Ota City

Environmental

Product and Technology

Catalog

On publishing the "Catalog of technology for environmental products made in Ota City"

The environment of Ota City – City of Manufacturing has environmental products and is technology friendly. This catalog introduces products that received awards at the Ota City New Product/New Technology Competition. This catalog also contains products made by factories certified as excellent factories by Ota City, ISO 14001 certified factories and Eco Action 21 certified companies. The performance and energy saving effects of the products and technology described in this catalog are introduced based on information provided by companies in Ota City. Please be sure look at the environmental products and technology of the companies in this catalog. When you contact the companies introduced in this catalog, we would appreciate your telling them that you found them in this catalog.

Inquiries

Environmental Planning Division in the Environmental Sanitation Department of Ota City

Tel.:+81-3-5744-1625

Contents (Listed in the Original Japanese Syllabary Order)

	(
AI Co., Ltd.	1
iMott Inc.	1
Kankyou Kougaku Inc	2
Kansai Electronics Co., Ltd.	2
Kyofuku Shoten KK	
Kyoritsu Denki Sangyo KK	3
KYORITSU CHEMICAL-CHECK Lab., Corp	4
Craft Works Co., Ltd.	4
Sanki Co., Ltd	
TAIYO TORYO CO., LTD.	
Tokyo Recycling Center: TAKEEI Corporation	6
TV Valve Co., Ltd.	6
TECH-TAIYO KOGYO Co., Ltd.	2
TOKI CORPORATION	2
Tokiwa Seiki Co., Ltd	8
Nisshin Kogyo Co., Ltd	8
Nitto Kohki Co., Ltd	9
Hatada Co., Ltd	9
Hikariyane Co., Ltd	10
HIROSAWA ELECTRIC Co.,Ltd.	10
Bunseikaku Co., Ltd	1
MATERIAL HOUSE CO., LTD	1
MITSUMI MFG. CO., LTD.	12
Tokuo Factoru : Re-Tem Cornoration	19

Nail Contact®: Nail tips made of PLAX - modified polylactic acid





■ How to use WEB media [Nail magazine] https://nailmagazine.online/

Molds the world's thinnest nail tips! Conventional nail tips are made of plastics derived from petroleum and have problems due to this such as Pseudomonas aeruginosa infection. Gel nails have problems with cost and time as well as resulting in your own nails thinning.

Now, we have independently developed a nail system using biomass plastics and applied for a PCT international patent. We have developed patented technologies from design to production, including usage, and successfully molded thin articles while using biodegradable PLA as a material. They are very safe for the human body, require only a short period of time to put on and can be worn continuously thanks to the high oxygen permeability. They are carbon neutral products with less burden on both the human body and environment since they do not generate toxic gas when burning.

AI Co., Ltd.

Add.: Morinaka Seisakusho Co., Ltd., 1-15-20 Kitakojiya, Ota City, Tokyo 144-0032

Tel.:+81-3-3742-1435 Email: omori@aicoltd.net URL: https://aicoltd.net/

32nd Ota New Product & New Technology Contest – Won the Ota ECO Promotion Award

geek scissors: Reducing the burden on hairdressers





Edge face S-DLC, 200x ratio

Visit http://www.iqubiq.com to learn more about the geek scissors

Many hairdressers suffer from tenosynovitis due to opening and closing their scissors over 1000 times a day. In severe cases this results in hairdressers having difficulties continuing their jobs.

The sliding portions of the shear blades of the geek scissors are coated with our S-DLC (segment structured diamond-like carbon film) patented technology characterized by high-hardness and low-friction. Thanks to this, opening and closing the scissors is smooth and the burden on the fingers is reduced. The film also protects the blades from friction, extending the life of the blades 20 times longer until the next regrinding when compared with conventional products. The scissors lifetime is greatly extended and the cost and labor for grinding are greatly reduced.

We contribute to suppressing energy loss caused by friction in every field.

iMott Inc.

Add.: Techno Front Morigasaki 402, 4-6-15 Omoriminami,

Ota City, Tokyo 143-0013 Tel.: +81-3-6423-8314

Fax: +81-3-6423-8312 Email: info@imott.co.jp

URL: http://www.imott.co.jp

ISO9001 certified

27th Ota New Product & New Technology Contest - Excellent

Technical Skill Prize

 $11\ \mathrm{th}\ \mathrm{Japanese}\ \mathrm{version}$ of the Ig Nobel Prize - Cutting-Edge Manufacturing Prize

PVROS

Pure water machine available for both disasters and normal times



Device operation does not use commercial power source. Basically CO₂ emission-free.

Solar-Powered Water Purification System

Able to operate up to 20 hours on storage batteries during a disaster.

Recharges via sunlight and operates continuously.

Comes with suction pump for water intake, enabling automatic operation from a water tank.

Able to be recharged via a 100 V power source – always

Equipped with reverse osmosis membrane device, dramatically increasing water safety.

Kankyou Kougaku Inc.

Add.: 2-40-11 Kamiikedai, Ota City, Tokyo 145-0064

Tel.: +81-3-3720-4800 Fax: +81-3-3720-4700 Email: info@aqua-street.com URL: http://www.agua-street.com

LOHAS Grand Prize (two consecutive years)

Mass-production nanofiber melt spinning machine



This can be used against environmental pollution including absorbing oil and wastewater leaked from factories and agri-materials.

Our company developed a manufacturing apparatus for nanofiber that is formed from less than 1 micron (1,000 nm) diameter fibers and patented it in July 2017. Our manufacturing apparatus is one of the best apparatus in Japan capable of producing 6 kg of about 500 nm nanofiber per hour. This epoch-making new nanofiber material can be applied in a wide range of fields and offers high performance beyond that of conventional materials and new performance beyond that of conventional materials.

These include sound absorption, thermal insulation, oil absorption, heat retention, agri-material, decontamination, virus prevention, air filters and in-water filters.

We also suggest new materials and new businesses for applying nanofiber.

Kansai Electronics Co., Ltd.

Add.: Techno FRONT Morigasaki #208-509, 4-6-15 Omori-Minami, Ota City, Tokyo 143-0013 Tel.:+81-3-6423-2858

Fