ecological super high-rise building that is considerate of global environment

Eco-products

EP-7-041

Building and civil engineering

architectures

Epson Innovation Center Sustainable

This is the research facilities to develop the information related equipment of the next generation. The buildings are the architecture of the "symbiosis with environment", in which the characteristic of the nature at a 700m altitude has been utilized. The feature is the atrium space that prompts the communication and collaboration of the researchers. The buildings consist of 2 blocks: "C-Cube" block is used for the collaboration with the outside, and "A" block is the innovation center for the fusion of researchers. Enlargement is possible across the "C-Cube" block. As for the inside, the amenity was raised by woody decoration and by mild light from the top. We tried further development of the known energy-saving technique. We added automatic tracking mechanism of the sun light to the light receiving part of glass duct, which works as floor warmer by aspirating the warm air in the upper space of atrium. With the aim of 60% CO₂ reduction, one hundred technological items to reduce the environment load were incorporated. This center is the research base in which the company's philosophy to the environment conservation has realized.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>



Available in : Worldwide

Sustainable Architecture using natural resources

Eco-products

EP-7-042

Building and civil engineering

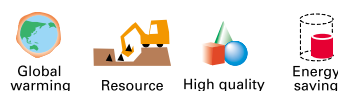
architectures

TOYOTA Motors Main building

We proposed the "façade" which warmly welcomes domestic and foreign guests. It will become a new face of Toyota. Our concept was placed on (1) the full equipment with earthquake proofing ping, disaster prevention, security, and crisis control, (2) the device of work space to enhance the efficiency and the productivity of office work, and (3) the realization of the environment performance of world's top level, because the building is the headquarter of the global company that conducts a pioneering work for the environment consideration. We offered "Vertical Village" for the "KAIZEN" (improvement) of work space. We placed the inside stairs and stairwell between the elevator and the office, and aimed to improve the productivity by the activation of communication. The advanced technologies of reducing the environment load were introduced: a hi-tech curtain wall consisting of horizontal/vertical louver; a full-scale floor ventilation system with the breathing carpet; a light duct system of domestic largest scale, etc. We expressed these advanced technologies as the environment design which harmonizes with the architecture.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>



Available in : Worldwide

Collaboration of Design & Environmental Engineering

Eco-products

EP-7-043

Building and civil engineering

architectures

Institute for Global Environmental Strategies (IGES)

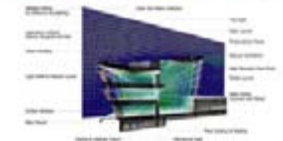
This is the leading institution for research agencies that apply all environment-oriented technologies that are effective at present.

Light shelves in the windows provide brightness, and advanced technologies such as natural ventilation, ice heat storage, NAS batteries and micro-gas turbines are used throughout the building to make effective use of energy. Rooftop planting has enhanced insulation performance, electricity is generated from sunlight and wind, geothermal energy is used and various other techniques harness the power of nature to cut Life Cycle Cost by approximately 50% and Life Cycle CO₂ by approximately 40%. The Building Environmental Efficiency (BEE value) of 5.1 is the highest assessed value.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Total Eco-Design -Earth, Wind & Light

Eco-products

EP-7-044

Building and civil engineering

architectures

Aoyama Gakuin University Sagamihara Campus

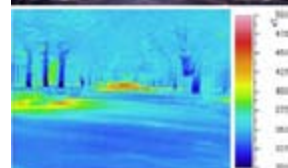
The Sagamihara campus of Aoyama Gakuin University is integrated from Atsugi and Setagaya campus. It is an environment friendly eco-campus surrounded by many long-grown trees, showing the tradition of Aoyama Gakuin.

The environment friendly considerations include long-life building design; effective usage of natural energy such as light, wind, terrestrial heat, rain water and well water; heat insulation design; minimum dirt release; and many eco-activities during the construction phases. The whole campus design is to provide convenience and comfort to the students among the 20 buildings, and to harmonize the buildings with landscape. The exterior is simply designed with bright stair entrance and well-defined window sills, decorated with earth-color slate tiles.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



A richly forested campus, using original trees

Eco-products

EP-7-045

Building and civil engineering

architectures

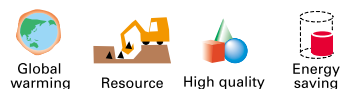
Kansai Electric Power Headquarters

The building integrating Kansai Electric Power's headquarters function. The building was constructed as part of "The Joint development project of Nakanoshima 3-chome" by DAIBIRU Corporation, Kansai Electric Power Co., Inc., and Kanden-fudosan Co., Ltd. Under the consideration of one of the concepts laid as "Model building for environmental symbiosis". The following functions are realized. For the aspect of the surrounding of the window, the construction frame such as pillar or beam keeps approximate 1.8 m apart from the window surface, together with revealing the facade's shades, while the building ensures natural daylight through the big windows, and sun protection by the eaves. And, natural ventilation resulting from making eaves' sky is introduced, and the space for solar system is installed. Besides, the technologies for the environmental symbiosis including task-ambient air conditioning system, and thermal storage for the building, etc are introduced. For the office zone at its high-rise part, communication for the up and down floor can be better activated through integrating three floors called as "communication well" into one space by the stairwell.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Model building for environmental symbiosis

Eco-products

EP-7-046

Building and civil engineering

architectures

Tokatsu Techno Plaza

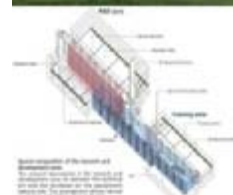
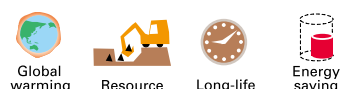
This research facility aims to bring together industry, academia and government in an effort to nurture the next generation of regional industries. It is a comprehensive center for technological exchange providing venture companies with three functions: technological development, training and exchange. We use a wide variety of techniques as we work to create buildings for the next generation. The main themes of this building are reduction of energy usage so that the building will be used through a long lifespan in harmony with the environment, and advanced flexibility to make sure the building can adapt swiftly to rapidly changing research work. Three elements are used to provide natural ventilation/ lighting for themselves and the research laboratories, and to naturally light the laboratories from both sides:

- 1) The glass double skin that forms the south wall of the communication Plaza in the three-story atrium over the entrance.
- 2) The central shaft space (technical slit) which is surrounded by glass and serves as a path for light and air through the center of the laboratories.
- 3) The central emergency exit staircase (communication steps), which is surrounded by transparent walls.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Creating a sustainable building

TOKYO GAS "Earth Port"

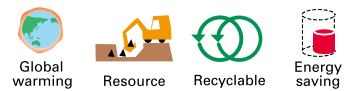
This building is aimed at being the Life-cycle Energy-saving Office. It was built on the concentration of the techniques of building, environment and facilities. The issue of building was to pursue the compatibility of the comfortable environment with the energy saving through the life cycles of the materials, while making the best use of natural energy.

The core space of building which had been traditionally closed was reexamined and "the ecological core" which works as a vertical path of light and wind was offered. Namely, corridor, elevator and staircase were connected with the showroom, and they were made to develop as atrium space which connects the each floor. Both sides lighting of the office and the maximum use of natural energy by natural ventilation are being attempted. The effective use of energy and resources is thoroughly being pursued: the use of heat-insulating material that has performance most suitable to the part of building; the active use of regenerated material; the use of rain water, etc.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Life-cycle energy-saving architecture

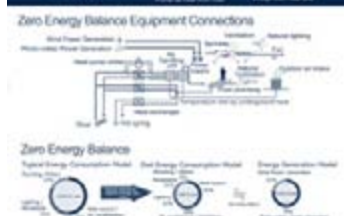
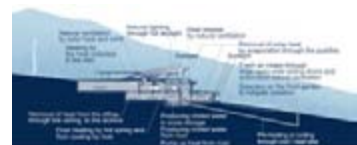
K-Nasu Project

It is a plan to build the main office of a certain company on the site 800m above sea level which is located on the hillside of Nasu Highland in the Nikko National Park. The attraction of this location is, after all, in the splendid scenery and the refreshing air of the plateau. In order to make the space where the work is possible while enjoying this blessed natural environment, we placed a large opening from which the marvelous prospect is obtained. From the natural ventilation device, refreshing wind of Nasu highland moves in, and from the top light, mild natural light pours into the room. And, to realize zero-carbon office, in addition to the natural ventilation and lighting, various natural energies such as solar cell, solar heat collector, wind turbine, geothermal energy, hot spring and snow are used.

NIKKEN SEKKEI LTD

2-18-3 Iidabashi, Chiyoda-ku, Tokyo 102-8117, Japan
Tel 81-3-5226-3030 Fax 81-3-5226-3038
E-mail webmaster@nikken.co.jp
URL <http://www.nikken.co.jp>

Available in : Worldwide



Zero Carbon Building

Eco-products

EP-7-049

Building and civil engineering

modular floating system

EcoFloat Modular Floating System

EcoFloat Modular Floating System is a revolutionary highly modular floating system with excellent features. It is cost effective and environmental friendly, suitable for any leisure activities, waterfront property, aquatic sports, military and engineering projects on the water.

The benefits of EcoFloat:

- Easy to install, no extensive construction work needed
- Low cost
- Environmental Friendly
- Versatile, can be reconfigure to any size or shape that suit different type of applications
- Minimum maintenance

The Features:

- High load capacity with 350 kg/m²
- Durable built material - High Density Polyethylene (HDPE) that resistant to UV rays, seawater, corrosion, chemical and oil
- Non-slippery surface and sharp edges
- Comes in modular built that aid easy installation - like piecing the "Lego" bricks

GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore
Tel 65-6872-2350 Fax 65-6872-5610
E-mail info@grenzone.com
URL <http://www.grenzone.com>



Available in : Worldwide

EcoFloat Modular Floating System

Eco-products

EP-7-050

Building and civil engineering

ceramic insulation coating

COOL THERM / Ceramic Insulation Coating

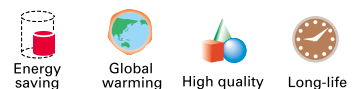
COOL THERM is a coating born in the ceramic development for NASA's space shuttle, and it is nonflammable and non-toxic properties are tested and proved by NASA. These four types of special ceramics developed by NASA line up in coating, and reflect / radiate a wide range of heat waves including infrared rays. This is the mechanism of COOL THERM's effect.

COOL THERM prevents heat being generated on the surface of coating, the air-conditioning load of the building and the house decreases, and it can greatly cut down the electric power of the air conditioner.

COOL THERM is tough in the salt damage, the life cycle of coating is very long, and insulated power is kept for ten years or more. Therefore, COOL THERM is often used as coating of the oil tank of petrochemical complex and the ship, etc. The administrative and maintenance are not necessary for COOL THERM. The product of the energy saving with unnecessary running cost is only ceramic insulated coating. It's COOL THERM.

Ebara Agency Co., Ltd.

11-1, Haneda Asahi-cho, Ohta-ku, Tokyo 144-8510, Japan
Tel 81-3-3743-7130 Fax 81-3-3743-7131
E-mail webmaster@ebara.com
URL <http://www.ebara.co.jp>



COOL THERM of EBARA's Factory

Eco-products

EP-7-051

Building and civil engineering

green roof system

PEG System - Your Portable Greening Solution

Prefabricated Extensive Green Roof System (PEG) is an innovative lightweight modular green roof tray system manufactured using thermal plastic which can be recycled. It has a built-in reservoir that retains rainwater to sustain plant growth. PEG system allows instant greening for extensive roof garden and is suitable for most new and existing buildings

The benefits of the PEG System are;

- Allows owners to dismantle and move PEG to a new place with ease
- Designer can rearrange PEG trays to achieve different aesthetic look
- Enables a neat and quick installation process on site
- Stores water to sustain the plant growth
- Improves energy efficiency and softens the urban landscape
- High durability and low maintenance
- Reduces surface temperature



United Premas Limited

Block 750 Oasis, Chai Chee Road Technopark @ Chai Chee #01-01,
469000 Singapore
Tel 65-6876-0088 Fax 65-6538-8146
E-mail corporatemarketing@unitedpremas.com
URL www.uglpremas.com

Available in : Singapore

Eco-products

EP-7-052

Building and civil engineering

landscaping materials

Garden landscaping products

SECOIN garden landscaping concrete products are produced under "non-burnt" technology, which helps saving agricultural land and does not use fuel for burning. In addition, the curing (drying) process is done in room-temperature without heating. These products are made to replicate the natural materials such as natural stone, natural trees/ wood and clay burnt bricks. They are, therefore, very close to the nature, environmental friendly and energy-saving.



SECOIN Co., Ltd.

59 Hang Chuoi Str., Hai Ba Trung Dist., Hanoi, 10000 Vietnam
Tel 84-4-9718899 Fax 84-4-9718898
E-mail sales@secoin.vn
URL www.secointile.com

Available in : Vietnam, Japan, Australia

Secoin garden paver creates a warm atmosphere for outdoor living space

Eco-products

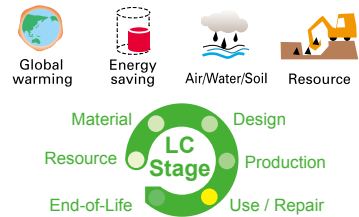
EP-8-001

Machines and equipment

conveyor rubber belts

Energy-saving belt "BEATRON"

In the operation of the conveyor belt, the energy consumption grows by the roll over resistance generated when the belt passes on the roller. Energy-saving belt "BEATRON" can decrease the roll over resistance by uniting the optimization design of the rubber viscoelasticity and the HELLO theory (the theory of optimized belt design). As a result, about 30% and more energy-saving has been verified when applying to an actual long distance conveyor line.



Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
 Tel 81-3-5202-6851 Fax 81-3-5202-6854
 E-mail
 URL <http://www.bridgestone.co.jp/>



Energy-saving belt "BEATRON"

Eco-products

EP-8-002

Machines and equipment

rubber hoses

Hydrogen dispenser hose

Under the fuel cell system is in the limelight as next generation's ultimate energy, improving the infrastructure of the hydrogen that is an energy of the fuel cell is an problem. Bridgestone apply the conventional technique of high-pressure hose (Primoline), and developed 70MPa hydrogen dispenser hose (over 280MPa breakdown pressure). So we make a contribution to improve the infrastructure of the hydrogen.



Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
 Tel 81-3-5202-6706 Fax 81-3-5202-6718
 E-mail
 URL <http://www.bridgestone.co.jp/english/index.html>



Hydrogen dispenser hose

Eco-products

EP-8-003

Machines and equipment

air conditioners

UTOPIA IVX DC INVERTER Packaged Air Conditioner

"UTOPIA IVX DC INVERTER" won the "Minister of Economy, Trade and Industry Award"; the first prize of the Energy Conservation Awards in Japan, for its high energy-saving performance.

By realizing independent operation - the first in the industry, COP is increased 143% ; 4.24(8HP) and 3.85(10HP). These advanced technologies decreased 50% power consumption.

The mass of material used has been successfully reduced due to product downsizing. (Installation space is 40%, Net weight is 25% downsized), which has improved installation flexibility and resource consumption. Iron is reduced by 37%, while Aluminum by 50%. 27% of power consumption has been reduced during production.

HFC refrigerant (R410A) with zero ozone depletion potential has reduced amount of charging by 26% when shipping and by 47% when charging for long piping(100m).

We still continue to strive for further environmental protection.

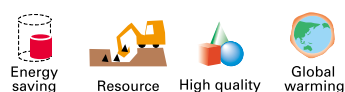
Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo 105-8410, Japan

Tel 81-3-3502-2111 Fax

E-mail

URL <http://www.hitachi-ap.co.jp/>



UTOPIA IVX DC INVERTER OUTDOOR UNIT

Eco-products

EP-8-004

Machines and equipment

air conditioners

Gas engine heat pump air conditioner equipped with power generator

High-Power EXCEL is a revolutionary system realizing simultaneous air conditioning and power generation. A compressor driven by a gas engine provides space heating/cooling and a generator is capable of generating 2.3 - 4kW electricity utilizing surplus energy of gas engine.

The electricity generated is supplied to the pump of air conditioner and also the building in which High-Power EXCEL is installed.

With its high energy-saving features, this system contributes to cutting electricity consumption in the peak hours of electricity demand.

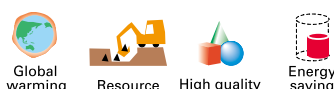
Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan

Tel 81-6-6205-6455 Fax 81-6-6202-6455

E-mail

URL <http://www.osakagas.co.jp>



Eco-products

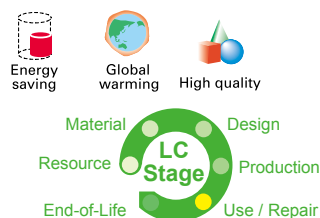
EP-8-005

Machines and equipment

air conditioners

Clathrate Hydrate Slurry (CHS) Heat Storage Air-conditioning System

Using clathrate hydrate slurry instead of water, the Clathrate Hydrate Slurry (CHS) Heat Storage Airconditioning System is a cooling system with excellent energy saving effects. This system substantially reduces power consumption and thereby contributes to global warming prevention. The Kawasaki shopping mall "Azalea" is one of our major clients who have adopted this system. The new air-conditioning system has been awarded the Prime Minister Prize of the 35th Japan Industrial Technology Grand Prix.



JFE Engineering Corporation

1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-6527, Japan
Tel Fax
E-mail
URL <http://www.jfe-eng.co.jp/>



Available in :

Eco-products

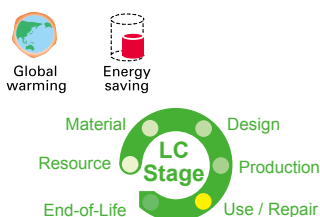
EP-8-006

Machines and equipment

air conditioners

High performance, energy-saving air conditioner

Daikin's SUPER MULTI NX with DC inverter offers energy savings, quiet operation, and a wide range of models to provide you with maximum comfort while respecting homes and people. Furthermore, the wall-mounted type D series won the prestigious Good Design Award in Japan.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi, Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>



Available in : Out of Japan

SUPER MULTI NX

Eco-products

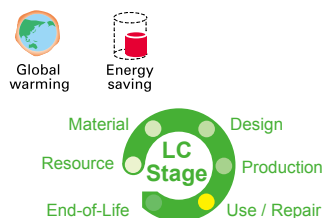
EP-8-007

Machines and equipment

air conditioners

High performance, energy-saving air conditioner

Daikin's Super Multi Plus D and E series is now connectable to up to 8 indoor units and offers you a richer choice of indoor units to coordinate with each room d°cor. Advanced technology from Daikin has improved COP and reduced sound levels to suit today's modern living environment.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in : Out of Japan

SUPER MULTI PLUS

Eco-products

EP-8-008

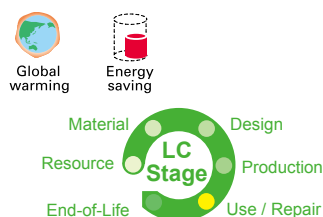
Machines and equipment

air conditioners

High performance, energy-saving air conditioner

Daikin's SkyAir Inverter series have launched new line up achieving High COP. The outdoor unit is equipped with Reluctance DC scroll compressor, Aero Spiral Fan, DC Fan Motors and Super Aero Grille as the latest energy saving technologies.

The ceiling mounted cassette type (Round Flow) indoor unit which delivers 360 degree of the angle airflow brings out uniform temperature distribution and a comfortable living environment even if the setting temperature is raised by 1 degree C in cooling.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi,
Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in :

SkyAir Inverter series

Eco-products

EP-8-009

Machines and equipment

retail facility and office air conditioner

Air-conditioner for retail facility and Office with the industry's highest energy-saving performance

The product is a retail facility and office-use air-conditioner having the industry's best energy-saving performance, which was further improved.

As for the indoor unit (four way cassette type), a self-cleaning function which can suppress the generation of mold and germs was installed for the first time in the air-conditioner industry. The dirt which stuck to the heat exchanger is washed down by the condensed dew water, and the wet heat exchanger becomes dry when ventilated.

Outdoor machine-unit adopted a DC twin rotary compressor, the thrust load of which was decreased by a newly-developed magnetic buoyancy device. The energy saving performance was improved particularly in the load range from low to middle.

- **Energy Saving:** Annual power consumption was reduced by 58% compared to that before 10 years (by our company's constant speed machine). Annual CO₂ discharge was reduced by 1.2 ton compared to that before 10 years (ibid). APF (Annual Power-consumption Efficiency) of 6.0 has been achieved for 11.2kW capacity model.

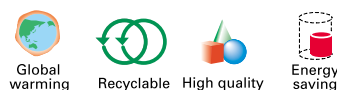
Toshiba Carrier Corporation

3-23-17 Takanawa, Minato-ku, Tokyo 108-007, Japan

Tel Fax

E-mail

URL <http://www.toshiba-carrier.co.jp/>



Super Power Eco³(cube),AIU-AP1405H (Indoor Unit),ROA-AP1405HS (Outdoor Unit)

Eco-products

EP-8-010

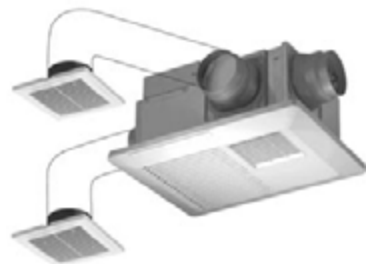
Machines and equipment

room dryer

Bathroom ventilation dryer for drying the clothing with reduced power consumption

Since the revised Building Standard Act that considered the sick-house syndrome was executed, July, 2003, the role of ventilation system varied from the local ventilation to the ventilation of the whole house. The carrier group in Toshiba developed the bathroom ventilation drier, "Bath Dry" which can dry not only bathroom, but also plural rooms.

It has mounted "the eco-drying mode", which holds the supplying time of electricity to the heater minimum at the time of drying the clothing. This is controlled by changing the temperature of the air sent to the bathroom. The amount of the used electricity was reduced to 1/3 in comparison with that in the standard drying mode.



Toshiba Carrier Corporation

3-23-17 Takanawa, Minato-ku, Tokyo 108-007, Japan

Tel 81-3-6409-1735 Fax 81-3-5447-8388

E-mail

URL <http://www.toshiba-carrier.co.jp/>

DVB-18STD

Eco-products

EP-8-011

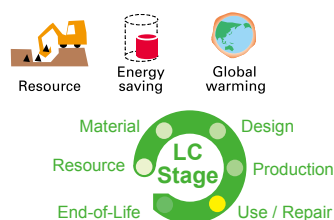
Machines and equipment

air conditioning and household equipments

OH Saver® (Optimized HVAC Control Systems for Energy Saving)

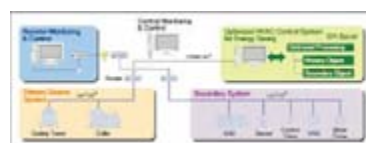
During the design stage, total system parameters are simulated to obtain optimum energy efficiency, e.g., 20% reduction in energy consumption was achieved.

Our enhanced software improves the efficiency of the Primary Source System and the Secondary System and applicable to various types of existing HVAC components



Hitachi Plant Technologies, Ltd.

5-2, Higashi-Ikebukuro 4-chome, Toshima-ku, Tokyo 170-8466, Japan
Tel 81-3-5928-8100 Fax 81-3-5928-8701
E-mail koho-senden@hitachi-pt.com
URL <http://www.hitachi-pt.com>



System configuration

Eco-products

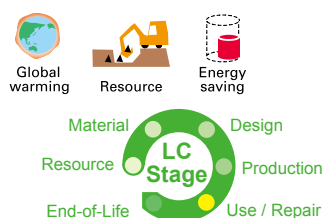
EP-8-012

Machines and equipment

freezing/refrigerating/air-conditioning sysstem

Freezing/refrigerating/air-conditioning sysstem

This system achieves an energy reduction for convenience stores by integrating the freezer and refrigeration showcases with an air-conditioning system. It achieves a 50% reduction in annual energy consumption compared with existing systems by using exhausted heat from freezing, refrigerating, and air-conditioning into one system provides resource-savings.



DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi, Osaka 530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>



CONVENI-PACK

Eco-products

EP-8-013

Machines and equipment

chiller

Adsorption Chiller making a cold water at a low cost

This is a chemical refrigeration compressor using one of the NWFs, H₂O and adsorbent. It can produce chilled water from the low grade heat source of less than 75 degrees Celsius. Main body does not require electricity. In addition, the maintenance cost is nearly negligible.



Global warming



Mayekawa Mfg.Co.,Ltd.

2-13-1, Botan, Kotou-ku, Tokyo 135-8482, Japan
Tel 81-3-3642-8181 Fax 81-3-3643-7094
E-mail pubic@mayekawa.co.jp
URL <http://www.mayekawa.co.jp>

Available in : Japan&28countries

Adsorption Chiller

Eco-products

EP-8-014

Machines and equipment

chiller

The dehumidification type air refrigeration system, "Air Ref 500"

Air is the ultimate NWF from the viewpoint of safety and environment. This is the latest refrigeration system which uses air as a refrigerant. The major feature is to suck the air in the refrigerated room, and to lower the temperature of sucked air by compressing and expanding, and then to burst out into the refrigerated room again. High coefficient of performance is realized by the expander integrated turbo-compressor, and 50% energy saving can be fulfilled compared with the former system.



Global warming



High quality



Mayekawa Mfg.Co.,Ltd

2-13-1, Botan, Koto-ku, Tokyo 277-0027, Japan
Tel 81-3-3642-8181 Fax 81-3-3643-7094
E-mail public@mayekawa.co.jp
URL <http://www.mayekawa.co.jp>

Available in : JAPAN&28countries

AirRef500

Eco-products

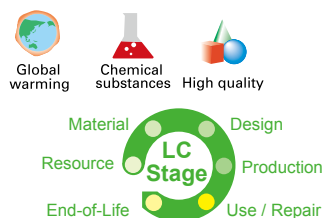
EP-8-015

Machines and equipment

chiller

Hybrid cooling unit

This is a hybrid cooling unit with one of the NWFs, NH₃ which is equipped with a IPM motor and a semi-hermetic type compound screw compressor which is proud of world's best coefficient of performance (COP). It is optimum for the re-modeling and the renewal of the existing refrigerated warehouses and/or the food processing factories.



Mayekawa Mfg.Co.,Ltd.

2-13-1, Botan, Kotou-ku, Tokyo 135-8482, Japan
Tel 81-3-3642-8181 Fax 81-3-3643-7094
E-mail public@mayekawa.co.jp
URL <http://www.mayekawa.co.jp>



Available in : Japan&28countries

NewTon3000

Eco-products

EP-8-016

Machines and equipment

chiller

Low energy consumption heat source for large-scale air conditioning facilities

The product is a high-efficient heat-pump chiller, which is most suitable for the industrial-use central air-conditioning. The new refrigerant R410A was used for the newly developed X-frame and the large-scale chiller. By using a module connecting method, realized were the high efficiency, the saving of space and the enlargement of capacity. The commercial goods of 90-360 refrigeration ton are lined up for heat pump and/or cooling only machine.

- **Energy Saving:** The energy of 31% was saved compared to the conventional machine. For the absorption-type hot/cold water-service machine, 49% of the primary energy, which corresponds to 60% of CO₂, was reduced. As for the refrigerator of 300 ton class, the CO₂ reduction of 60 ton/ year is possible.
- **Resource Saving:** The weight of 14% was reduced compared to the conventional machine. 85% of the used materials are iron, copper and aluminum. Recycling is possible for most of the mechanical parts.

The product won the Minister of Economy Trade and Industry Prize at the 17th Energy-saving grand prix (a section for business use) in Japan



Toyo Carrier Engineering Co., Ltd.

1300-3, Kamo, Kikugawa-shi, Shizuoka 439-0031, Japan
Tel 81-537-36-1111 Fax 81-537-36-1163
E-mail
URL



Super flex modular chiller RUA-TBP series

Eco-products

EP-8-017

Machines and equipment

chiller

High-Efficient absorption chiller with two-stage absorption and evaporation

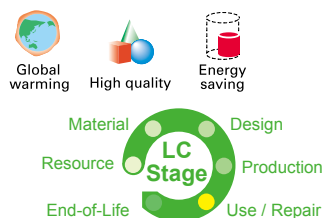
Ebara's two-stage absorption and evaporation cycle type dual absorption chiller "RFW model" is developed in line with the market demand for high efficiency chillers and received the Japan Machinery Federation's (JMF) fiscal 2005 award for superior energy-saving machinery.

The RFW Series features the world's highest-level steam consumption rate of 3.5kg/h per USRT. Steam consumption decreases more than 20% with comparing to conventional chiller. Standard specification corresponding large temperature difference decreases water flow and also power consumption of water pump more than 30%.

The refrigerating capacity is 1864kW{530USRT}~5274kW{1500 USRT} per unit and system up to 10549kW{3000USRT} could be configured by installing 2 RFW units side-by-side.

EBARA CORPORATION

11-1 Haneda Asahi-cho, Ohta-ku, Tokyo 144-8510, Japan
Tel 81-3-3743-6111 Fax 81-3-3743-6589
E-mail webmaster@ebara.com
URL <http://www.ebara.co.jp>



Available in : Sales&Service Network

Ebara Steam Absorption Chiller RFW model

Eco-products

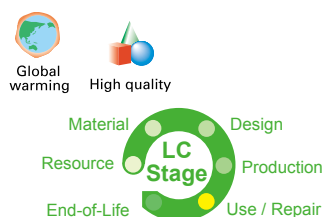
EP-8-018

Machines and equipment

heat pump air conditioning system

Non-fluorocarbon type energy saving air-conditioning system

This is a heat pump system using one of the NWFs, HC i.e. hydrocarbons. By using mixed hydrocarbons, it enables to do high-efficient operation for cooling, heating and hot water supply.



Mayekawa Mfg.Co.,Ltd.

2-13-1, Botan, Kotou-ku, Tokyo 135-8482, Japan
Tel 81-3-3642-8181 Fax 81-3-3643-7094
E-mail public@mayekawa.co.jp
URL <http://www.mayekawa.co.jp>



Available in : Japan&28countries

HC2008HP

Eco-products

EP-8-019

Machines and equipment

heat pump hot-water supply system

Home Heating and Cooling Solution

Altherma is an air to water heat pump type boiler consisting of an outdoor unit, hydro-box and secondary equipment, researched and developed by Daikin Europe. N.V.

In the system, hot water is circulated to secondary equipment such as under floor heating and radiators to warm rooms. Air to water heat pump type boilers provide energy efficient heating and are getting famous in the European heating market.

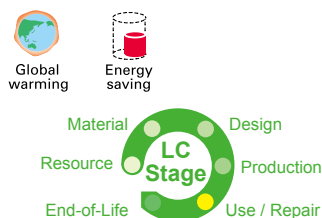
Heat pump type boilers are cheaper and less laborious than the alternatives such as combustion type boilers. 66 to 80% of the heat produced by Altherma comes from the ambient air and is free of charge.

With Altherma, you can personally contribute to a better environment because heat pumps consume little energy. Altherma emits no direct CO₂ and also, emits far less CO₂ than fossil fuel boilers.

DAIKIN INDUSTRIES, LTD.

Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka-shi
530-8323, Japan
Tel 81-6-6374-9304 Fax 81-6-6373-4380
E-mail kankyo@daikin.co.jp
URL <http://www.daikin.co.jp>

Available in : Europe



Altherma

Eco-products

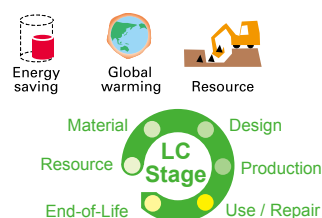
EP-8-020

Machines and equipment

gas heat pumps

New refrigerant high-efficiency gas heat pump

Our company developed a new refrigerant high-efficiency gas heat pump together with equipment manufacturers and commenced sales of it in April 2005. The COP was increased by 15% relative to that of the conventional equipment and is on the order of 1.5 (the average of the cooling and heating modes), the highest level in the field. The product therefore offers its customers a lower running cost and a higher energy-saving merit. Concern for the global environment is further evidenced by the utilization of refrigerants that do not deplete the ozone layer. In addition, we improved the efficiency of half load and commenced sales in October 2006.



Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>

Available in :

Eco-products

EP-8-021

Machines and equipment

heat pump hot-water supply system

High-efficiency heat pump water heater for commercial field

Commercial heat pump hot water supply system which can provide up to 40 ton /day, by using modular 14 kW heat pump systems from 2 to 14 units (28-168kW). High performance heat pump unit with rated COP of 4.45. Using open type water storage tank with capacity from 4 ton to 30 ton. Simultaneous upstairs and downstairs hot water supply is available. Touch panel type controller is adopted. Customer can set water storage volume every hours very easily. Heat pump unit is used for water supply maintenance circuit. Energy consumption is reduced to 1/3 of conventional electric heater type. This system reduces CO₂ emission by 50% to conventional gas furnace hot water supply system. Running cost is reduced 1/3 compared with the conventional gas system using cheaper night electric charge.



Toshiba Carrier Corporation

Shinagawa Center Bldg, 23-17, Takanawa 3-chome, Minato-ku,
Tokyo 108-0074, Japan
Tel 81-3-6409-1735 Fax 81-3-5447-8388
E-mail
URL <http://www.toshiba-carrier.co.jp/>

Available in :

Hot Power Eco Ultra Big SYSTEM, Heat Pump Unit, System Tank Unit , System Control Unit, etc

Eco-products

EP-8-022

Machines and equipment

energy system

Commercial-use gas engine co-generation system

Gas co-generation systems efficiently extract electrical and thermal energy from city gas and attain a high total energy efficiency. The high total efficiency of the systems helps to curtail CO₂ emissions and contributes to the customer's economic efficiency. This is a landmark commercial-use model of the smallest size in Japan, and was developed to facilitate the use of such systems in a wider range of fields.

Customers using this system can greatly reduce their energy costs by lowering their purchase of utility power and city gas charges for boilers.

With a total efficiency of at least 80% (a rate that could only be attained with cogeneration) and its effective use of energy, the system reduces CO₂ emissions to about two-third of the conventional level, and therefore has been given high ratings in the environmental aspect as well.

Because the model is compact, it does not take up much space. In addition, it does not require a high initial investment. These features are behind the spread of easy use among many customers. In addition, we have some models which provide backup electricity in the event of power loss.



Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan
Tel 81-3-5400-7671 Fax 81-3-3432-5509
E-mail
URL <http://www.tokyo-gas.co.jp/>

Eco-products

EP-8-023

Machines and equipment

systems

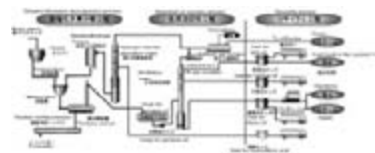
Waste Plastics Liquefaction System

This product is a system which converts the plastic mixture in general waste or industrial waste to oil by thermal decomposition. The product oil can be utilized for various applications (diesel generator fuel, boiler fuel, chemical raw materials, etc.) after the oil has been fractionated into heavy oil, medium oil and light oil. The system consists of the pre-treatment process (pelletizing of the charged material), the dehydrochlorination process (desalting, thermal decomposition), and the product oil recovery process (fractional distillation)

- **Energy Saving:** The product oil can be used as the alternative fuel of boiler and power generation, and therefore the substitute share becomes a CO₂ reduction. In addition, a higher CO₂ reduction effect is obtained, if the feeding stock recycling in which the product oil is returned to the crude oil purification flow is carried out.
- **Resource Saving:** The user can make use of the oil, the effluent gas, the residue, the hydrochloric acid, etc. which were obtained in the recovery process, so it is possible to raise the recycling rate.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4305 Fax
E-mail
URL



Waste Plastic Liquefaction System

Eco-products

EP-8-024

Machines and equipment

systems

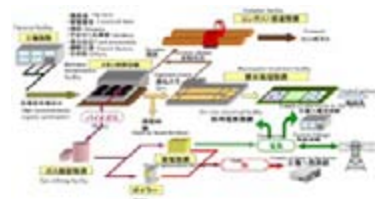
High concentration organic effluent treatment / an energy collection system

The product is an excellent total system to recover the energy efficiently, while processing organic drainage provided from stock raising and food processing. The system consists of methane fermentation equipment, subsequent aerobic processing denitrification equipment, biogas purification and utilization equipment, etc.. For the effective utilization of the sludge residue, it is also possible to combine composting equipment or carbonization equipment, etc..

- **Energy Saving:** The gas steadily produced from organic drainage can be used as the fuel of gas-engine power generation and boiler.
- **Resource Saving:** The biogas of the biomass origin can be used as the alternative fuel of boiler and power generation, and its substitution share corresponds to a CO₂ reduction.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4305 Fax
E-mail
URL



High concentration organic effluent treatment system

Eco-products

EP-8-025

Machines and equipment

systems

Recycle system of the sewage treatment sludge by pyrolysis

The system consists of the main facilities for pre-treatment, pyrolysis in a gasification furnace, gas-reforming and gas-cleaning, and the equipment of heat-source or gas-engine generation. The charged material is converted to the gas usable as fuels by pyrolysis and gasification. In addition, it is possible to take out carbide (char) of high utility value from the charge, and thereby high recyclability is realized.

Main features.

- (1) The amount of sludge is decreased in volume and in weight when converted to solid carbon fuel, so the sewage-disposal plant can save the cost.
- (2) As for solid fuel, a long-term storage is possible because its component is stable carbides. Moreover, the problems due to bad smell seldom happen.
- (3) In neighborhood factories using steam can use carbon fuel as the bio-fuel that is neutral for CO₂ discharge.
 - **Energy Saving:** The CO₂ reduction effect is larger than the incineration system, because the feeding of extra fuel is unnecessary for the running of process, and because solid carbon is separated owing to the thermal decomposition of the charged organic materials.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4336 Fax
E-mail
URL



Recycle system of the sewage treatment sludge

Eco-products

EP-8-026

Machines and equipment

systems

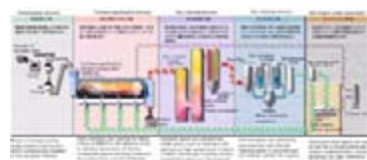
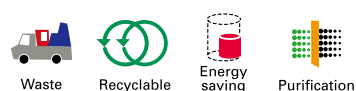
Recovery system of carbon fuels by pyrolysis and gasification

The product is a system to heat organic substances and wastes by heat-source equipment, to separate combustible gas and carbide of high utility value, and to use them as fuel and power generation material. The system consists of the main facilities for pre-treatment, pyrolysis in a gasification furnace, gas-reforming and gas cleaning, and the equipment of heat-source or gas-engine generation. The charged material is decomposed to the combustible gas containing CO₂ and H₂O through the pyrolysis and the gas-reforming under high temperature. Namely, the gas usable as fuel is recovered. And, it is possible to take out carbide (char) of high utility value from the charge.

- **Energy saving:** The use of the produced gas is fuel, power generation, and chemical raw material. As for generation, a higher efficiency than engine power generation is possible even in a small scale facility.
- **Resource Saving:** Since various organic matter (ASR, waste plastic, biomass, etc.) can be used as the charge, and the product is gas and carbide, total recycling ratio is high.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4336 Fax
E-mail
URL



Recovery system of carbon fuels by pyrolysis and gasification

Heat Pump Water Heater for Industrial Use

1. Ample capacity.

The capacity of the hot-water supply has been considerably increased by utilizing the natural refrigerant CO₂ when it produces high-temperature boiling at approximately 90°C. The basic system configuration makes it possible to provide about four tons of hot water per day (60°C, with nighttime hot-water storage and daytime 8-hour operation).

2. High-efficiency hot-water supply at a low running cost.

Since it achieves the industry's top-class intermediate-stage COP of 4.1, it is very economical. Its running cost is about one-third of that of gas hot-water supply systems, and significant electricity bill savings can also be obtained.

3. Environmental friendliness

It utilizes the natural refrigerant (CO₂), whose ozone depletion potential is "zero" and whose global warming potential is about 1/1700 that of a conventional fluorocarbon refrigerant. Its low energy consumption also decreases CO₂ indirect emission.

4. Flexible Combination

One heat pump unit can be combined with one to three hot-water storage units, depending on the amount of hot-water usage.

Hitachi Appliances, Inc.

Hitachi Atago Bldg., 15-12, Nishi shimbashi 2-chome, Minato-ku, Tokyo 105-8410, Japan

Tel 81-3-3502-2111 Fax

E-mail

URL <http://www.hitachi-ap.co.jp/>



Global warming



Energy saving



RHK-1501VGS (For Japanese Market)

PRB coal-fired super critical once-through, sliding pressure, BHK-type Benson Boiler

Description of Products

The power boiler is specifically designed for use in thermal power plants. It is a supercritical, once through, sliding pressure unit, fueled by pulverized coal.

Development Concept

The original 1997 concept has been improved in the current design by enhancing the steam conditions to increase thermal efficiency, producing a reduction in exhaust gas and improving fuel consumption. Materials used in the construction of the unit have also been rationalized to significantly reduce mass and allow optimization of the physical characteristics of many components.

Babcock-Hitachi K.K.

Akihabara UDX Building, 14-1 Soto-Kanda 4-chome, Chiyoda-ku, Tokyo 101-0021, Japan

Tel Fax

E-mail

URL <http://www.power-hitachi.com/>



Resource



High quality



Power Boiler

Eco-products

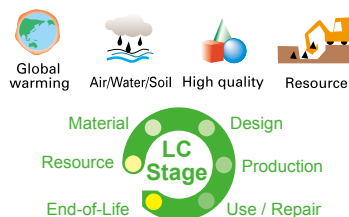
EP-8-029

Machines and equipment

boilers, except hot water boilers

Biomass Boiler System

This system uses a circulating fluidized bed boiler to efficiently generate power and supply heat from carbon-neutral biomass. The biomass boiler system has been adopted and used mainly by wood biomass power plants and paper-manufacturing companies and contributed to reduce CO₂ emission.



JFE Engineering Corporation

1-5-1, Marunoushi, Chiyoda-ku, Tokyo 100-6527, Japan
Tel Fax
E-mail
URL <http://www.jfe-eng.co.jp/>



Eco-products

EP-8-030

Machines and equipment

photovoltaic module

Multi-crystalline Photovoltaic Module

Advanced cell-connection technologies cultivated for Sharp Space-use solar cells for many years are applied to terrestrial solar cells and modules. Newly developed Stress Proof inter-connector and unique electrode pattern enable us to relieve the contraction stress originating from thermal expansion by temperature change. These technologies are effective to improve yield in production and to secure reliability of modules especially for modules using thin cells.



SHARP CORPORATION

22-22, Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan
Tel 81-6-6625-0438 Fax 81-6-6625-0153
E-mail eco-info@sharp.co.jp
URL <http://www.sharp.co.jp/>



Products/Model: Photovoltaic Module ND-153AU

Eco-products

EP-8-031

Machines and equipment

photovoltaic module

Hooray Energy Photovoltaic Module

Founded in 2007, Hooray Energy is a Singapore based photovoltaic modules manufacturer, focusing in producing highly reliable low wattage modules. Hooray Energy is competent in offering OEM service and customized wattage modules for large projects .

With our constant R&D effort, we have developed innovative technology to improve the photovoltaic modules performance efficiency and operating life-span.

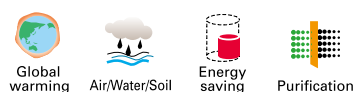
Hooray photovoltaic modules are used in rural electrifications, street lightings, battery charging system, security sensor system, water pumping, recreation and leisure.

Feel free to write to us if you need further clarifications on our products. We look forward to hear from you.

Hooray Energy Pte Ltd

48 Toh Guan Road East #08-123 608586, Singapore
Tel 65-6515-5356 Fax 65-6515-5276
E-mail info@hoorayenergy.com
URL <http://www.hoorayenergy.com>

Available in : ASEAN



PV Module Hooray 50 MCP

Eco-products

EP-8-032

Machines and equipment

residential fuel cells

Residential fuel cell cogeneration system using a polymer electrolyte fuel cell (PEFC)

Polymer electrolyte fuel cell for home-use is the equipment which produces electricity and heat from city gas or liquefied petroleum (LP) gas. The total energy efficiency due to the combination of the power generation and the heat recovery is very high, namely over 85%. This suggests that the co-generation system is excellent in the energy saving. By installing this in an ordinary home, it is possible to reduce CO₂ discharge by 1 ton

- **Energy Saving:** A very high efficiency of above 85% was realized. The CO₂ reduction rate becomes about 40% compared to that before installation, and the annual CO₂ reduction of about 1 ton is possible
- **Clean Exhaust:** The exhaust which comes out of the residential fuel cell is only water and CO₂, and it is very clean

Toshiba Fuel Cell Power Systems Corp.

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel 81-3-3457-3622 Fax 81-3-5444-9199
E-mail
URL



Available in : Japan

Left side:Fuel cell package, Roght side:Hot water storage unit

Eco-products

EP-8-033

Machines and equipment

auxiliary machinery of crushers, mills and separators

Mobile Crusher BR580JG-1

Komatsu offers providing solutions that the company provides a means of on-site recycling that recycles the residuals generated from construction sites and civil engineering projects at the site where they are generated. A sample of these solutions is the large-scale mobile crusher BR580JG. The BR580JG-1 has undergone a complete model change from the BR550JG, a type of mobile crusher/recycler in the 50-ton class that crushes and recycles rock, pieces of concrete, slag, and other residuals on site.

This model, changed after a six-year interval, satisfies Tier 3 emission standards, which became effective in 2006, and features enhanced operability and ease of maintenance. Furthermore, the BR380JG has succeeded in strikingly improving its cost performance through innovative features such as the well-received fully automatic discharge setting adjustment system and a function to protect the hydraulic crusher.

Komatsu Ltd.

3-2-6 Akasaka, Minato-ku, Tokyo 107-8414, Japan
Tel 81-3-5561-2646 Fax 81-3-3582-8332
E-mail kankyo@komatsu.co.jp
URL <http://www.komatsu.co.jp/>



Available in : Worldwide

Mobile Crusher BR580JG-1

Eco-products

EP-8-034

Machines and equipment

machinery and equipment for recycling

Track Mounted Soil Recycler ,SR-G2000

With our high technology for soil, Hitachi has developed an advanced track mounted soil recycler SR-G2000 which is characterized by both light weight and best-in-class material handling capacity. The main 3 features are as follows.

- 1) Wide application and high productivity
 - Smooth material feed without bridging thanks to Swing Gate
 - Horizontal feeder and wide hopper enable to handle moisturized soil.
- 2) Excellent mixing performance
 - High performance with reliable double shafts mixing paddle
 - Accurate additive feed control with level roller
- 3) Easy operation and maintenance
 - Easy maintenance with divided opening mixing chamber
 - Easy dumping with wide and lower hopper

Our highly advanced soil recycler offers reliable operation in job sites such as civil engineering site, contaminated soil clean up, waste management, recycle, and so on.

Hitachi Construction Machinery Co., Ltd.

5-1, Koraku 2-chome, Bunkyo-ku, Tokyo 112-8563, Japan
Tel 81-3-3830-8093 Fax 81-3-3830-8219
E-mail
URL <http://www.hitachi-c-m.com>



Track Mounted Soil Recycler ,SR-G2000

Eco-products

EP-8-035

Machines and equipment

machinery and equipment for recycling

Track Mounted Wood Grinder, ZR260HC

HITACHI track mounted wood grinder ZR260HC is developed with our full technology and realizes higher performance. The main 5 features are as follows.

- 1) Featuring automatic feed control to keep higher grinding efficiency. In case of grinding load is increased, feed conveyor stop automatically to prevent grinding under low efficiency. Feeder restarts automatically as soon as grinding load is reduced.
- 2) It enables to grind material under higher efficiency with feed material select switch.
- 3) Easy to replace screen, hammer bit, and wearing plate. Also possible to open return deck and plate under driving roller. Easy to clean up crushed material on return deck.
- 4) Complied with tier 3 gas emission.
- 5) Equipped 4 pieces of water spray nozzle for dust suppression and fire prevention.

Our wood grinder offers reliable operation environmentally friendly at various job sites.

Hitachi Construction Machinery Co., Ltd.

5-1, Koraku 2-chome, Bunkyo-ku, Tokyo 112-8563, Japan
Tel 81-3-3830-8093 Fax 81-3-3830-8219
E-mail
URL <http://www.hitachi-c-m.com>



Track Mounted Wood Grinder, ZR260HC

Eco-products

EP-8-036

Machines and equipment

machinery and equipment for recycling

Track Mounted Shredder, ZR900TS

HITACHI track mounted shredder ZR900TS is suitable for shredding Car tires, Plastics, Wood, and so on. With ability for strong crush, it handles recycling disposal of every waste from urban large-size refuse to industrial waste effectively. The main 5 features are as follows.

- 1) High mobility
With truck mounted system, ZR900TS can move freely on-site.
- 2) Powerful shred
Low speed high torque motor and monolithic cutter enable the strong shred power.
- 3) Efficient cutter control
With original hydraulic operating system, ZR900TS increases the efficiency of shredding. In case of cutter revolution load is increased, stop and reverse the cutter automatically to prevent shredding under low efficiency.
- 4) Reduced Operating Cost
This 2-shaft shredder is fitted with monolithic cutters featuring remarkable shredding capability and durability. This monolithic cutter has good wear resistance and impact resistance, furthermore it can be reused by the repair and grinding.
- 5) Easy operation and safety design
Designed for easy operation and safety such as hand-rail, ladder, access equipment, scatter protection door, water spray pipe system for dust suppression, and so on.

Hitachi Construction Machinery Co., Ltd.

5-1, Koraku 2-chome, Bunkyo-ku, Tokyo 112-8563, Japan
Tel 81-3-3830-8093 Fax 81-3-3830-8219
E-mail
URL <http://www.hitachi-c-m.com>



Track Mounted Shredder, ZR900TS

Eco-products

EP-8-037

Machines and equipment

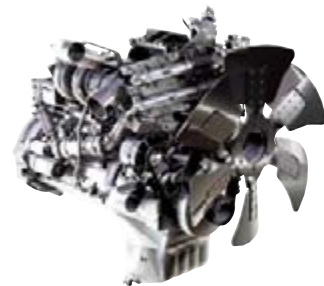
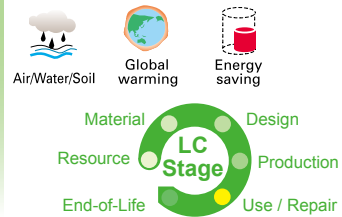
equipment for construction and mining

Advanced technology of diesel engine for reducing

Since 2006, Tier THE THIRD emission standards are enforced in Japan, US and Europe. Its largest focus is the reduction of NO_x (a nitrogen oxide). In order to reduce NO_x, it's necessary to lower the combustion temperature. However, the combustion at lower temperatures promotes the formation of particulate matter, and it makes fuel economy worse. In the development of diesel engines, the simultaneous reduction of NO_x and particulate matter is most desired. Along with it, what is asked for is to improve the fuel consumption, which realizes the reduction of running cost of user's machine. Komatsu developed main components of the body such as engine and hydraulic equipment in own factories. All of the electronic control technology is also in the same situation. By making the most of its strength in production, and by combining it to the latest technology, Komatsu succeeded in the development of new engine technology. This new engine technology is going to mount on our new goods hereafter. Here, "ecot 3" is short for "ecology & economy-technology". In Komatsu, we call our advanced technology for diesel engine "ecot 3".

Komatsu Ltd.

2-3-6 Akasaka, Minato-ku, Tokyo 107-8414, Japan
Tel 81-3-5561-2646 Fax 81-3-3582-8332
E-mail kankyo@komatsu.co.jp
URL <http://www.komatsu.co.jp/>



Tier 3-compliant engine which incorporates Komatsu

Eco-products

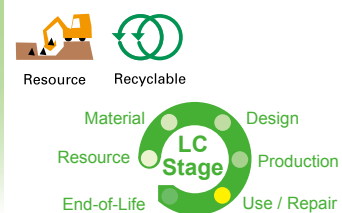
EP-8-038

Machines and equipment

fixtures and accessories for metal machining

Fixturing Components & Systems

Traditional permanent fixtures are often discarded if workpieces are changed. Imao modular fixturing systems include a wide variety of tooling plates/blocks, clamps, supports and others, and allow flexibly and repeatedly rebuilding fixtures for new workpieces just by replacing fixturing components with other better matching ones.



IMAO CORPORATION

2002 Senbiki, Seki, Gifu 501-3954, Japan
Tel 81-575-28-5802 Fax 81-575-28-5812
E-mail info@imao.jp
URL <http://www.imao.co.jp>



Object in orange: workpiece
Others: Imao fixturing components

Available in : Japan, USA and Europe

Eco-products

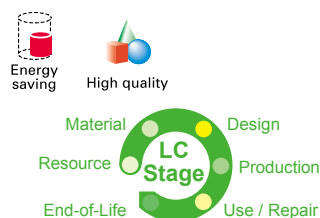
EP-8-039

Machines and equipment

assembly equipments

Direct Drive Modular Mounter GXH-1S

- 1 Reduction in power consumption by 40% and productivity enhancement by 65% compared to conventional products
- 2 Reduction of the noise by 14% to provide more quiet working environment
- 3 Improvement in product quality by unique functions of detection and teaching



Hitachi High-Tech Instruments Co., Ltd.

1-1-1 Sakata, Oizumi-Machi, Ora-Gun, Gunma 370-0596, Japan
 Tel 81-276-61-7930 Fax 81-276-61-8710
 E-mail
 URL <http://www.hitachi-hitec-hti.com/en/index.html>



GXH-1S

Eco-products

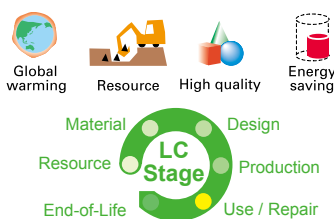
EP-8-040

Machines and equipment

vacuum pumps

EI-D Series energy-saving type power supply unit

Turbo-molecular pump is vacuum pump which make up clean ultra-high vacuum by carrying out the molecular -level exhaust by means of high-speed rotation of turbine blade. The new-model power supply unit (EI-D Series) achieved its weight reduction with the help of a new control circuit which comprises DSP(Digital Signal Processor) and HIC(Hybrid IC) and of the high-density packaging technology. In comparison with our previous-model product, the volume and the weight reduced by 50%, respectively. The maximum power consumption also reduced by 30% by installing the new-model power supply unit.



Shimadzu Corporation

1, Nishinokyo-kuwabara-cho, Nakagyo-ku, Kyoto-shi, Kyoto 604-8511, Japan
 Tel 81-75-823-1113 Fax 81-75-823-2062
 E-mail kksitu@group.shimadzu.co.jp
 URL <http://www.shimadzu.co.jp>



EI-D Series pump power supply

Eco-products

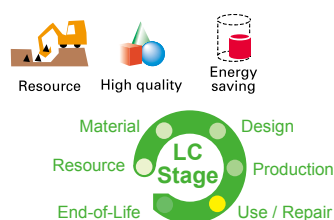
EP-8-041

Machines and equipment

pumps

Energy-saving canned motor pumps

1. 8 steps controlled energy-saving drive can be done with the internal inverter carried on the pump. Further, it has the automatic valuable speed control function by external signal input and trouble caution signal output function in standard.
2. Application of the canned motor and inverter enable the pump to be compact. Because of the leakage free design, the sealing device is maintenance free.



EBARA CORPORATION

11-1 Haneda Asahi-cho, Ohta-ku, Tokyo 144-8510, Japan
 Tel 81-3-3743-6111 Fax 81-3-3743-6589
 E-mail webmaster@ebara.com
 URL <http://www.ebara.co.jp>



Ebara Hzfree pump model MMF

Eco-products

EP-8-042

Machines and equipment

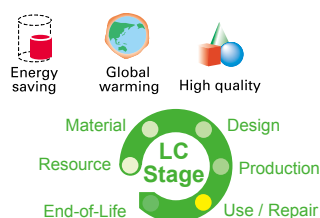
air compressors

Variable Speed Control Packaged Oil-Free Bebicon

Variable frequency control with Inverter Drive keeps the pressure stable in a narrow operation band. This allows significant energy savings over conventional control methods.

Frequency controlled starting with inverter drive reduces the starting noise and vibration.

Low speed operating sound level is significantly lower than normal operation sound level.



Hitachi Industrial Equipment Systems.,Ltd.

AKS Bldg., 3, Kanda Neribei-cho, Chiyoda-ku, Tokyo 101-0022, Japan
 Tel 81-3-4345-6075 Fax 81-3-4345-6913
 E-mail
 URL <http://www.hitachi-ies.co.jp/english/products/overview/pdf/bebicon>



Available in : Japan, Asia, and China

POD series V-type

Eco-products

EP-8-043

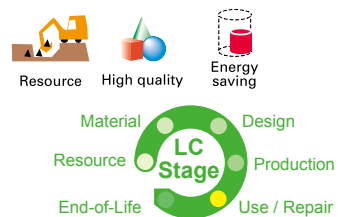
Machines and equipment

air compressors

Variable Speed Control Oil-Free Rotary Screw Air Compressors

Hitachi Variable Frequency Control keeps the pressure of compressed air stable in a narrow operation band. This technology has achieved a significantly larger energy saving compared to conventional control methods.

In addition gear-case oil mists are not vented to atmosphere, but recaptured, using Hitachi's patented oil mist remover. Oil mists are recycled, saving maintenance oil, eliminating possibility of emissions into the environment, and ensuring purity of air compression.



Hitachi Industrial Equipment Systems.,Ltd.

AKS Bldg., 3, Kanda Neribei-cho, Chiyoda-ku, Tokyo 101-0022, Japan
Tel 81-3-4345-6075 Fax 81-304345-6913
E-mail
URL <http://hitachi-ies.co.jp/english/products/overview/pdf/screw.pdf>

Available in : Japan,Asia,China and the U.S.A

DSP Series V-type

Eco-products

EP-8-044

Machines and equipment

filters

Cerazone ~100% ozone treatment system ~

This product is designed to recirculate the water in large bathtubs. It employs filtering and ozone sterilization and can process 10 tons of water per hour.

- (1) Energy consumption is 950,000 MJ and carbon dioxide emissions are 38 tons over the entire life cycle of the product, including 10 years of use.
- (2) Energy consumption in the use stage is about 80 MWh, the volume of water treated over 10 years about 1,050 tons, and the average per month 9 tons.



TERAO CO., LTD

1-7-18, Minami-harimaya-cho, Kochi-shi, Kochi 780-0833, Japan
Tel 81-88-882-2617 Fax 81-88-883-6653
E-mail info@terao-kochi.co.jp
URL <http://www.kanozo.jp/>

Available in : Japan

Cerazone CZ-10ST

Eco-products

EP-8-045

Machines and equipment

environment protecting equipment

MU AERATOR® : Micro bubbles aeration device

PRINCIPLES: This device is basically composed of two "MU MIXER®"s, a static mixer of very high efficiency. Lower mixer installed in the lower part of the device has the function of creating air bubbles in the raw water to be treated, as well as generating strong water circulation in the aeration tank with the help of up-rising air-lift effect. Air circulation in the tank generated together with fine compressed air bubbles is stirred and mixed with strong force to create further fine bubbles. Oxygen contained in these fine bubbles is absorbed into the raw water with high efficiency.

SPECIAL FEATURES:

- 1- Energy Saving Effect: More than 20% or more saving of electricity consumption.
- 2- Maintenance Free Effect: As the outlet of exhaust air is 24 mm in diameter, pressure loss is always at low, eventually extremely less blocking.
- 3- Safety: "MU MIXER®" is made of polypropylene, which is of anti-corrosive and of high mechanical strength. Further, no hazardous gases generated when disposing by burning.

EFFICIENCY:

- 1- Oxygen absorption efficiency: 7.7 ~ 8.9 % (Water depth: 4 meters)
- 2- Air infusion volume: 0.6 ~ 1.2 Nm³/min.
- 3- Pressure loss: 1.5 ~ 3.0 kPa.

MU COMPANY LTD.

18-8, Ueno-Koen, Taito-ku, Tokyo 110-0007, Japan
Tel 81-3-3828-7090 Fax 81-3-3823-2890
E-mail 0325muc@mu-company.com
URL <http://www.mu-company.com/>



MU AERATOR®

Eco-products

EP-8-046

Machines and equipment

environment protecting equipment

MU SCRUBBER, Wet type exhaust gas treatment device

Since 1983 MU COMPANY LTD. has concentrated in the area of industrial waste gas treatment. Based on our proprietary static fluid mixing technology, we have successfully supplied many MU SCRUBBERS to contribute to the saving of production and maintenance costs thanks to the high efficiency of our device.

Special features of MU SCRUBBER are; 1- Maintenance free, because of no adhesion of solid materials on the internals. 2- High efficiency of the device, i.e., Gas flow rate: 9,000~14,000 m³/m²/Hr, Water flow rate: 250~600m³/m²/Hr., Pressure loss: below 3 kPa. 3- Flexibly respondent to wide ranges of raw gases to be treated, i.e., 100% raw gas down to 1 ppm. after treatment.

Some examples of applications;

Odor treatment device, Desulfurization and dust removal of exhaust gases, Removal of silica compounds in exhaust gas, and Recovery of HCl gas of high concentration etc.

MU COMPANY LTD.

18-8, Ueno-Koen, Taito-ku, Tokyo 110-0007, Japan
Tel 81-3-3828-7090 Fax 81-3-3823-2890
E-mail 0325muc@mu-company.com
URL <http://www.mu-company.com/>



Odor control device for rendering plant

Eco-products

EP-8-047

Machines and equipment

environment protecting equipment

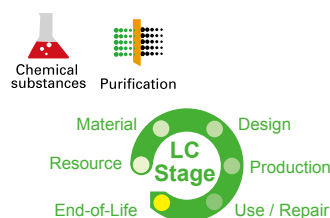
"HM2 system", on-site detoxification of the materials contaminated with dioxin

HM2 is a detoxification system that can work on-site to detoxify the substances which were polluted by dioxin; for example, soil, bottom ash and fly ash. It is further possible to on-site detoxify the sedimentary soil (bottom material) of rivers and harbors. The system not only detoxifies the contaminated substances, but also decomposes the dioxin in the exhaust gas from the detoxification process thermally by use of the dioxin decomposing equipment "DeDIOX". Each equipment is compact and independent, so the space-saving is realized.

※ In 2003 fiscal year, the system has been certified as the bottom material purification technology by Ministry of Land, Infrastructure and Transport of Japan.

Mitsubishi Materials Techno Corporation

1-14-16 Kudankita, Chiyoda-ku, Tokyo 102-8205, Japan
Tel 81-3-3221-1741 Fax 81-3-3239-8763
E-mail mmtecsal@mmc.co.jp
URL <http://www.mmtec.co.jp>



Available in : JAPAN

HM2 system, on-site detoxification of the materials contaminated with dioxin

Eco-products

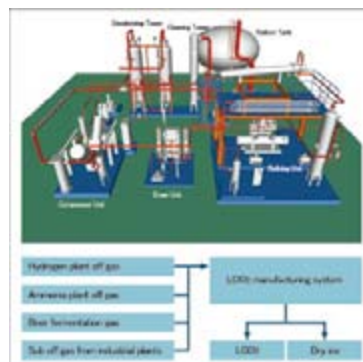
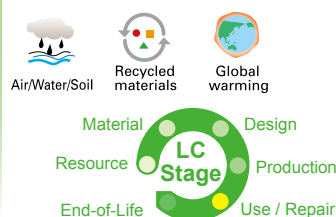
EP-8-048

Machines and equipment

environment protecting equipment

Liquefied CO₂ Manufacturing Systems

Ammonia manufacturing plants and beer breweries emit high levels of carbon dioxide. Our "Liquefied CO₂ Manufacturing System" is able to capture and recycle these emissions and produce extremely high levels of liquefied CO₂ with over 99.99% purity. The recycled CO₂ can then be used to manufacture carbonated beverages and dry ice. The running costs of our refining technologies are 19% more efficient than conventional methods.



Hitachi Plant Technologies, Ltd

5-2, Higashi-Ikebukuro 4-Chome, Toshima-ku, Tokyo 170-8466, Japan
Tel 81-3-5928-8100 Fax 81-3-5928-8701
E-mail koho-senden@hitachi-pt.com
URL <http://www.hitachi-pt.com>

View of Liquefied CO₂ Manufacturing Systems

Eco-products

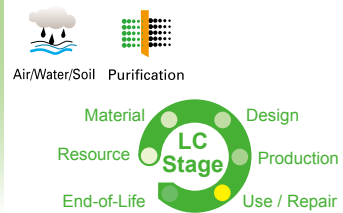
EP-8-049

Machines and equipment

environment protecting equipment

Catalytic PFC Resolver

This resolver has a capability of resolving 99% or more of greenhouse gas (PFC gas) from semiconductor factories through the proprietary catalyst technology. PFC (Perfluoro Compound): Compound whose warming factor is several thousands times larger than carbon oxide (CO₂). Development Concept Recalcitrant greenhouse gas (PFC gas) is resolved efficiently at low temperature to prevent global warming.



Hitachi, Ltd.

Akihabara Daibiru Building, 18-13 Soto-Kanda 1-chome, Chiyoda-ku,
Tokyo 101-8618, Japan
Tel 81-294-21-1111 Fax
E-mail
URL <http://www.hitachi.com/>



CD200

Eco-products

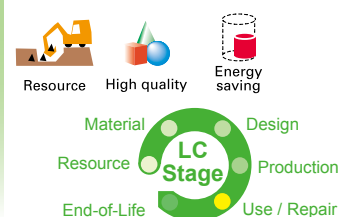
EP-8-050

Machines and equipment

motors

High-efficient motors

This product is a new highly effective motor that contributes to conservation of energy applicable to various machines. The optimization of the shape of the core and high-quality material have decreased the loss by about 20-30% (compared with our standard motor). The stator coil temperature has been decreased by about 10-20°C by a optimally designed high cooling capacity and an aluminum alloy frame.



Hitachi Industrial Equipment Systems.,Ltd.

AKS Bldg., 3, Kanda Neribei-cho, Chiyoda-ku, Tokyo 101-0022, Japan
Tel 81-3-4345-6071 Fax 81-3-4345-6913
E-mail
URL



TFO-K

Eco-products

EP-8-051

Machines and equipment

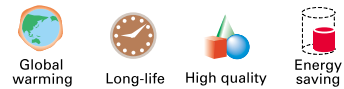
motors

Traction Motor for Rolling Stock Realizing Noise Reduction by Totally Enclosed Construction

By reducing motor internal losses, the efficiency of the traction motor was enhanced by 2 to 3% from that of the conventional motors. Therefore, it is possible to reduce running cost owing to the higher efficiency.

By the adoption of totally-enclosed construction, the reliability of motor itself was improved, and the lower noise from motor was realized since the internal fan noise was shut out.

- **Energy Saving:** By pursuing the higher efficiency, 9% of the power consumption (when compared with our conventional motors) is possible to be reduced.
- **Resource Saving:** Since the motor inside is clean owing to totally-enclosed construction, it will prolong the overhaul period of the motors and reduce the maintenance cost.



TOSHIBA CORPORATION Industrial Systems Company

1-1, Shibaura 1-chome, Minato-Ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL

Available in : JAPAN

Traction Motor Totally Enclosed with an Internal Fan

Eco-products

EP-8-052

Machines and equipment

generators

Babcock & Wilcox Volund Wood Biomass Gas-fired Power Generation System

Combining gasification furnace and gas engine, this system efficiently generates power from carbonneutral biomass. It has realized comprehensive energy utilizing efficiency rate as high as 80% or more by not only generating power but also utilizing heat.



JFE Engineering Corporation

1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-6527, Japan
Tel Fax
E-mail
URL <http://www.jfe-eng.co.jp/>

Eco-products

EP-8-053

Machines and equipment

generators

Co-generation system with micro-gas engine: GENELIGHT

GENELIGHT is an energy-saving gas cogeneration system which generates electricity by a gas engine and heats water utilizing exhaust heat of generation. Heated water is stored in the storage tank and then supplied to the building. This system is ideal for small and mid-sized hotels, hospitals and restaurants for its energy-saving features and for its supply capacity of large amount of hot water.

The 25kW model has achieved the generation efficiency of 33.5% (LHV basis), the world's highest in this capacity range.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>

Eco-products

EP-8-054

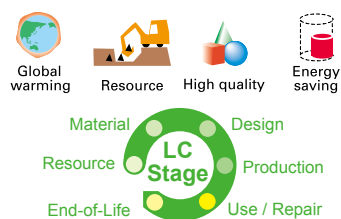
Machines and equipment

generators

Polymer Electrolyte Fuel Cell (PEFC) for residential use

Osaka gas is currently developing PEFC jointly with Toshiba Corp.. It generates electricity by chemical reaction of oxygen in the air and hydrogen extracted from natural gas.

It is a highly energy-saving system which has realized reduced energy consumption by 28% as well as lower CO₂ emission by 42% through utilization of waste heat from generation process for water heating purposes. In addition, chemical reaction causes no noise. It is currently undergoing durability and verification tests as part of a government-sponsored R&D project.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>

Eco-products

EP-8-055

Machines and equipment

generators

Polymer Electrolyte Fuel Cell (PEFC) for residential use

Osaka gas is currently developing PEFC jointly with Sanyo Electric Co., Ltd. It generates electricity by chemical reaction of oxygen in the air and hydrogen extracted from natural gas.

It is a highly energy-saving system which has realized reduced energy consumption by 28% as well as lower CO₂ emission by 42% through utilization of waste heat from generation process for water heating purposes. In addition, chemical reaction causes no noise. It is currently undergoing durability and verification tests as part of a government-sponsored R&D project.



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp>



Eco-products

EP-8-056

Machines and equipment

generators

Solid Oxide Fuel Cell (SOFC) for residential use

SOFC consists of a generation unit and an exhaust heat utilization unit. Osaka Gas works on the development of these units jointly with Kyocera Corp. and Chofu Seisakusho Co., Ltd., respectively. The generating efficiency of this system have achieved higher than average thermal power plant: maximum energy saving of 37% and maximum CO₂ emission reduction of 50%. (Operational performance (HHV): generating efficiency of 41%, waste heat recovery ratio of 36%.)

The compact size of each unit* makes the system suited for residential use.

The New Energy Foundation started the field test subsidized by NEDO in 2007. Osaka Gas strives for the commercialization of this system making use of the participation to the field test and its result.

※ Size (DxWxH, mm):

Generation unit: 350x540x950

Exhaust heat utilization unit: 300x700x1700



Osaka Gas Co., Ltd.

4-1-2, Hiranomachi, Chuo-ku, Osaka-shi, Osaka 541-0046, Japan
Tel 81-6-6205-4605 Fax 81-6-6202-1040
E-mail
URL <http://www.osakagas.co.jp/indexe.html>



Eco-products

EP-8-057

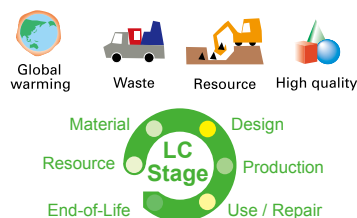
Machines and equipment

generators

A small, light and high-efficiency turbine generator for heat power plant

The product is a generator for the heat power plant. It reduced the loss by 20% compared to the conventional generator, and achieved a high-efficiency of 98.8% which is the top-class of the industry. The reliability of the generator was ensured by advanced analysis and verification experiment. In addition, the manufacturing period was shortened by 30% by introducing the structure which is easy to be built up.

- **Energy Saving:** The amount of CO₂ exhaust was reduced; it was about 240 ton at the step of manufacturing, (23% cut at our company' s ratio before 15 years). ; It was about 1,700 ton per year at the step of use, (18% cut).
- **Resource Saving:** Realization of a 2/3 size in comparison with the conventional generator; Development of new materials and methods; Reduction of the waste and the environmental load by the reuse of part / materials at the time of repair.



Turbine generator

TOSHIBA CORPORATION Power Systems Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel 81-3-3457-3678 Fax 81-3-5444-9377
E-mail
URL <http://www3.toshiba.co.jp/power/>

Eco-products

EP-8-058

Machines and equipment

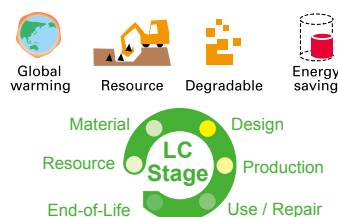
wind power generation system

Hybrid system with solar energy of omni-directional wind power generation

This windmill provides 400W at the rated wind velocity of 12m/s. Since the annual average wind velocity of Kanto region in Japan is 4m/s, the power generation of 10W-15W is possible. This system adopted a vertical axis windmill which can work effectively even with the wind changing its direction frequently. Its rotation becomes slow, which gives low noise. In addition, this system adopted a double braking system, provided it receives occasional strong winds. One is an electric brake which works by the regenerative braking force. The other is mechanical one which prevents the sudden turn rise due to the gusts of wind. The windmill can stop safely by fail-safe mechanism in case that electrically uncontrollable state occurs. The system is equipped with an 110W solar battery. The full-charged battery makes it possible for 5 days to light at 15W for 8 hours every day in no sunshine and no wind state.

Energy saving: In comparison with the current generation by the fossil fuel, the consumption of resource and the discharge of CO₂ are controlled.

(Note) As for exportation we will talk individually, because this commodity needs the special maintenance system.



WIND FLOWER EWF-400

TOSHIBA PLANT SYSTEMS & SERVICES CORPORATION

(Nissay Aroma Square) 37-1, Kamata 5-chome, Ota-ku, Tokyo
144-8721, Japan
Tel 81-3-5714-3687 Fax 81-3-5714-3816
E-mail
URL <http://www.toshiba-tpsc.co.jp>

Eco-products

EP-8-059

Machines and equipment

hydro-power generation system

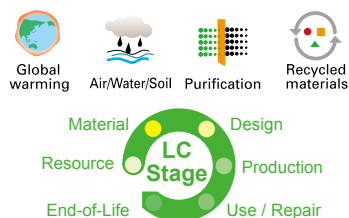
Small-scale hydro-power generation system Hydro - eKIDS™ using renewable energy

Brief specifications are as follows: the flow rate, $0.03\text{m}^3/\text{s} \sim 3.5\text{m}^3/\text{s}$; the head, 2~15m; the output, 1~200kw. Five kinds of the standard units cover the wide application ranges. Because of a small, lightweight pipe-in structure, the units are easily placed even in a small space. The features are cheaper running cost and longer life than other large-scale power sources, so the economical efficiency will be displayed for long-term use.

- **Energy Saving:** In comparison with the fossil-fuel power generation, the consumption of resources and the discharge of CO_2 are suppressed. Because of small-scale hydraulic power generation, the system can be applied to the place where hydraulic energy is available. Considered is the utilization of the water and sewage, the agriculture water, the factory waste water, discharged water from the river dam, of greenhouse gas and the saving of energy. The system can be used as dispersed power source, and it can contribute to the reduction of greenhouse gas and the saving of energy.
- **Resource Saving:** The system does not need the conventional large-scale dam, so the river environment and the natural ecosystem are not influenced.

TOSHIBA PLANT SYSTEMS & SERVICES CORPORATION

36-5, Tsurumichuo 4-chome, Tsurumi-Ku, Yokohama 230-8691, Japan
Tel 81-45-500-7342 Fax 81-45-500-7599
E-mail
URL <http://www.toshiba-tps.co.jp>



Hydro-eKIDS S type

Eco-products

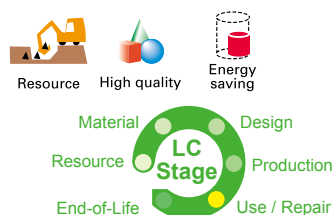
EP-8-060

Machines and equipment

standard transformers

Super-energy-saving transformers(Super Amorphous)

All losses were achieved and the decrease to about the maximum 44% was achieved. Amorphous alloys is a solid of non-crystal made from cooling from the state of Melting rapidly. The no-load loss (eddy current disadvantage + disadvantage of hysteresis) can be decreased to about 1/5 compared with the silicon Steel.



Amorphous transformer

Hitachi Industrial Equipment Systems.,Ltd.

AKS Bldg., 3, Kanda Neribei-cho, Chiyoda-ku, Tokyo 101-0022, Japan
Tel 81-3-4345-6076 Fax 81-3-4345-6913
E-mail
URL

Eco-products

EP-8-061

Machines and equipment

distribution transformer

High-voltage distribution transformer "Top Runner" with improved energy efficiency

The product is the distribution transformers of "Top Runner" series (capacity: 10- 2000kVA, primary voltage: 6.6kV, and secondary voltage: below 440V). Two types are available; one is oil-immersed type for general use, the other is cast-resin-type for flame retardant use. The no-load loss was reduced by adopting high-performance iron core materials and low-loss core structure, while the load loss was reduced by expanding the application of copper conductor and by miniaturizing due to the improvement of insulation. Thereby, the energy consumption efficiency was improved by 40 % while keeping the same product size as that of the conventional one. The noise value also decreased 5-8dB (A) from the sound level of the conventional product.

- **Energy Saving:** Saving of 40% was achieved in comparison with old JIS product.
- **Resource Saving:** Increases of weight and volume were restrained by the winding structure.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel 81-3-3457-4320 Fax 81-3-5444-9278
E-mail
URL



6.6kV/210V-300kVA Cast Resin, Transformer and 6.6kV/210V-300kVA Oil Immersed Transformer

Eco-products

EP-8-062

Machines and equipment

switchgear

High-density packaging type low-voltage motor control center SM3000.

In the conventional product, the maximum mounting number of the control unit was 7 pieces per 1 panel. In SM3000, it was increased to 20 pieces per 1 panel, owing to the miniaturization of control unit by electronics parts use and the contrivance of power feeding method.



Fuji Electric Systems Co., Ltd

1, Fuji-machi, Hino-city, Tokyo 191-8502, Japan
Tel 81-42-585-6410 Fax 81-42-587-0084
E-mail masuda-masahiko@fesys.co.jp
URL <http://www.fesys.co.jp/sougou/seihin/ecodesign/index.html>



Eco-products

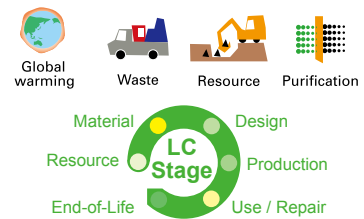
EP-8-063

Machines and equipment

switchgear

Compact-type high-voltage switchgear and controlgear , “SLIMEC-V6”

This product is a high-voltage switchgear and controlgear which reduced the depth of 2000mm of the conventional board to 700mm by contriving the downsizing of the instrument and the feeding method of the electricity. The warming load was reduced by 28% at total; the power consumption was reduced by 10%. The reduction of total weight is more than 40%.



Fuji Electric Systems Co., Ltd

1, Fuji-machi, Hino-city, Tokyo 191-8502, Japan 191-8502, Japan
Tel 81-42-585-6410 Fax 81-42-587-0084
E-mail masuda-masahiko@fesys.co.jp
URL <http://www.fesys.co.jp/sougou/seihin/ecodesign/index.html>



Eco-products

EP-8-064

Machines and equipment

switchgear

Eco-type thin high-voltage switchgear and controlgear

This product is a high-voltage switchgear and controlgear used for the water and sewage facilities. Owing to the downsizing of the instrument, the depth of 600mm was achieved in comparison with 2000mm of the conventional product. As a result, the installation space was reduced by 30%, and the reduction of the building cost of electric room became possible. In addition, the dismantling hours become 1/6 compared to before by the adoption of the rivet fastener structure. The environmental consideration parts materials such as the eco-type electric wires are used.



Fuji Electric Systems Co., Ltd

1, Fuji-machi, Hino-city, Tokyo 191-8502, Japan
Tel 81-42-585-6410 Fax 81-42-587-0084
E-mail masuda-masahiko@fesys.co.jp
URL <http://www.fesys.co.jp/sougou/seihin/ecodesign/index.html>



Eco-products

EP-8-065

Machines and equipment

switchgear

Hybrid 'Dry Air' and Solid Insulation SF6-free Switchgear

Mitsubishi Electric developed a series of 7.2 to 72 kV switchgear for power distribution featuring a composite insulation of solid materials and low-pressure dry air, friendly to the global environment, and has been placing them on the market since 2000. Here we introduce the HG-VA type of hermetically sealed compositely insulated switchgear as one of our product series.

---<< Greenhouse gas free >>-----

The adoption of a composite insulation of solid materials and low pressure, dry air (at 0.15 MPa-g with moisture removed) realizes a 72 kV C-GIS free from SF6 gas.

-----<< Components reduced to 70 % >>-----

The number of components was greatly reduced (to 70 % in comparison with our previous type) applying a simple structure vacuum circuit breaker (VCB) with an electric magnetic operating mechanism.

-----<< Operating energy reduced to 70 %, heat loss to 60 % >>-----

Electric magnetic operating mechanism reduced the VCB operating energy to 70 % of that of our previous type. The power dissipation (heat loss) was reduced to 60 % by optimizing device arrangement and minimizing conductor lengths that reduces the resistance of the main circuit.

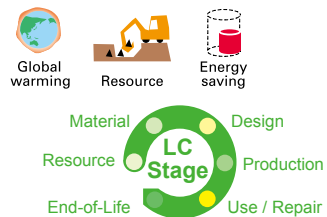
Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>



Available in : Asia, Japan, etc.

HG-VA switchgear

Eco-products

EP-8-066

Machines and equipment

switchgear

Environment-conscious 7.2kV air insulated switchgear

Compared to our company's conventional products, the reduction of 45% in volume and that of 30% in weight have been achieved, as well as a 20% reduction of discharge of the CO₂ gas which is a source of global warming. Taking account of 3R environmental items, namely "Reduction of hazardous substance", "Reuse of waste", and "Recycling of resource", the ECO (halogen-free) wire and the non-vinyl chloride materials were used to reduce the hazardous substances. The use of weld-free frame enables compartments to be reused. In addition, easy classification on scrapping has being promoted by releasing documents in which recycle and waste processes of materials used for switchgear are described.

- **Energy Saving:** Electricity loss was reduced by optimum placement of the conductors. Multi-function relays were used; the control power was lowered by wire-saving.
- **Resource Saving:** Downsizing and weight lightening (45% in volume and 30% in weight in comparison with the convention)
- **Elimination of harmful chemical substances:** Substitution of vinyl chloride products (halogen-free)

TOSHIBA CORPORATION

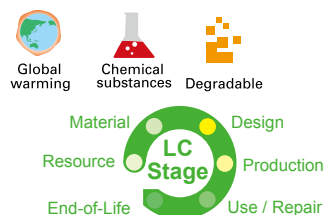
Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-ku Tokyo 105-8001, Japan

Tel Fax

E-mail

URL <http://www3.toshiba.co.jp/snis/>



Available in : Japan

type: VUHE type, Circuit breaker 2 stage feeder panel

Eco-products

EP-8-067

Machines and equipment

switchgear

Global environment-conscious 24/36kV solid-insulated switchgear

This product is cubicle-type solid-insulated switchgear (SIS) not using sulfur hexafluoride (SF₆) gas. This new type of switchgear is epoxy resin-molded insulation SIS. It was improved to be smaller, lighter, and better environment-conscious product than the conventional gas-insulated switchgear (C-GIS). "SF₆ gas-free" has realized by using vacuum valves for circuit breaker and disconnecting switch, and high-performance epoxy resin in making the main circuit and the conductor. High performance and downsizing has realized with the use of balance type electromagnetic mechanism for operating device of the circuit breaker and the disconnecting switch to reduce the number of the parts as well as energy for switching operation.

- **Energy Saving:** Downsized product reduces electrification loss. Adoption of high speed molding reduces energy for producing products.
- **Resource Saving:** Weight is 55% lighter and volume is 37% reduced for one set of receiving board of 24kV, comparing to those of the board of conventional machine.

TOSHIBA CORPORATION Social Infrastructure Systems Company

1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL <http://www3.toshiba.co.jp/snis/>



Global warming



Degradable



Solid insulated switchgear

Eco-products

EP-8-068

Machines and equipment

switchgear

7.2/3.6kV Multi-Switchgear

High-voltage switchgear for the steady supply of electricity at 6,000 volts to offices from power lines.

We succeeded in reducing installation space by one-third through employing advanced insulation technology, resulting in a lighter product (66% compared with previous models) and concomitant resource savings.

The use of a modular design also enables the sharing of materials, greater reusability, and greater transportability.



Resource



Energy saving



Super-Compact 7.2 kV Switchgear

Hitachi, Ltd.

Akihabara Daibiru Building, 18-13 Soto-Kanda 1-chome, Chiyoda-ku, Tokyo 101-8618, Japan
Tel Fax
E-mail
URL <http://www.hitachi.com/>

Eco-products

EP-8-069

Machines and equipment

wiring devices and supplies

Energy and Material Saving Wire-Electrical Discharge Machine

Won the Innovation Prize at the 2006 Japan Invention and Innovation Awards sponsored by the Japan Institute of Invention and Innovation.

This wire-electrical discharge machine is a machine tool that utilizes the discharge phenomenon to precision-process metals using electrode wire that is the size of a strand of hair.

-----<< Material >>-----

Preventing wire electrode breaks improves processing yields and reduces wire electrode waste

-----<< Energy >>-----

Eliminating wire electrode breaks and controlling energy to match processing variation cuts processing time in half (doubling energy efficiency)

-----<< Toxicity >>-----

Uses screws and steel sheeting with hexavalent chromium-free coating; CFC substitute used to cool the processing fluid

Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>



Available in : Asia,America,EU and Japan, etc.

FA20PS Advance

Eco-products

EP-8-070

Machines and equipment

analytical instruments

GC-2014, energy-saving type high-performance Gas Chromatograph

"GC-2014" is a gas chromatograph considering high performance and environmental loading.

By the following improvement:

- (a) use of a transformer- less switching power supply,
- (b) miniaturization of parts by using high performance, high-density integrated circuit, and
- (c) decrease in the number of parts, the energy consumption in the stand-by condition was reduced by 68% of that for the previous-type instrument.



Shimadzu Corporation

1, Nishinokyo-kuwabara-cho, Nakagyo-ku, Kyoto-shi, Kyoto 604-8511, Japan

Tel 81-75-823-1113 Fax 81-75-823-2062

E-mail kksitu@group.shimadzu.co.jp

URL <http://www.shimadzu.co.jp>

Gas Chromatograph GC-2014

Eco-products

EP-8-071

Machines and equipment

interventional angiography system

Environmentally conscious Interventional Angiography System for medical institution

Interventional Angiography System of our company has become the apparatus which is friendly to patients, by adding the following improvements and by adopting a company's original filter of new type.

- **Energy Saving:** The power consumption of examination per one patient was reduced by 20% owing to the optimization of design and the shortening of examination time.
- **Resource Saving:** The weight per one patient examination was reduced by 20% owing to the same reason as above.
- **Elimination of harmful chemical substances:** Harmful substances were reduced by 30% owing to the abolishment of FRP covers and the extensive use of Pb-free solder.



TOSHIBA MEDICAL SYSTEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
 Tel 81-287-26-6280 Fax 81-287-26-6053
 E-mail mutsuo.innami@toshiba.co.jp
 URL <http://www.toshiba-medical.co.jp/tmd/>

Interventional Angiography System (Infinix CF-i)

Eco-products

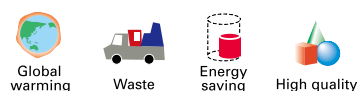
EP-8-072

Machines and equipment

whole-body x-ray ct system

Whole-body X-ray CT system ECLOS

By increasing the number of the slices which our X-ray CT system scans, the consumption electric power per slice has been reduced to 1/2-1/4 during scanning. The weight of X-ray CT system is about 10 % reduced.



Hitachi Medical Corporation

Akihabara UDX, 4-14-1, Soto-Kanda, Chiyoda-ku, Tokyo 101-0021, Japan
 Tel 81-3-3526-8880 Fax 81-3-3526-8810
 E-mail
 URL <http://www.hitachi-medical.co.jp/>

Whole-body X-ray CT system ECLOS

Eco-products

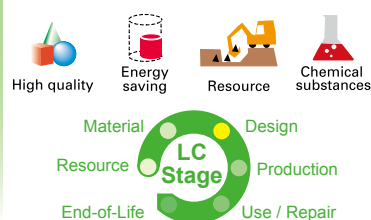
EP-8-073

Machines and equipment

medical electronic instrument and equipment

Ultrasound Diagnostic Scanner

Our company announces "We defend human happiness and the earth environment" as our environmental policy over development, production, and sales of medical equipments. This ultrasound diagnostic scanner "EUB-8500" has reduced the unit size adopting large scale FPGA and ASIC, cut weight by 19%, and decreased the power consumption by 17%. In addition, only Pb-free solder is used as are all other products in our company.



HITACHI MEDICAL CORPORATION

Akihabara UDX, 4-14-1, Soto-Kanda, Chiyoda-ku, Tokyo 101-0021, Japan
Tel 81-3-3256-8880 Fax 81-3-3256-8810
E-mail
URL <http://www.hitachi-medical.co.jp/>



Ultrasound Diagnostic Scanner EUB-8500

Eco-products

EP-8-074

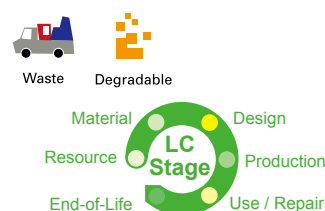
Machines and equipment

biochemical analyzer

Environmentally conscious Biochemical Analyzer for medical institution

The workflow in the inspection room was optimized, and the total measuring time of the immunoassay and the biochemical measurement was shortened. These results contribute to the energy saving and the resource saving. The product is a clinical chemistry auto-analyzer which was made in consideration of the global environment and patients.

- **Energy Saving:** The 24 hour operation became possible, and the inspection waiting time of the urgent specimen was shortened from the conventional 10 minutes at the longest to 30 seconds. The power consumption per one specimen inspection was reduced.
- **Resource Saving:** The technology of reducing the carry over between samples halved the consumption of blood-collecting vessels.
- **Elimination of harmful chemical substances:** The consumption of chemical reagent was reduced by 33% owing to the reduction of minimum reaction quantity. Lead-free solder was extensively applied.



TOSHIBA MEDICAL SYSTEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
Tel 81-287-26-6280 Fax 81-287-26-6053
E-mail mitsuo.innami@toshiba.co.jp
URL <http://www.toshiba-medical.co.jp/tmd/>



Biochemical Analyzer TBA-c16000

Eco-products

EP-8-075

Machines and equipment

computed tomography system

Environmentally conscious X-ray CT Systems for medical institution

The X-ray CT System "AsteionTM/VP" realized drastic reduction of the radiation exposure while maintaining high picture quality. Moreover, it offers to the operator a friendly environment where he can concentrate on the inspection by plain operation.

In addition, this X-ray CT System is equipped with a function to control the consumption of the contrast media by informing the timing of photography which is optimum in the imaging inspection. The function serves also to avoid the patient's excessive burden. Owing to this function as well as the function to reduce the radiation exposure, the system has become friendly to patient.

- **Energy Saving:** By developing a new unit and a new picture-reformation method, the time-of-use of the system came to be a half and power consumption per one patient inspection reduced to 51%.
- **Resource Saving:** The development of a new unit brought a 34% weight reduction.
- **Elimination of harmful chemical substances:** The lead used for the shielding was minimized. Lead-free solder was applied to the printed board.

TOSHIBA MEDICAL SYSTEEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
Tel 81-287-26-6280 Fax 81-287-26-6053
E-mail mutsumi.innami@toshiba.co.jp
URL <http://www.toshiba-medical.co.jp/tmd/>



Waste



Degradable



X-ray CT Systems Asteion(TSX-021B)

Eco-products

EP-8-076

Machines and equipment

computed tomography system

Environmentally conscious X-ray CT Systems for medical institution

The X-ray computed tomography device "Aquilion 64" is the apparatus which makes the image of the cross-section of human body using X-ray. The device can collect 64 sheets of section image in one round, and the highest revolution speed is 0.35 second. Since the photography of 64 sheets is possible for such a short time, it is usable for the inspection of the heart which is working. As a result, the clinical value of the device has increased drastically.

- **Energy Saving:** A 60% saving was achieved by developing the new model unit and by increasing the processing speed of the reconstruction of image.
- **Resource Saving:** A 20% saving was achieved by the adoption of the non-contact communication technology. The digitizing of information and the promotion of the sharing of information contribute to X-ray film-less.
- **Elimination of harmful chemical substances:** Use of the smallest shielding lead, applying of lead-free solder to printed board, etc.

The product won a prize at the 4th Eco-Products Awards in Japan (The prize was given to X-ray CT diagnostic apparatus / X-ray tube / CCD camera for new generation environment).

TOSHIBA MEDICAL SYSTEEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
Tel 81-287-26-6280 Fax 81-287-26-6053
E-mail mutsumi.innami@toshiba.co.jp
URL <http://www.toshiba-medical.co.jp/tmd/>



Waste



Degradable



X-ray CT Systems Aquilion(TSX-101A)

Eco-products

EP-8-077

Machines and equipment

diagnostic ultrasound system

Environmentally conscious Ultrasound System for medical institution

"Xario" is ultrasonic diagnostic equipment, which emits a signal of supersonic wave in vivo, and gets the image of in vivo by receiving the reflected signal from the organization. The function and performance necessary for a high-grade machine is held in a compact size body. It can provide a precise diagnosis not only in the inspection room but also on the bed in the patient's room. It is effective for the diagnosis of heart and abdomen, mammary glands, thyroid gland, thyroid grand, baby in the stomach, etc.

- **Energy Saving:** A 33 % saving was achieved by adopting a high-speed CPU, and by shortening of the boot-time.
- **Resource Saving:** A 31% reduction in volume and a 25% reduction in weight were achieved by adopting a large-scale FGPA (Field Programmable Gate Array) and the structural design method, and by integrating functions.
- **Elimination of harmful chemical substances:** The achieved items are the abolition of the vinyl chloride cover and the use of Pb-free solder for the printed board.

TOSHIBA MEDICAL SYSYSTEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
Tel 81-287-26-6280 Fax 81-287-26-6053
E-mail mutso.innami@toshiba.co.jp
URL <http://www.toshiba-medical.co.jp/tmd/>



Waste



Degradable



Diagnostic Ultrasound Systems XARIO SSA-660A

Eco-products

EP-8-078

Machines and equipment

magnetic resonance imaging systems

Environmentally conscious MRI Systems for medical institution

MRI apparatus "EXCELART Vantage" is a machine to do image processing of the profile of human body by using the magnetic resonance phenomenon, and the latest extra-high speed photography and the contrast medium-less photography are possible. It is a patient-friendly medical apparatus owing to our company's original noise-silencing mechanism which can remove 90% of noise and the enhancement of a feeling of release with the shortening of the axis.

- **Energy Saving:** The power consumption of inspection per one patient was reduced by 58% owing to the development of high-speed photographic method, the optimization of design, etc.
- **Resource Saving:** The weight per one patient inspection was reduced by 56% by developing a short-axis magnet mount.
- **Elimination of harmful chemical substances:** As found from the following items: Reuse of exchangeable parts; Decrease of the waste due to the extension of product life; Application of Pb-free solder to the printed board; A 20% weight reduction of the FRP (Fiber Reinforced Plastics) cover of the mount, we are promoting the reduction of environment-related substances.

TOSHIBA MEDICAL SYSYSTEMS CORPORATION

1385, Shimoishigami, Otawara-Shi, Tochigi 324-8550, Japan
Tel 81-287-26-6280 Fax 81-287-26-6053
E-mail mutso.innami@toshiba.co.jp
URL <http://www.toshiba-medical.co.jp/tmd/>



Waste



Degradable



MRI Systems Vantage(MRT-2003)

Eco-products

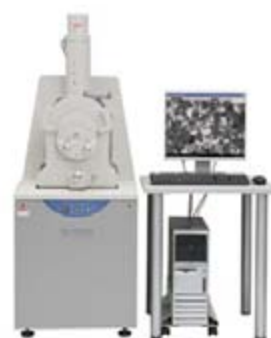
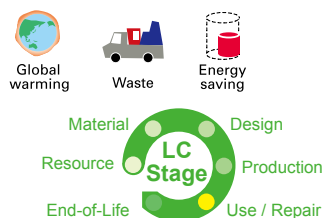
EP-8-079

Machines and equipment

electronic microscopes

Scanning Electron Microscope SU-1500

Width of the main unit has been reduced by 20% (by comparison Hitachi Scanning Electron Microscope S-3000N) so that the microscope can be installed in more confined places than before. The specimen chamber and stage have been designed to accommodate samples as large as 153mm in diameter. Imaging can be completed on a sample that is 60mm in height at the analytical working distance of 15mm. Flexibility for sample size is a key feature of the SU-1500. To assist inexperienced users, the SU-1500 includes an on-screen operation guide that guides the user step by step through the complete imaging process - from vacuum mode selection to taking a picture. This unique feature allows users of all experience levels to quickly obtain high quality images.



SU-1500

Hitachi High-Technologies Corporation

24-14, Nishi-shimbashi, 1-chome, Minatoku Tokyo 105-8717, Japan
Tel 81-3-3504-7111 Fax 81-3-3504-7123
E-mail
URL http://www.hitachi-hitec.com/global/em/sem/sem_index.html

Eco-products

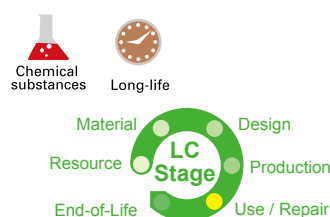
EP-8-080

Machines and equipment

electronic microscopes

CD-Measurement SEM CG4000

- Product function:
CD-SEM(Electron microscope for measuring semiconductor devices)
- Development Concept
Improved resolution and throughput



CG4000

Hitachi High-Technologies Corporation

24-14, Nishi-shimbashi, 1-chome, Minatoku Tokyo 105-8717, Japan
Tel 81-3-3504-7111 Fax 81-3-3504-7123
E-mail
URL <http://www.hitachi-hitec.com/global/>

Eco-products

EP-8-081

Machines and equipment

numerical control equipment

Advanced New Standard MITSUBISHI CNC 70series

Developed with a view to "MET" profile, Narrows down the functions required for CNC, reduced the number of parts and thereby realized 2.47 in the Mitsubishi Electric's environment load factor index.

(Comparison with CNC 60Series manufactured in year of 2001.)

-----<< M : Material >>-----

For less-wiring and product downsizing, the control unit body and wiring part are unified.

Volume ratio: Approximately 30% reduction/Weight ratio: Approximately 30% reduction.

-----<< E: Energy >>-----

While enhancing the product quality with the newly developed CNC dedicated device (ASIC), energy saving is realized by eliminating the cooling fan. In addition, CRT monitor is changed to the full-color LCD to reduce the power consumption by 60%.

-----<< T: Toxicity >>-----

Reduced the substances prohibited in the EU's RoHS directive instead that CNC is not within the scope.

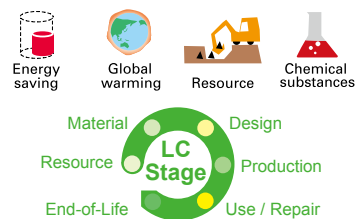
Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>



Available in : worldwide except controlled region

Mitsubishi Electric numerical control equipment 70 series

Eco-products

EP-8-082

Machines and equipment

electric measuring instruments

Energy Measuring Unit " Eco Monitor Pro "

"EcoMonitor Pro" can support your energy saving activity. It is capable of accurately measuring the electric consumption of each facility or assembling line. The line-up is for 1,3,5, and 7 circuits. It can be connected to our field-network, CC-Link.

Following is its environmental performance features compared to the previous model (per 1 circuit).

-----<< M : Material >>-----

45% reduction of resource consumption and non-recycling resource

-----<< E : Energy >>-----

51% reduction of electricity consumption when used and 82% reduction of electricity consumption on standby

-----<< T : Toxicity >>-----

Compliance with EU's RoHS Directive

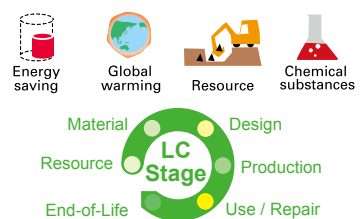
Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>



Available in : worldwide except controlled region

EMU2 - RD7 - B

Eco-products

EP-8-083

Machines and equipment

electric measuring instruments

Breaker with Energy Measuring function and Display

MDU breaker (= a breaker with measuring function and display) is capable of measuring, displaying and transmitting circuit information with having VT and CT inside of the body and Measuring Display Unit outside of the body. Wide-range line-up of MDU breakers and capability of connecting to our field network, CC-Link, can contribute to your saving energy activity.

Following is its features in environmental conscious design compared to the previous MDU breaker.

-----<< M : Material >>-----

31% reduction of resource consumption (MDU part only)

-----<< E : Energy >>-----

37% reduction of electricity consumption (MDU part only)

-----<< T : Toxicity >>-----

Compliance with RoHS

Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>

Available in : worldwide (limited to MCCB with MDU)



NF400-SEP with MDU

Eco-products

EP-8-084

Machines and equipment

electric measuring instruments

Energy saving data collecting server " EcoServer II "

"Ecoserver II " collects energy data from MDU breaker (= a breaker with energy measuring unit and display) and EcoMonitorPro (= Energy measuring equipment) and transmit the data to the Internet/ Intranet through Ethernet(10BASE-T). The transmitted data is graphed and can be seen on the Web.

Following is its features in environmental conscious design compared to the previous model.

-----<< M : Material >>-----

66% reduction of resource consumption

-----<< E : Energy >>-----

54% reduction of electricity consumption

Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan

Tel 81-3-3218-9024 Fax 81-3-3218-2465

E-mail eqd.eco@pj.MitsubishiElectric.co.jp

URL <http://www.Global.MitsubishiElectric.com>

Available in : Japan only



MES-255BR-A

Eco-products

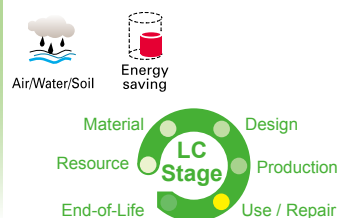
EP-8-085

Machines and equipment

electric railcars, with motive power

Monorail System

Railways are a complex combination of various parts including the trains, track, track switches, substations, substation supervising system, signals, communication systems, operation control systems, etc. Hitachi has four decades of experience supplying all of these products individually and as a fully integrated monorail system to meet the demands of urban environments.



Hitachi, Ltd.

Akihabara Daibiru Building, 18-13 Soto-Kanda 1-chome, Chiyoda-ku,
Tokyo 101-8618, Japan
Tel Fax
E-mail
URL <http://www.hitachi-rail.com/>



Monorail System

Eco-products

EP-8-086

Machines and equipment

marine engines

Environmental-friendly large two-stroke diesel engine

This next generation computerized diesel engine enabled flexible control according to the situation by changing the control method of fuel injection, opening and closing of exhaust valve, and cylinder lubricating oil injection from conventional mechanical control to electronic control. This reduced NO_x emission discharged during a sailing in port area as well as fuel consumption and CO₂ emission during an ocean voyage. Besides, it enabled to cut down on oil consumption and control the emission of particulate matter.



KAWASAKI HEAVY INDUSTRIES, LTD.

1-1, Higashikawasaki-cho 3-chome, Chuo-ku, Kobe 650-8670, Japan
Tel 81-78-682-5343 Fax 81-78-682-5558
E-mail yoshida_taka@khi.co.jp
URL <http://www.khi.co.jp/>



KAWASAKI MAN B&W 7S60ME-C Engine

Eco-products

EP-8-087

Machines and equipment

precision measuring machines and instruments

F-7000 Fluorescence Spectrophotometer

Designed to Meet Your Needs for High-Quality Analytical Instrumentation.

Hitachi's Superior Fluorescence Technology has created a new generation of Fluorescence Spectrophotometers.

Products Features

- High S/N Ratio(using Raman band of water) : S/N 800 RMS, equivalent to S/N 250 peak to peak
- Ultra-Fast Scanning : 60,000nm/min
- Compact Design : approx. 2/3 the size of the F-4500
- Multiple Accessories : a wide range of accessories accommodating various applications

Environmental features (compared to F-4500)

- Resource reduction (Compact Design) : approx. 2/3 the size of the F-4500
- Ease of decomposition : 23% reduction of screws facilitates dismantling
- Energy efficiency : 30% reduction of motor's electric power consumption

Hitachi High-Technologies Corporation

24-14, Nishi-shimbashi, 1-chome, Minatoku Tokyo 105-8717, Japan

Tel 81-3-3504-7111 Fax 81-3-3504-7123

E-mail

URL http://www.hitachi-hitec.com/global/science/fl/fl_index.html



F-7000

Eco-products

EP-8-088

Machines and equipment

pollution measuring instruments

Online Dioxin Precursor Monitor CP-2000

The CP-2000 Dioxin Precursor Monitor is an online real-time monitor of chlorophenol, which is one of the dioxin precursors (intermediates of dioxin formation). It is known that chlorophenol and dioxin have a high correlation of concentration in flue gas. The chlorophenols in the flue gas are ionized by atmospheric-pressure chemical-ionization(APCI) using needle electrode corona-discharge. Ionized chlorophenols are detected by a three-dimensional quadrupole mass analyzer (3DQMS).

This monitor can measure in high sensitive up to a few tens of ppt levels of chlorophenols in flue gas. And the concentration is automatically calibrated under of the changes in flue gas components and the combustion conditions by continuous automatic calibration. So it can be stable measurement. The CP-2000 can continuously monitor transient emission of chlorophenol, so that the parameters of the incinerator and the combustion conditions can be controlled to reduce the emission of dioxin. It was awarded "Nikkei Earth Environment Technical Award in 2000"and "R&D 100 Award in 2001"

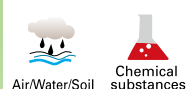
Hitachi High-Tech Trading Corporation

24-14, Nishi-shimbashi, 1-chome, Minatoku Tokyo 105-8717, Japan

Tel 81-3-3504-7311 Fax 81-3-3504-7363

E-mail keisoku@nst.hitachi-hitec.com

URL <http://www.hitachi-hitec-trading.com/english/index.html>



CP-2000

Eco-products

EP-8-089

Machines and equipment

measuring instruments

Save Energy "MT8820B Radio Communication Analyzer"

The MT8820B is a measuring instrument used for inspection and adjustment of mobile phones at an assembly plant. The instrument must be compact enough for use on a production line. Conventional models release internal heat by taking in air from one side and discharging it from the other, requiring space around the instrument.

The MT8820B, however, exhausts air from the back to help make the entire process more space-efficient. To this end, we first wanted a power-saving design to curb the generation of internal heat. For example, we innovated circuits and parts of the RF converter, which typically consumes the most power, and dramatically reduce the number of parts. With such improvements, we cut power consumption to two-thirds that of a conventional model. We also improved upon conventional models by designing the instrument to keep internal air resistance to an absolute minimum and decreased the number of cooling fans. This cut noise by 5-10dB, making operation quieter.

Anritsu Corporation

5-1-1 Onna, Atsugi-shi, Kanagawa 243-8555, Japan
Tel 81-46-223-1111 Fax
E-mail
URL <http://www.anritsu.com>



Global warming



Energy saving



MT8820B Radio Communication Analyzer

Eco-products

EP-8-090

Machines and equipment

manometers, flowmeters and quantity gauges parts

Gasoline Pump Dispenser

Description of Products

Gasoline meter for gasoline stations.

Development Concept

Light weighting

Electrical power saving



Resource



Energy saving



Tokico Technology, Ltd.

3-9-27 Tsurumi Chuo, Tsurumi-ku, Yokohama City, Kanagawa
Prefecture 230-0051, Japan
Tel 81-45-504-9720 Fax
E-mail
URL

AB26LA-T

Eco-products

EP-8-091

Machines and equipment

measuring instruments

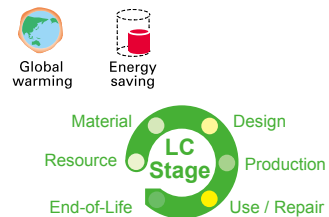
Realizing the Functions of Two Boards with One "MP1800A Signal Quality Analyzer"

Today, as optical fiber cables are routed to households, high-speed data transmission devices are ever more essential to convenient communication. The MP1800A measuring instrument evaluates the performance of such devices. By greatly downsizing the phase shifting module and employing highly integrated devices, we have successfully integrated send-receive functions on one board, rather than using two, as previously required. As a result, the MP1800A is just 70.0% of the size, 66.7% of the weight and consumes only 70.8% of the power of a conventional equivalent model.

The MP1800A has six board slots implemented with measuring modules, enabling it to evaluate multiple devices. Another of its major features is its ability to be configured to best suit a user's needs, because the module system is adopted.

Anritsu Corporation

5-1-1 Onna, Atsugi-shi, Kanagawa 243-8555, Japan
Tel 81-46-223-1111 Fax
E-mail
URL <http://www.anritsu.com>



MP1800A Signal Quality Analyzer

Eco-products

EP-8-092

Machines and equipment

power transformers

Energy Saving Inverter for buildings and factories, fan and pump applications

Received Honorable award at the 2006 Electrical Manufacturers Awards sponsored by the Japan Electrical Manufacturers' Association

Using inverter for fan or pump application is more efficient and saves more energy than conventional flow rate control using damper or valve or motor on-off control.

-----<< Material >>-----

Designed to extend the life span of major consumables, such as capacitors and cooling fans, for ten years (design life of ten years) to effectively which helps to save resources.

-----<< Energy >>-----

By using an inverter for fan or pump application and control the flow rate by changing motor speed, it achieves a higher level of energy saving compared to the flow rate control using damper or valve or motor on-off control. Optimal excitation control (a distinct function in FREQROL-F700) makes more energy saving compared to conventional V/f control.

-----<< Toxicity >>-----

Comply with the EU RoHS Directive to use alternatives to all six hazardous substances.

Mitsubishi Electric Corporation

2-7-3 Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.Global.MitsubishiElectric.com>



Inverter FREQROL-F700

Available in : Asia, Europe, America, Japan, etc.

Eco-products

EP-8-093

Machines and equipment

power transformers

HIVERTER-UP201i(UNIPARA)

Description of Products

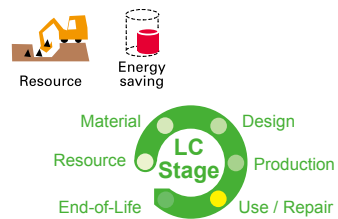
UPS protects important equipment such as facilities of data centers against instantaneous power failure. Depending on the scale of equipment, a maximum of 6 UPS's can be connected in parallel to provide the power supply capacity.

Development Concept

Reduction of environmental load and economy through high efficiency, compact and lightweight. High expandability based on unit parallel design.

Hitachi, Ltd.

5-2-1 Ohmika, Hitachi-shi, Ibaraki-ken 319-1121, Japan
Tel Fax
E-mail
URL <http://www.hitachi.co.jp/Div/ise/upshp/> (Japanese Only)



HIVERTER-UP201i(UNIPARA)

Eco-products

EP-8-094

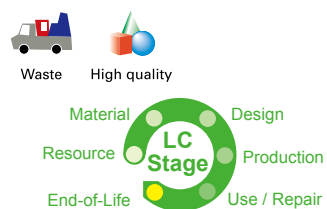
Machines and equipment

garbage disposer for business use

Eco-champion, a garbage disposer for business use

This product is a garbage processing machine for business use. The machine contributes to the circulating-type society in which the garbage (such as the residue of food processing and the leftovers of meal) is decomposed by bio (microorganism) and then the decomposition product will be recycled as organic fertilizer.

- (1) The process from the charge of garbage to the discharge of compost (fertilizer) is full-automatic, and the volume of the charged garbage reduced to 15-20% after hours running.
- (2) The disposal capacity per day is 4 kinds: 50kg, 100kg, 150kg and 200kg.
- (3) Inverter control realized energy saving operation. (Power consumption of 100kg type disposer is 81kwh/day)
- (4) Owing to the space-saving machine design, setting is easy even in the business-use kitchen.
(50 kg type: W1200mmxD760mmxH1405mm).
- (5) The installed deodorizer controlled the generation of bad smell.
- (6) It is a newly registered product of the JAFRC standard for performance.



ECOCHAMPION (MHC-100CD)

BRIDGESTONE PLANT ENGINEERING CO.,LTD.

3-1-1, Ogawahigashi-cho, Kodaira-shi, Tokyo 187-8531, Japan
Tel 81-42-342-6340 Fax 81-42-344-0991
E-mail
URL

Eco-products

EP-8-095

Machines and equipment

purifying system

A new agitating and purifying system using the density current for the enclosed water area

This is the apparatus to improve the quality of an enclosed waters by flowing it artificially, and thereby promoting the restraint of abnormal propagation of phytoplankton and the organic dissolution by benthos. By use of a pipe vertically inserted in water, the apparatus sucks higher temperature water from the top and lower temperature water from the bottom, mixes them together at the middle depth position, and discharges the mixed water.

A density current is formed by the discharged water and it diffuses horizontally up to the wide range. Density currents come about both in the surface layer and the bottom layer. By keeping such a condition for a long period, the temperature of the surface layer lowers, the discontinuity layer relaxes, and the improvement of oxygen poverty proceeds.

As a result, the activity of the organic dissolution is promoted, and the purification and improvement of the waters occurs. Suitable places to be installed are enclosed marine bay, culture sea area, lakes, dam, hollow after dredging, harbor, etc.

Nakashima Propeller Co., Ltd.

688-1 Joto-kitagata, Okayama Japan 709-0625, Japan
Tel 81-86-279-5111 Fax 81-86-279-3107
E-mail npcwebmaster@nakashima.co.jp
URL <http://www.nakashima.co.jp/>

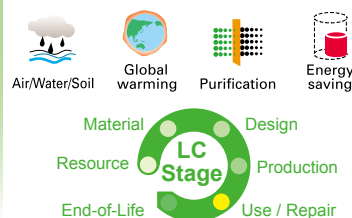


Image figure of Density Current Generator

Eco-products

EP-8-096

Machines and equipment

biotechnology rest room

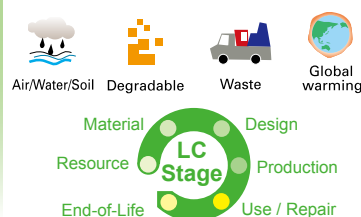
NO smell! NO water! New biotechnology rest room "Suntool" will solve excreta problem.

Water is a root of the life, and we have been made the best use of by the existence of water. However, water has been uselessly used for the rest room's flush water. Moreover, the living drainage that goes out of the house is estimated to be about 250 liters a day a person though it is known to become an origin where living drainage makes nature dirty. In the amount of the dirt of living drainage, (amount of BOD), it becomes about 43g a day a person, and the about 30% is the one because of the rest room drain. On that occasion, biotechnology rest room "Suntool" that doesn't use water can decrease the pollution of an important water resource. The most elements of excreta are "moisture". Moisture is adsorbed by sawdust, and then excreta are mostly resolved to carbon dioxide gas and water gas (moisture) without smell by microorganism's fermentation in aerobic condition.

Biotechnology rest room "Suntool" uses a microorganism that adhered to the excreta from human's inside of the body. Therefore as many as it will be used, the microorganism will grow vigorously. The excreta finally become the remainders of the inorganic component and are adsorbed by sawdust.

Tokyo Suntool Co., Ltd.

3-8-12 Minamiogikubo, Suginami-ku, Tokyo 167-0052, Japan
Tel 81-50-5531-1136 Fax 81-3-3332-3187
E-mail iwao@suntool.jp
URL <http://www.suntool.jp>



Available in : World wide

Biotechnology rest room "Suntool" Type:LOGW-60ST

Eco-products

EP-8-097

Machines and equipment

vacuum degassing tower

MU REACTOR, a Stripping Tower for expelling O₂ & CO₂ gases

MU REACTOR, a stripping tower, is developed to expel dissolved oxygen and CO₂ gases melted in the water by stripping process, with the help of vacuum. Our device has many advantages compared to the conventional process, i.e., smaller in equipment size, almost nil of maintenance costs, the tower made of FRP which is competitive in price-wise to the conventional packed towers fabricated by rubber-lined special steel plates. PERFORMANCE: First unit is presently in operation for table salt manufacturing, treating brine with 20% salt content. Rated treatment capacity of the device is 150~250 m³ per hour. Suppose 5~10 ppm. of dissolved oxygen and 100~200 ppm. of CO₂ gas being melted in the water, after treatment by MU REACTOR, dissolved oxygen will be reduced to 1 ppm. and CO₂ 20 ppm. only. Static liquid mixer, MU MIXER® installed inside the tower, helps brine to flow smoothly not to stagnate, which eventually contribute to substantial saving of maintenance costs thanks to no blocking on internals in the tower.

MU Company Ltd.

18-8, Uenokouen, Taito-ku, Tokyo 110-0007, Japan
Tel 81-3-3828-7090 Fax 81-3-3823-2890
E-mail 0325muc@mu-company.com
URL <http://www.mu-company.com/>



Resource



Stripping Tower for O₂ and CO₂ gases removal

Eco-products

EP-8-098

Machines and equipment

air conditioning unit

ECO Green Aircon for Building and Civil Engineering

An ECO / Energy Saving Air conditioning unit for Cooling and Ventilation

ECO COOL represent a Green technology that offer a cost effective solution to satisfying 100% fresh air and Cooling for many applications

Enabling dry cooling without compressor, ECO COOL achieve heat recovery using little energy to remove latent load from hot air, resulting in Ultra high EERs (C.O.P.) Substantial energy savings of over 50% compared to traditional system.

Instead of circulating hot and moist air, now you have a solution using only 750 watts for 6 tons optimum cooling. High volume ventilation & sensible cooling at the same time without adding humidity.

ECO COOL can be used as a pre cooler for intake air that can reduces your existing air conditioning system power consumption by 30%- 50%.

ECO COOL (dry cooling) helps provide substantial amount of fresh outdoor air to meet ASHARE standard 62-89 requirements, while keeping energy cost conservative.

Green innovation is ETHA Engineering philosophy - To pursue the leading edge cooling technology in harmony with the natural environment.

ETHA Engineering Pte Ltd

4012 Ang Mo Kio Avenue 10, #07-02 TECHplace 1 569628, Singapore
Tel 65-6553-3140 Fax 65-6553-3142
E-mail ben@etha.com.sg
URL <http://www.etha.sg>



Global warming



Resource



Purification



Available in : Singapore

Eco Cool 1200

Eco-products

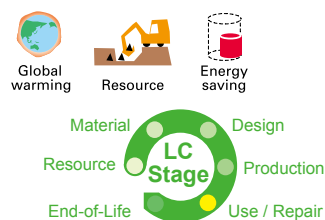
EP-8-099

Machines and equipment

medical electronic instrument and equipment

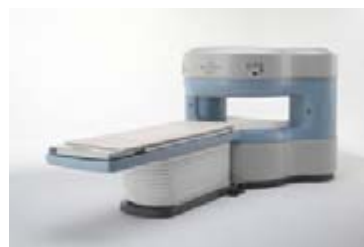
MR Imaging System

1. Superconductor in a typical MRI imaging equipment consumes 8 KW of electricity in the helium cooling unit. This system uses a permanent magnet instead, which does not need the magnetic field generation to consume energy so that running costs and an installation space are eventually reduced .
2. No need for helium's replacement, cold heads replacement, and magnetic circuit maintenance.
3. NEOJIUMU magnets, iron, aluminum used in this equipment can be reused/recycled after demagnetizing and do not generate wastes.



Hitachi Medical Corporation

Akihabara UDX., 4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, Japan
Tel 81-3-3256-8880 Fax 81-3-3256-8810
E-mail
URL <http://www.hitachi-medical.co.jp/>



AIRIS Elite

Eco-products

EP-8-100

Machines and equipment

hot-water supply system

"Eco Cute" Water Heater Using Natural Refrigerant for Large-Capacity institution

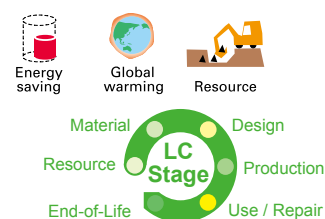
It is jointly developed with Tokyo Electric Power Company, Inc. and the Kansai Electric Power Company, inc.

-----<< M : Material >>-----

Dractically made compact from our current model (CHA-P500CQ-H), reducing approximately 55% of the installation area per unit.

-----<< E : Energy >>-----

Newly developed inverter type CO₂ refrigerant scroll compressor enables it to achieve COP 4.1, which marks industry highest at the point of May 2007, up approximately 70% from our previous model and it reduces approximately 40% of CO₂ emission amount compared to burning type water heater (the load is estimated as it is used in a middle-sized institution for the welfare of the elderly). CO₂ natural refrigerant has its zero ozone layer depleting coefficient.



Mitsubishi Electric Corporation

2-7-3, Marunouchi Chiyoda-ku, Tokyo 100-8310, Japan
Tel 81-3-3218-9024 Fax 81-3-3218-2465
E-mail eqd.eco@pj.MitsubishiElectric.co.jp
URL <http://www.mitsubishielectric.co.jp/>



QAHV-N560A

Available in : Japan

Eco-products

EP-9-001

Others

elemental feeds

Feed grade L-Threonine

Feeds for livestock animals are mainly composed of vegetable ingredients such as corn, wheat, and soybean meal. Most proteins in such vegetable ingredients do not necessarily have the optimal amino acid profile for muscle protein synthesis by animals. The insufficient supply of a certain amino acid may lead not only to inferior growth but also to increased excretion of nitrogen to the environment because of less efficient utilization of amino acids for protein synthesis and the subsequent enhancement in catabolism of amino acids. Supplementation of L-threonine, which is in general the 2nd limiting amino acid in pigs and the 3rd limiting in chickens, can contribute to the reduction of nitrogen excretion from animals to the environment by improving dietary amino acid balance and consequently by improving amino acid utilization efficiency. In addition, because the usage of L-threonine in the feeds can sustain the ideal growth of animals with a less amount of feeds, it helps save the land area for feed crop production.

AJINOMOTO CO., INC.

15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, Japan
Tel 81-3-5250-8140 Fax 81-3-5250-8270
E-mail izuru_shinzato@ajinomoto.com
URL <http://www.ajinomoto.com/aan>



L-Threonine Feed Grade

Eco-products

EP-9-002

Others

elemental feeds

Feed grade L-Tryptophan

Feeds for livestock animals are mainly composed of vegetable ingredients such as corn, wheat, and soybean meal. Most proteins in such vegetable ingredients do not necessarily have the optimal amino acid profile for muscle protein synthesis by animals. The insufficient supply of a certain amino acid may lead not only to inferior growth but also to increased excretion of nitrogen to the environment because of less efficient utilization of amino acids for protein synthesis and the subsequent enhancement in catabolism of amino acids. Supplementation of L-tryptophan, which is one of the essential amino acids for pigs and chickens, can contribute to the reduction of nitrogen excretion from animals to the environment by improving dietary amino acid balance and consequently by improving amino acid utilization efficiency. In addition, because the usage of L-tryptophan in the feeds can sustain the ideal growth of animals with a less amount of feeds, it helps save the land area for feed crop production.

AJINOMOTO CO., INC.

15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, Japan
Tel 81-3-5250-8140 Fax 81-3-5250-8270
E-mail izuru_shinzato@ajinomoto.com
URL <http://www.ajinomoto.com/aan>



L-Tryptophan Feed Grade

Eco-products

EP-9-003

Others

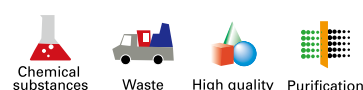
elemental feeds

Feed grade L-Lysine

Feeds for livestock animals are mainly composed of vegetable ingredients such as corn, wheat, and soybean meal. Most proteins in such vegetable ingredients do not necessarily have the optimal amino acid profile for muscle protein synthesis by animals. The insufficient supply of a certain amino acid may lead not only to inferior growth but also to increased excretion of nitrogen to the environment because of less efficient utilization of amino acids for protein synthesis and the subsequent enhancement in catabolism of amino acids. Supplementation of L-lysine, which is in general the 1st limiting amino acid in pigs and the 2nd limiting in chickens, can contribute to the reduction of nitrogen excretion from animals to the environment by improving dietary amino acid balance and consequently by improving amino acid utilization efficiency. In addition, because the usage of L-lysine in the feeds can sustain the ideal growth of animals with a less amount of feeds, it helps save the land area for feed crop production.

AJINOMOTO CO., INC.

15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, Japan
Tel 81-3-5250-8140 Fax 81-3-5250-8270
E-mail izuru_shinzato@ajinomoto.com
URL <http://www.ajinomoto.com/aan>



L-Lysine Monohydrochloride Feed Grade

Eco-products

EP-9-004

Others

chemical fertilizers

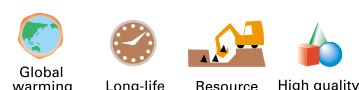
PENTAKEEP®

"PENTAKEEP" is a series of fertilizers containing 5-aminolevulinic acid (ALA). ALA is known to have the following physiological effects on plants, making it relevant to environmental fields as well as agriculture.

- 1) ALA promotes plant absorption of fertilizer, so it is expected to lead to the best use of resource and protect against environmental contamination from run-off.
- 2) ALA promotes plant photosynthesis. Its carbon dioxide fixation is expected to contribute to protection of global warming.
- 3) ALA improves salt tolerance of plants. It is expected to contribute to the greening of deserts and alkali soil.

COSMO OIL CO., LTD.

Toshiba Bldg., 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8528, Japan
Tel 81-3-3798-3215 Fax 81-3-3798-3216
E-mail ala_info@cosmo-oil.co.jp
URL <http://www.pentakeep-world.com>



Available in : Europe, Japan, Korea

PENTAKEEP®super; Liquid fertilizer to promote photosynthesis

Eco-products

EP-9-005

Others

office paper products

Ricoh RECO-View* Re-writable Sheet/Re-writable IC Tag Sheet

The Ricoh RECO-View Re-writable Sheet and IC Tag Sheet can permit visual images displayed on its surface. Especially, the IC Tag Sheet, as a radio frequency identification (RFID) technology, is a new product, combining IC tags with re-writable capability. Images on the sheets can be easily erased and formed repeatedly up to about 1,000 times with 300 dpi resolution.

With visualization of digital data on re-writable sheets, workflow, cost and environmental impact can be dramatically improved.

In factory and/or warehouse applications, a various management paper forms attached to incoming parts/products can be changed to the re-writable sheets, saving paper and IC chips. (Resources and energy are saved associated to the life cycle of paper and IC chip.)

Additionally, IC tag re-writable sheet can change the workflow, as a part of IT system with RFID technologies.

By checking visual image of the products printed on re-writable sheet with IC tag data, it is possible to reduce human errors, which also result in less environmental impacts.

※ RECO-View is the trademark for Ricoh re-writable media. RE means RE-writable and Re-usable + ECO means economy and ecology.

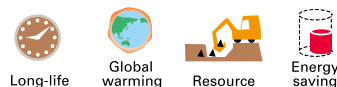
Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan

Tel 81-3-6278-5209 Fax 81-3-3543-9347

E-mail envinfo@ricoh.co.jp

URL <http://www.ricoh.com/environment/>



Available in : Asia Pacific Region & Japan

Ricoh RECO-View* Re-writable Sheet/IC Tag Sheet

Eco-products

EP-9-006

Others

flexible plastic sheets

Ricoh RECO-View PR Film and CR Re-writable Film

Clear & fine 400dpi images on the information display of Ricoh RECO-View re-writable film can be easily erased and formed repeatedly up to several hundred times. Additionally, image data is memorized in the magnetic layer or the IC chip, which is retrieval when needed.

Applications are "Loyalty Cards" to show shopping points with other information, "ID Cards/Passes" with or without a photo and an IC chip, and "Hospital Cards" with the next appointment information, etc.

These films can be used ten times more than conventional direct thermal film. A loyalty card generates 0.0241Kg of CO₂ in its life cycle, which is one tenth of direct thermal cards.

The credit card type is reusable, but no information can be displayed on the card, and normal thermal card is just for one time use.

Thus, these films can improve communication with cardholders, while reducing environmental impact.

* RECO-View is the trademark for Ricoh re-writable media. RE means RE-writable and Re-usable + ECO means economy and ecology.

** PR: Physical Re-writable Film with white opaque image

*** CR: Chemical Re-Writable Film with black image

Ricoh Company, Ltd.

Ricoh Building, 8-13-1 Ginza, Chuo-ku, Tokyo 104-8222, Japan

Tel 81-3-6278-5209 Fax 81-3-3543-9347

E-mail envinfo@ricoh.co.jp

URL <http://www.ricoh.com/environment/>



Available in : Asia Pacific Region & Japan

RECO-View Re-writable PR Film for the loyalty card

Eco-products

EP-9-007

Others

plastic cards

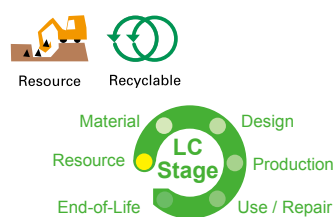
"Edy" card using vegetable-based plastic

Vegetable-based plastic - made from biomass such as corn - offers two advantages: it helps to cut consumption of the world's petroleum resources, and when discarded it can be processed in a variety of ways*. In 2006, Sony adopted this plastic for the manufacture of contactless IC card for the first time in the world. This plastic can be applied to "Edy" pre-paid e-money service, which is an application of Sony's "FeliCa" technology, and so on. This plastic makes contactless IC card more environmental conscious.

* Material recycling, chemical recycling, incineration, etc.

Sony Corporation

1-7-1 Konan Minato-ku, Tokyo 108-0075, Japan
Tel 81-3-6748-2111 Fax 81-3-6748-2244
E-mail
URL <http://www.sony.net>



"Edy" card using vegetable-based plastic

Eco-products

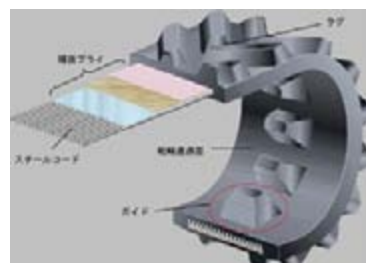
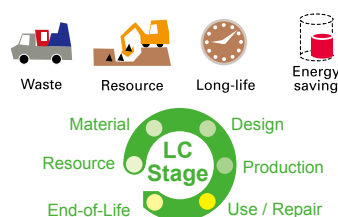
EP-9-008

Others

mechanical rubber products

Rubber Track

Bridgestone manufactures a wide range of rubber tracks which fit onto the undercarriage of mini-excavators and tracked loaders. One key feature of rubber tracks is that they do not damage the road surface. Also Bridgestone has been developing more eco-friendly products such as non-core-metal rubber tracks which can be recycled more easily than traditional tracks, avoiding the need to separate out the core metals before the recycling process.



Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-8203 Fax 81-3-5202-6719
E-mail
URL <http://www.bridgestone.co.jp/>

Rubber Track

Eco-products

EP-9-009

Others

environment protecting equipment

Hitachi Ballast Water Purification Systems

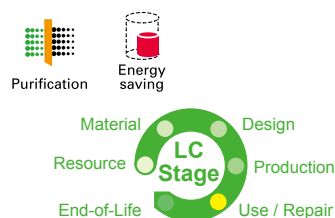
International Maritime Organization adopted the international convention for the control and management of ships' ballast water and sediments in 2004 from the viewpoint of protecting ecosystem and prevent pandemic. The convention stipulates the progressive introduction of ballast water management systems on board for all the ships from 2009.

Hitachi, Ltd. and Hitachi plant technologies, Ltd. have developed an epoch-making ballast water purification system to remove seawater organisms in ballast water using coagulation and magnetic separation methods.

This environment-friendly system does not use any disinfecting agents and causes no secondary marine pollution.

Hitachi Plant Technologies, Ltd.

5-2, Higashi-Ikebukuro 4-chome, Toshima-ku, Tokyo 170-8466, Japan
Tel 81-3-5928-8100 Fax 81-3-5928-8701
E-mail koho-senden@hitachi-pt.com
URL <http://www.hitachi-pt.com>



Hitachi Ballast Water Purification Systems

Eco-products

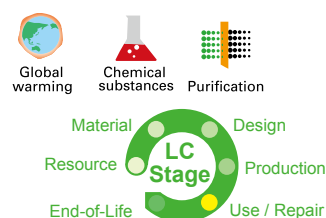
EP-9-010

Others

vending machines

The world's first vending machine adopting the heat pump heating system

This vending machine realizes the high efficiency of more than twice as high as that of electric heater by adopting the heat pump heating system, and also increases the efficiency of cooling system. As a result, the energy consumption of 950kWh per year is achieved.



Matsushita Refrigeration Company

3-4-74 Noji-higasi, Kusatsu, Shiga 525-0058, Japan
Tel 81-77-566-4810 Fax 81-77-565-9633
E-mail
URL

Available in : Japan

Can & bottles vending machines : NS-7R30HP

Eco-products

EP-9-011

Others

organic compost fertiliser

Composting. Natural and thermophilic accelerated composting technology

Compost manufacturing facility of 15,000m² for the production of quality organic compost from tree and horticulture wastes with a daily intake of over 100tonnes/day.

The composting reactor chambers are able to convert natural raw organic feed materials to organic fertilizer in 14 days.

Production activities are monitored, from initial intake quality, shredding, crushing, sieving, ingredient mixing, process monitoring, curing and final product testing.

The organic compost is widely used in gardens, parks and landscaping activities. The products are certified organic by Biological Farmers of Australia and has received the Singapore Green Leaf mark for environmental sustainability.

ecoWise Holdings Ltd

3 Phillip Street, #14-01 Commerce Point, 048693 Singapore
Tel (65) 6536 2489 Fax (65) 6536 7672
E-mail enquiries@ecowise.com.sg
URL <http://www.ecowise.com.sg>

Available in : ASEAN



Eco-products

EP-9-012

Others

digital cameras

Nikon Digital SLR camera D300

D300 is a NIKON digital single-lens reflex camera which drastically evolved on the DX format machine, picture quality, sensitivity, high-speed performance and operational ability. Various advanced performance has been realized on the size of the middle class machine with a low cost. • 12.3 mega-pixel image pick-up element, • high-speed serial photography of 6-8 frames per second, • AF system of the 51 points, • cognitive system for photographing scene, • new image adjustment /setting function, image sensor cleaning function, • visual field ratio 100%.

- (1) Power consumption efficiency was improved by 67% in comparison with that of D200. (Maximum workable frame number:D300, 3,000; D200, 1,800 at our company's testing condition using the same battery and ordinary temperature)
- (2) Life time was extended by 50% compared to that of D200. (the durability of shutter: D300, 150,000 times; D200, 100,000times)
- (3) Pb-free solder is used for all electronic-circuit boards.
- (4) Eco-glass (Pb-free and As-free optical glass), Usage 100%
- (5) Reduction of hazardous substances (Pb, Cd, Hg, Cr⁶⁺, PBB, PBDE) to comply the EU RoHS directive.

NIKON CORPORATION

Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331, Japan
Tel 81-3-3214-5311 Fax
E-mail
URL <https://www.nikon.co.jp>

Available in : world wide



Nikon Digital SLR camera D300

Eco-products

EP-9-013

Others

digital cameras

Nikon Digital SLR Camera D3

D3 is a NIKON flagship camera that meets the advanced and extensive requirement for the professional cameramen and is clearly distinct from the conventional digital single-lens reflex camera. It has many features. • Nikon's first 12.1 mega-pixel large-size image pick-up element which correspond to a film-size of 36×24mm, • common use photography sensitivity of ISO200 - 6400, • high-speed serial photography of 9-11 frames per second, • AF system of the 51 points, • cognitive system for photographing scene, • new image adjustment /setting function

- (1) Power consumption efficiency was improved by 24% in comparison with that of D2Xs. (Maximum workable frame number:D3, 4,700; D2Xs, 3,800 at our company's testing condition using the same battery and ordinary temperature)
- (2) Life time was extended by 100% compared to that of D2Xs. (the durability of shutter: D3, 300,000 times; D2Xs, 150,000times)
- (3) Pb-free solder is used for all electronic-circuit boards
- (4) Eco-glass (Pb-free and As-free optical glass) Usage 100%
- (5) Reduction of hazardous substances (Pb, Cd, Hg, Cr⁶⁺, PBB, PBDE) to comply the EU RoHS directive.

NIKON CORPORATION

Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331, Japan
Tel 81-3-3214-5311 Fax
E-mail
URL <http://www.nikon.co.jp>

Available in : world wide



Nikon Digital SLR Camera D3

Eco-products

EP-9-014

Others

digital cameras

Olympus E-3 Digital Single-Lens Reflex Camera

E-3 is one of the high-end of our digital single-lens reflex camera in our lineup that we investigated high-resolution, mobility, and reliability thoroughly to satisfy the high demand specification of the photograph lover and their hard use sever environment.

With achieving highest high-resolution, mobility, and reliability, E-3 is realized to save energy highly by reform of ones system and device. Compared with conventional products, the E-3 consumes about 34% less power when in use.

Olympus Corporatin

Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0914, Japan
Tel 81-3-3340-2111 Fax 81-42-642-9017
E-mail environ@ot.olympus.co.jp
URL <http://www.olympus.co.jp/en/eco-products>

Available in : Global



Eco-products

EP-9-015

Others

color surveillance camera

Super-Dynamic 3 Color Surveillance Camera, WV-CW484

<Reduced installation time and energy>

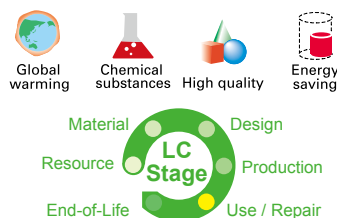
Backing focus adjustment can be carried out by moving the image pickup element in the camera to the most desired position through the original Auto Back Focus function. This allows focus to be adjusted roughly at the installation time and reduces the time and energy for focus adjustment to a third, because focus can be fine-tuned with a switch on the camera or a remote controller on final inspection.

<Reduced power consumption>

While functions such as wide dynamic range, high-image resolution, high sensitivity, Auto Back Focus, Scene change detection and Auto image stabilizer functions have been either enhanced or newly added to the previous model, power consumption is kept at no more than that of the previous model.

**Matsushita Electric Industrial Co.,Ltd.
Panasonic System Solutions Company**

4-3-1 Tsunashima-higashi, Kohoku-ku, Yokohama, Kanagawa
223-8639, Japan
Tel Fax
E-mail
URL



Available in : Global

Color Surveillance Camera : WV-CW484 Series

Eco-products

EP-9-016

Others

biomass plastic pot

Planting pot made from polylactic acid and paper , biopot ZPFacH

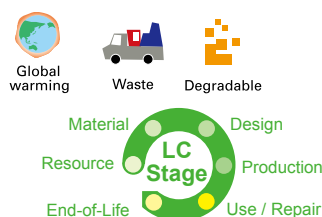
Our Biopot(biomass plastic pot) made from the starch of corn and other plants excels in ventilation and water conducting and accelerates the growth of plants. Our pots degrade by hydrolysis before planting, but after planting they decompose gradually into water and carbon dioxide by bacteria in the soil, and returns to earth. The carbon dioxide is again taken in by the plant which in turn becomes the raw material of this product by photosynthesis. Our biomass pots (environment-friendly circulation type material) need not be removed in transplanting and therefore do not generate waste, thereby saving time and labor. Our carbon-neutral (zero-emission) pots are earth-friendly and prevent global warming.

We have possessed those data on the biodegradability of our product which will enable us to obtain the biodegradability mark and the eco mark in Europe and the USA as well as Japan, according to Mitsui Chemical Analysis & Consulting Service Inc. Our product has borne the biomass mark, a registered trademark of The Japan Organic Resources Association, Corp.

Our product has received the Eco Products Award 2006 (the chief judge's special prize)

Green support Co., Ltd.

688-3 Mitsumatsu Kaizuka-shi Osaka-fu 597-0105, Japan
Tel 81-72-447-0112 Fax 81-72-447-0133
E-mail eco@green-support.com
URL <http://www.green-support.com>



Available in : Japan

biopot ZPFacH

Eco-products

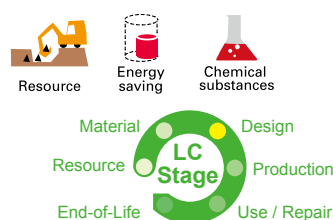
EP-9-017

Others

industrial video scope

IPLEX FX, an industrial video scope

IPLEX FX, the industrial video scope features higher spec than conventional product such as, enhancing manipulation performance and reducing size and weight, marketed as a certified Olympus Eco-product.



Olympus Corporation

Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0914, Japan
 Tel 81-3-3340-2111 Fax 81-42-642-9017
 E-mail environ@ot.olympus.co.jp
 URL <http://www.olympus.co.jp/en/eco-products>



Available in : Global

Eco-products

EP-9-018

Others

radio and tv broadcasting equipments

DVCPROHD P2 Camera Recorder, HVX200

- True high definition image quality with low-compression DVCPRO HD intraframe recording
- Multiple formats: DVCPRO HD, DVCPRO 50, DVCPRO, DV selectable
- New generation system "DVCPROHD P2 Series" employing "world's first" semiconductor device in recording medium
- The P2 card is superior to ordinary PC cards in durability. Its connector portion, for example, is specially designed for professional use and has passed insertion/removal tests of more than 30,000 cycles. The same P2 card can be used again and again for years to minimize the expense and impact to the environment.
- Heavy use of FPGA/Ultra LSI in promoting digital signal processing has led to reduction of parts quantity and power consumption despite realization of high function.
- Non-Use of Specific Chemical Substances *
 (* Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)



Matsushita Electric Industrial Co., Ltd. Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
 Tel 81-6-6905-8356 Fax 81-6-6905-4755
 E-mail
 URL <http://panasonic.co.jp/pavc/>



Available in : Japan

Memory Card Camera Recorder P2 System : AG-HVX200

Eco-products

EP-9-019

Others

radio and tv broadcasting equipments

DVCPROHD P2 Portable Recorder, HPM100

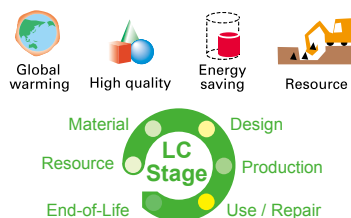
- Portable P2 HD/SD multi-format recorder delivers ultra flexibility and efficiency.
- The P2 card has no moving mechanisms, it offers outstanding reliability and high resistance to impact, vibration and temperature fluctuations. Reusable many times, the P2 card can reduce operating costs and minimize environmental impact.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company,

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>

Available in : Japan

Memory Card Portable Recorder P2 System : AJ-HPM100



Eco-products

EP-9-020

Others

radio and tv broadcasting equipments

DVCPROHD P2 Camera Recorder, HPX500

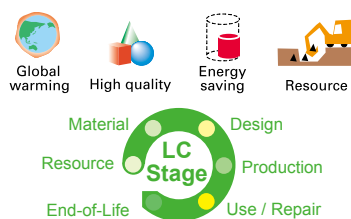
- Supports all HD/SD recording formats at the price of an SD camara-recorder.
- Advanced P2 technology provides fast, rugged performance plus IT connectivity.
- 2/3-inch interchangeable lens system.
- Variable frame rate function.
- Neither tape nor disc, the P2 card is a semiconductor memory device that can hold large amounts of video and audio data. Memory card recorders have no drive mechanism, so maintenance costs are much lower. And with their outstanding resistance to impact, vibration, temperature change, dust and other environmental conditions, they offer the high reliability you need in news acquisition and video recording.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)

Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>

Available in : Japan

Memory Card Camera Recorder P2 System : AG-HPX500



Eco-products

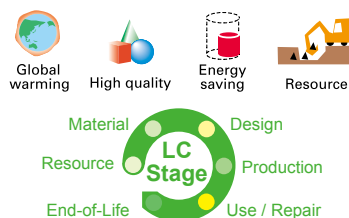
EP-9-021

Others

radio and tv broadcasting equipments

DVCPROHD P2 Portable Recorder, HPG10

- A single portable unit that provides viewing, backup and file management functions. The P2 Gear recorder gives you even greater P2 mobility.
- Developed for professional use, the P2 card is a compact solid-state memory card that offers superior reliability, large capacity, and high transfer speed. Its outstanding resistance to temperature fluctuation, vibration and impact makes it the superior choice for field recording in harsh conditions. The P2 card has passed insertion/removal tests of more than 30,000 cycles and can be used many times over a long period. P2 recorders have no transport mechanism or rotating parts, so startup is fast, power consumption is low, and maintenance is reduced. This means both lower costs and less environmental impact.
- Non-Use of Specific Chemical Substances *
(*: Lead, mercury, cadmium, hexavalent chromium, two specific brominated flame retardants, designated by the EU RoHS Directive.)



Matsushita Electric Industrial Co., Ltd.
Panasonic AVC Networks Company

1-15 Matsuo-cho, Kadoma, Osaka 571-8504, Japan
Tel 81-6-6905-8356 Fax 81-6-6905-4755
E-mail
URL <http://panasonic.co.jp/pavc/>

Available in : Japan

Memory Card Portable Recorder P2 System : AG-HPG10

Eco-products

EP-9-022

Others

electric audio equipment

Digital Audio Mixer for Professional

This is a "System-in-One" digital audio mixer which is integrated sound system components into one unit, such as mixer, equalizer, acoustic feedback suppressor, compressor/limiter, delay, reverb, etc.

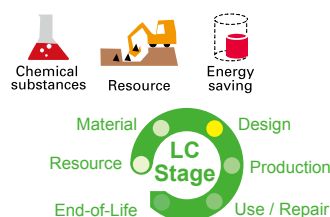
[Resources and Energy Saving]

Reduction in the number of devices and voltages has been carried out through the switching power supply of all circuits and development of next generation digital signal processing architecture.

- Reduction in the number of printed circuits boards. (14 pcs -> 7 pcs)
- Compact size (capacity reduction 28%)
- Light weight (weight reduction 29%)
- Power consumption (reduction 48%) (Compared to our models of FY2000)

[Green Materials]

- Use of fastening screws and aluminum die-cast made by hexavalent chromium-free chemical treatment
- Chromium-free processed steel for inner chassis
- Use of lead-free solder



Matsushita Electric Industrial Co., Ltd.
Panasonic System Solutions Company

4-3-1 Tsunashima-higashi, Kohoku-ku, Yokohama, Kanagawa
223-8639, Japan
Tel 81-45-544-3613 Fax
E-mail
URL <http://panasonic.co.jp/pss/en>

Available in : Japan, Europe

Digital Audio Mixer : WR-D40

Eco-products

EP-9-023

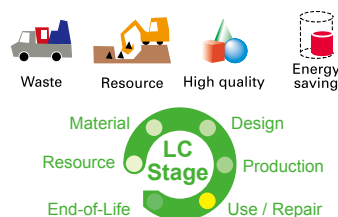
Others

displays

Electronic Displays "QR-LPD®"

The QR-LPD®(Quick Response Liquid Power Display) technology provides paper like appearance. Such as paper white, wide viewing angles and comfortable reading under all lighting conditions including bright sunlight. We supply ultra-low power display solutions for Electronic Paper markets (ESL, Information board and so on).

The QR-LPD® technology aims to become a new standard display technology for electronic paper applications and is expected to contribute the reduction of paper resources.



Bridgestone Corporation

10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-42-342-6271 Fax 81-42-342-6714
E-mail
URL <http://www.bridgestone.co.jp/english/index.html>



Electronic Displays "QR-LPD®"

Eco-products

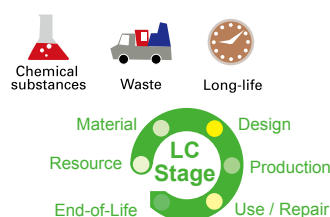
EP-9-024

Others

industrial computer

Environmentally conscious and Long-life design Industrial computer "FA3100S model 9,000"

"FA3100S model 9000" is the latest Industrial computer of our company. The computer was designed for a social infrastructure system which needs 24hour consecutive running, and various industrial systems. The long-term available CPU was selected, and the memory is correspondent to ECC (Error Check and Correct) for higher reliability. Other installed parts were also selected in the aspect of long life and high reliability. The functions of RAS (Reliability, Availability, and Serviceability) were mounted, which supports the diagnosis of a running state of the system and quick recovery from an abnormal state. In addition, we are actively taking on the problems of environmentally hazardous substances as well as resource saving. The environment measure including the use of "Pb-free" parts was started from 2001, and a RoHS-compliance product was released in May, 2006. Maintenance parts are exchangeable from the front of the computer, which makes it easy to exchange the parts. In addition, the maintenance of machine is possible for 15 years at the longest. Reduction of waste is realized by long life of the product and long-term use.



TOSHIBA CORPORATION Industrial Systems Company

1-1, Shibaura 1-Chome, Minato-Ku, Tokyo 105-8001, Japan
Tel Fax
E-mail
URL



Industrial Computer "FA3100S model 9000"

Eco-products

EP-9-025

Others

solar charging station

REACH Solar Charging Station

REACH is one of Grenzone's unique programs that consists multi-dimensional elements that helps to bring electricity as well as creating potential micro-economy in the rural areas.

Under REACH concept, critical resources will be pooled together to establish a "Solar Charging Station". Grenzone's own product such as EcooPower and EcooRay are used in this Charging Station.

REACH is applicable to places without grid connectivity and where utility power supply is impossible for at least several years.

The benefits of REACH:

- Provide instant power supply in off-grid locations
- Creates income generation opportunity for owner
- Contribute to rural development

The Features:

- Easy to install (fully integrated system)
- Highly modular and expandable to larger system
- Ease of use with plug and play applications

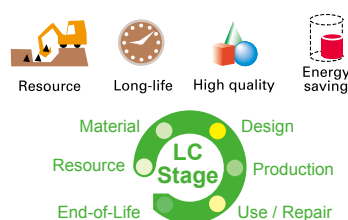
GRENZONE PTE LTD

51 Ayer Rajah Crescent, #06-16/17 139948, Singapore

Tel 65-6872-2350 Fax 65-6872-5610

E-mail info@grenzone.com

URL <http://www.grenzone.com>



Available in : Worldwide

GZC 12025R EcooRay Solar Charging Station

Eco-products

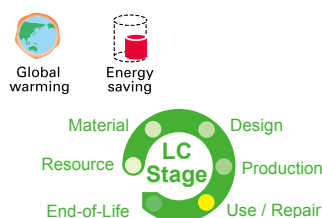
EP-9-026

Others

boilers

Industrial hot water supply equipment "Eco-cute" contributing to CO₂ emission reduction

This is the Japan's Largest industrial hot water supply equipment using one of the NWFs, CO₂. The capacity of hot water supply is 80kW. It enables to supply 20 tons of water a day at 90 degrees Celsius. In comparison with the heavy oil burning boilers, it can reduce the CO₂ emission more than 40%.



Mayekawa Mfg Co.,Ltd.

2-13-1, Botan, Koto-ku, Tokyo 135-8482, Japan

Tel 81-3-3642-8181 Fax 81-3-3643-7094

E-mail public@mayekawa.co.jp

URL <http://www.mayekawa.co.jp>



Available in : JAPAN&28countries

HWW-2HTC

microscopes and magnifying glasses

Nikon Fieldmicroscope Series "EZ-Micro"

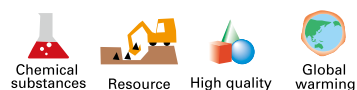
This top-end fieldmicroscope from Nikon's Naturescope series was designed for microscopic observation of insects, vegetables and minerals, and enables simplified digital photography during observation. The prism in the photographic optical path is treated with phase-correction coating for superb photography with a Nikon compact digital camera.

- (1) Use of bioplastic : Four microscope body parts, as well as the packing bag, are made from vegetable-origin plastic to reduce petroleum dependence.
- (2) Reduced hazardous substances : PVC (polyvinyl chloride) has been totally eliminated from the main body, case and strap. All parts in conformance with Nikon's green procurement standards.
- (3) Eco-glass (lead & arsenic free optical glass) usage : 100%

NIKON CORPORATION

Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331, Japan
 Tel 81-3-3214-5311 Fax
 E-mail
 URL <http://www.nikon.co.jp>

Available in : world wide



Nikon Fieldmicroscope Series "EZ-Micro"

microscopes and magnifying glasses

BX51N-DPH Phase Contrast/Dispersion Asbestos-Measuring Microscope

Combining clear, high-contrast images with enhanced ease of use, this microscope is an extremely effective tool for measuring asbestos levels designed for use with the dispersion staining method. It is also an environment-friendly product as it contains no harmful substances.

**Olympus Corporatin**

Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0914, Japan
 Tel 81-3-3340-2111 Fax 81-42-642-9017
 E-mail environ@ot.olympus.co.jp
 URL <http://www.olympus.co.jp/en/eco-products>

Available in : Global

Eco-products

EP-9-029

Others

exchange lenses for SLR cameras

Eco-friendly EF Lenses with High Image Quality

To produce the product that has non-toxic substance, Canon has been working on the development of a variety of technologies.

In case of optical lenses, Canon has introduced an alternative technology, using harmless titanium of which the refractive index is high, to produce lead-free optical lenses.

(Supplementary explanation)

So far, the lead has been contained in optical lenses to heighten refractive index.

Although such the lead is harmless because it does not melt and does not go outside the lens, it is concerned that some sludge (abrasion waste) generated in the abrasion process may pollute environment.

Therefore Canon has been seeking an alternative substance to be used for lenses instead of the lead. And now Canon has started using titanium (titanium oxide) that is no risk on human health and environment and has achieved the same optical performance as the lead.

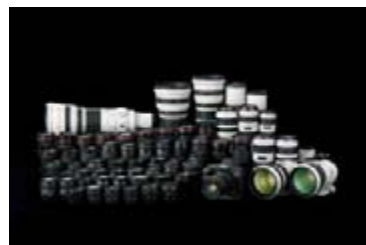
Canon Inc.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan

Tel 81-3-3758-2111 Fax 81-3-3758-1160

E-mail

URL <http://www.canon.com>



CANON EF lenses

Eco-products

EP-9-030

Others

watches

wn-2 , the globe-shaped wrist watch

The letter "w" in the code "wn-2" is the initial of the word "watch", which has two meanings. One is a tool showing the time and the other is to see something, here the globe. Regarding with the global environment problems including the warming, we considered making a chance to feel it and behave as the matter of ourselves in our daily lives. The time is only one if we watch it from the space. The global watch wn-2 is a world clock by which we can know at a glance the time of all places in the Northern Hemisphere. It is also a sense wear (a tool to feel the world) by which we feel a link with the world, and which brings us fresh surprise and emotion about the place where we are now. An important point on its development is to be used for a long time by customers. And, for example, it is possible to obtain a different face only by changing the bezels. The package is not only made by the regenerated paper of milk pack, but also designed to be usable as a display without being thrown away. In addition, a part of wn-2 sales is used to support the activity of a NPO "Think the Earth Project", and for the social contribution.

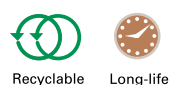
Think the Earth Project / SPACEPORT INC.

3-1-202 Sarugaku-cho, Shibuya-ku, Tokyo 150-0033, Japan

Tel 81-3-5459-2181 Fax 81-3-5459-2194

E-mail tte-sales@spaceport.co.jp

URL <http://www.thinktheearth.net>



Available in : world wide

wn-2 (watch northern hemisphere) silver/blue

Eco-products

EP-9-031

Others

packing crates and pallets

Environmentally Friendly Pallets and Packing Crates/ Eco-pallets

Waste wood chips derived from the trimming of trees (branches) and waste wood have been innovatively incorporated (developed with the help of the Centre for Applications in Environmental Technology of Singapore Polytechnic) as sustainable materials to produce our Eco-pallets and packing crates.

These sustainable developed Eco-pallets are:

- Structurally designed for static loading, dynamic loading and racking
- Suitable for 4-way forklift entry
- Conforming to the ISPM 15 Standards
- Simple yet elegant in design for non-slip operations
- Competitively priced
- Conform to ISO 14001 and OHSAS 18001 criteria for certification

This environmentally sustainable material can be customised for packing crates.

TentTech Pte. Ltd.

246 MacPherson Road, #06-02, Betime Building 348578, Singapore
Tel 65-9791-1284 Fax 65-6776-1554
E-mail info@tenttechsg.com
URL <http://www.tenttechsg.com>

Available in : Worldwide



Eco-pallet

Eco-products

EP-9-032

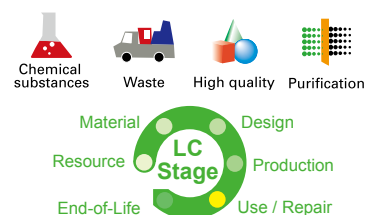
Others

biodegradable hydraulic oil

Eco-freindly biodegradable hydraulic oil "Bio Green Grass"

This envionmentally-friendly oil is degraded by microorganism and will not cause environmental damage if spilled onto grass, soil or into a river following a construction accident. We developed the technology for the world's first hydraulic oil that does not kill the grass. Eco-label certification criteria as biodegradable.

It is certified as an Eco-label Product by Japan Environment Association.



KUBOTA Corporation

1-2-47, Shikisu-higashi, Naniwa-ku, Osaka-shi, Osaka 556-0012, Japan
Tel 81-6-6648-2111 Fax
E-mail
URL <http://www.kubota.co.jp/index.html>



Bio Green Grass

Eco-products

EP-9-033

Others

gas engine co-generation system

Residential-use gas engine co-generation system

"Ecowill" is a gas engine co-generation system fueled by city gas. It generate 1.0kW of electricity with gas engine, and effectively use 2.8kW of waste heat for generating hot water and floor heating system as well.

Compared with conventional thermal power plant and hot water boiler, these systems contribute to energy savings by up to 21% and to the reduction of CO₂ emissions by up to 32% with its high efficiency. (power generation efficiency:20%, Heat recovery efficiency:57% in high heat value)

"Ecowill" memorize energy demands of every house by "learning function" and estimate demands, generate power with least energy.

In addition, user can check energy demand and reductions of CO₂ through remote display in the house. Many user said that their attitude towards energy saving has improved.

Tokyo Gas Co., Ltd

1-5-20, Kaigan, Minato-ku, Tokyo 105-8527, Japan

Tel 81-3-5400-7671 Fax 81-3-3432-5509

E-mail

URL <http://www.tokyo-gas.co.jp/>



Eco-products

EP-9-034

Others

noise barrier

Multiple Edge Noise Barrier "TONAKAI"

Multiple Edge Noise Barrier "TONAKAI" is a new type noise barrier which is more economical and effective on reducing the traffic noise.

- 1) Variation of 3 types; Large typ (Height/Width: 1m/2m), Small type (H/W: 0.5m/1.15m), Mini type (H/W: 0.5m/0.5m)
- 2) "TONAKAI" can reduce the noise by 3-5dB compared with a conventional noise barrier of the same height.
- 3) Better noise reduction without heightening the barrier enable to avoid the problem of sunlight and EMI interference.
- 4) "TONAKAI" can reduce the total cost of noise-control measures.
- 5) The noise reduction mechanisms are "Multi-diffraction" and "Mutual interference of sound wave in the barrier".
- 6) "TONAKAI" meets strength and safety standard.
- 7) "TONAKAI" can also be used for the railway noise.

Bridgestone Corporation

10-1, Kyobashi 1-chome Chuo-ku, Tokyo 104-8340, Japan

Tel 81-3-5202-6871 Fax 81-3-5202-6874

E-mail

URL <http://www2.bridgestone-dp.jp/civil/>



TONAKAI (Multiple Edge Noise Barrier)

Eco-products

EP-9-035

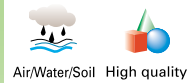
Others

oil boom

Oil Boom

Oil fence is the oil boom which stops the floating pollutant such as crude oil spilt from stranded tanker or an accident of the oil terminal and minimize the environmental pollution. The portable type has the foam blocks inside and most widely used. The inflatable type is space saving, air injection boom for emergency use. The unique sink-and float type is the fixed type moored around the certain area and floats only when it is necessary.

The bias structure of reinforcing ply enables the flexibility on the wavy water and keep the high performance.



Air/Water/Soil High quality



Oil Boom

Bridgestone Corporation

10-1 Kyobashi 1-chome, Chuo-ku, Tokyo 104-8340, Japan
Tel 81-3-5202-6871 Fax 81-3-5202-6874
E-mail
URL <http://www2.bridgestone-dp.jp/civil/>

Eco-products

EP-9-036

Others

coffins or caskets

Environmentally Friendly Caskets/ Eco-ffins

Waste wood chips derived from the trimming of trees (branches) and waste wood have been innovatively incorporated (developed with the help of the Centre for Applications in Environmental Technology of Singapore Polytechnic) as sustainable materials to produce our Eco-ffins.

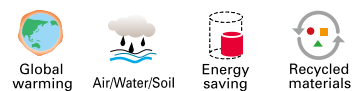
These sustainable developed Eco-ffins are:

- 1) Elegantly designed for aesthetics and dignified send-off for loved ones
- 2) Structurally strong
- 3) Competitively priced
- 4) Highly combustible
- 5) Environmentally friendly (either for burial or cremation)
- 6) We also have D.I.Y. (Do-It-Yourself) Eco-ffins as an enhanced eco-product that can further reduce energy demands via reduction in storage space, transportation and logistics needs

Air pollution tests on our Eco-ffins showed lesser pollutant levels as compared to those made from virgin timber or ply wood. Ash remains are also acceptable.

TentTech Pte. Ltd.

246 MacPherson Road, #06-02, Betime Building 348578, Singapore
Tel 65-9791-1284 Fax 65-6776-1554
E-mail info@tenttechsg.com
URL <http://www.tenttechsg.com>



Global warming Air/Water/Soil Energy saving Recycled materials



Available in : Worldwide

4-sided, 6-sided, 8-sided, 4-sided curved top

Eco-products

EP-9-037

Others

charcoal apple art

Environment-conscious carbon craft product, "Apple original charcoal"

Charcoal has been produced in a traditional charcoal kiln, and the most has been used for the fuel. Here, by firing the resin under the precise environmental control due to the charcoal making technology, we got the carbon material without the crack and the shape distortion which were defects of the charcoal. What we introduce here is the industrial material such made, namely a high-tech porous carbon material "wood ceramics".

The porous carbon material is obtained by firing wood and woody material in the oxygen-free atmosphere, after impregnating them with phenol resin. The product is a carbon composite material, which has the medium property of the advanced carbon material and the charcoal which is a traditional carbon material. The apple original charcoal is the craft product which is made by changing a dropped apple and the apple branch pieces into wood ceramics. By firing the leaf of the apple after soaking it with phenol, it becomes the composite material of the cellulose-origin amorphous carbon of and the phenol-origin glassy carbon. It is not damaged even in the transport, because it is reinforced by the hard glassy carbon.

SUMIKOUBOU APPLE STUDIO Co., Ltd.

4-5-15, Jumoku, Hirosaki-shi, Aomori 036-8228, Japan
Tel 81-172-37-7707 Fax 81-172-37-7707
E-mail sumikoubou-apple.studio@amber.plala.or.jp
URL



Eco-products

EP-9-038

Others

fertilizer

Environment-friendly fertilizer made from beer yeast

Our company Asahi Food & Healthcare Co., Ltd. sales the liquid fertilizer "豊作物語 (the good harvest story)" to the agricultural producers. The fertilizer is made from the cell wall of brewer's yeast by enzymatic reaction.

"豊作物語" is based on the hydrolysate of the cell wall of brewer's yeast. It increases the plant's intrinsic immunity power by the activity of the β - glucan exists in cell wall, and it promotes thereby the healthy growth of the plants. Since our raw material is the natural yeast which is safe and secure to both the human and the crops, we have received high evaluation from the users. Our company will continue development of the safe and secure goods by making use of the superior characteristic given by the hydrolysate made from the cell wall of brewer's yeast, such as "the growth acceleration", "the improvement of immunity", etc.

Asahi Food & Healthcare Co., Ltd.

1-23-1 Azumabashi, Sumida-ku, Tokyo 130-8602, Japan
Tel 81-3-5608-2771 Fax 81-3-5608-2773
E-mail
URL <http://www.asahi-fh.com>



Good Harvest Story

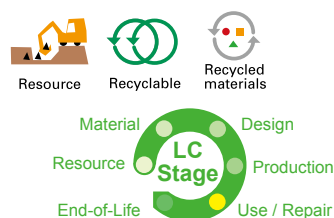
Recycled Containers with Attractive Appearance and Strength

Plastic containers are often used for in-plant handling of parts and products, as well as for their storage and transportation. However, end-of-life containers are usually disposed of in landfills or by incineration. There are two conventional methods of recycling: 1) pelletizing collected containers for use as molding materials; and 2) mixing the recovered pellets with new materials. However, pelletizing is costly and has product quality and color drawbacks. Relying on a proprietary injection molding method that uses recycled container material for the core layer which is sandwiched by new material layers, Sekisui Recycled Containers provide effective solutions for problems associated with recycling of plastic containers. Features of Sekisui Recycled Containers

- Three-layer molding structure in which the recycled container material forms the core layer and is sandwiched by new material layers.
- Color requirements can be met for recycled containers.
- The same quality and strength as 100% new material containers can be maintained.
- Crushed chips of collected containers can be used without pelletizing.
- Recycling can be repeated any number of times.

Sekisui Chemical Co., Ltd.

2-3-17, Toranomon, Minato-ku, Tokyo 105-0001, Japan
Tel Fax
E-mail kankyo@sekisui.jp
URL <http://www.sekisui.co.jp/>



Recycling

1. Fiber & textile recycling

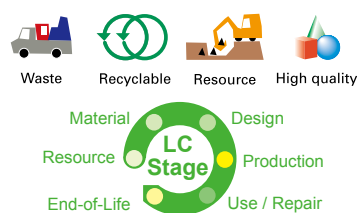
As a part of "ecodream", under which Toray promotes the company-wide environmental and recycling activity, we are working to establish a total recycling system for fibers & textiles. Based on this system, Toray will recycle various fiber & textile products using the optimal recycling technologies such as material, chemical and thermal, one of which is selected according to the properties of the material being recycled. The critical point of the total recycling system is that we approach recycling based on the concept of "Less Energy" to promote energy saving and reduce CO₂ emission.

2. Plastics material recycling system

Toray's material recycling system was developed to tie in with customer collection and recycling systems so that molded resin and film products recovered after use could be recycled and reused. Toray offers recycling system design for used plastic molded products in accordance with the customer's needs.

Toray Industries, Inc.

2-2-1, Nihonbashi-Muromachi, Chuo-ku, Tokyo 103-8666, Japan
Tel 81-3-3245-5115 Fax 81-3-3245-5344
E-mail Product@nts.toray.co.jp
URL <http://www.toray.jp>



Nylon 6 material recycling product

Eco-products

EP-9-041

Others

biomass plastic pot

Plantingpot made from polylactic acid , biopot ZFach

Our Biopot(biomass plastic pot) made from the starch of corn and other plants excels in ventilation and water conducting and accelerates the growth of plants.

Our pots degrade by hydrolysis before planting, but after planting they decompose gradually into water and carbon dioxide by bacteria in the soil, and returns to earth. The carbon dioxide is again taken in by the plant which in turn becomes the raw material of this product by photosynthesis.

Our biomass pots (environment-friendly circulation type material) need not be removed in transplanting and therefore do not generate waste, thereby saving time and labor. Our carbon-neutral (zero-emission) pots are earth-friendly and prevent global warming.

We have possessed those data on the biodegradability of our product which will enable us to obtain the biodegradability mark and the eco mark in Europe and the USA as well as Japan, according to Mitsui Chemical Analysis & Consulting Service Inc.

Our product has borne the biomass mark, a registered trademark of The Japan Organic Resources Association, Corp.

Our product has received the Eco Products Award 2006 (the chief judge's special prize)

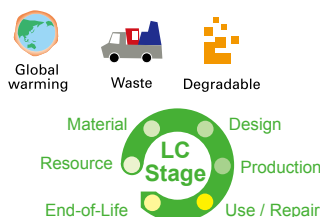
Green support Co., Ltd.

688-3 Mitsumatsu Kaizuka-shi Osaka-fu 597-0105, Japan

Tel 81-72-447-0112 Fax 81-72-447-0133

E-mail eco@green-support.com

URL <http://www.green-support.com>



Available in : Japan

biopot ZFach

Eco-products

EP-9-042

Others

biomass plastic pot

Panting pot made from polylactic acid , biopot ZH

Our Biopot(biomass plastic pot) made from the starch of corn and other plants excels in ventilation and water conducting and accelerates the growth of plants.

Our pots degrade by hydrolysis before planting, but after planting they decompose gradually into water and carbon dioxide by bacteria in the soil, and returns to earth. The carbon dioxide is again taken in by the plant which in turn becomes the raw material of this product by photosynthesis.

Our biomass pots (environment-friendly circulation type material) need not be removed in transplanting and therefore do not generate waste, thereby saving time and labor. Our carbon-neutral (zero-emission) pots are earth-friendly and prevent global warming.

We have possessed those data on the biodegradability of our product which will enable us to obtain the biodegradability mark and the eco mark in Europe and the USA as well as Japan, according to Mitsui Chemical Analysis & Consulting Service Inc.

Our product has borne the biomass mark, a registered trademark of The Japan Organic Resources Association, Corp.

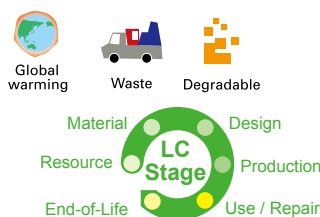
Green support Co., Ltd.

688-3 Mitsumatsu Kaizuka-shi Osaka-fu 597-0105, Japan

Tel 81-72-447-0112 Fax 81-72-447-0133

E-mail eco@green-support.com

URL <http://www.green-support.com>



Eco-products

EP-9-043

Others

biomass plastic pot

Planting pot made from polylactic acid , biopot Zach

Our Biopot(biomass plastic pot) made from the starch of corn and other plants excels in ventilation and water conducting and accelerates the growth of plants.

Our pots degrade by hydrolysis before planting, but after planting they decompose gradually into water and carbon dioxide by bacteria in the soil, and returns to earth. The carbon dioxide is again taken in by the plant which in turn becomes the raw material of this product by photosynthesis.

Our biomass pots (environment-friendly circulation type material) need not be removed in transplanting and therefore do not generate waste, thereby saving time and labor. Our carbon-neutral (zero-emission) pots are earth-friendly and prevent global warming.

We have possessed those data on the biodegradability of our product which will enable us to obtain the biodegradability mark and the eco mark in Europe and the USA as well as Japan, according to Mitsui Chemical Analysis & Consulting Service Inc.

Our product has borne the biomass mark, a registered trademark of The Japan Organic Resources Association, Corp.

Our product has received the Eco Products Award 2006 (the chief judge's special prize)

Green support Co., Ltd.

688-3 Mitsumatsu Kaizuka-shi Osaka-fu 597-0105, Japan

Tel 81-72-447-0112 Fax 81-72-447-0133

E-mail eco@green-support.com

URL <http://www.green-support.com>



biopot Zach

Available in : Japan

Eco-products

EP-9-044

Others

wood products

Laminated wood of Aomori HIBA for building material use

The development of wood resources has a possibility to destruct the global environment, so it is much interested. In general, it takes 30 years or more for a tree to grow up to the size from which usable wood is cut out, even if the tree is a species that has a large growth rate. As for Aomori HIBA, a long period of 200 to 300 years is necessary to grow. So, the effective use of the limited resource is important, and the most effective method is to use the laminated wood. (HIBA is a kind of Japanese cypress tree and grows in Aomori prefecture in Japan.)

Aomori HIBA contains about 1% Aomori HIBA oil, and the oil contains 2% "Hinokitiol". "Hinokitiol" is isopropyl-tropolone ($C_{10}H_{12}O_2$). It has anti-bacterial and worm-killing powers; therefore, the wood of Aomori HIBA does not easily rot and doesn't allow white ants to come closer to it. We may therefore say that Aomori HIBA is a long life material that can be used without special rot-proof treatment. Because of its long life, Aomori HIBA has been used not only for the foundation and pillars of private house, but also in the structures of shrine and temple.

Kodate Lumber Inc.

127-20, Sengari, Aburakawa, Aomori-shi, Aomori, 038-0059, Japan

Tel 81-17-788-8125 Fax 81-17-788-8127

E-mail kodate-mokuzai@kodate.co.jp

URL <http://kodate.co.jp/>

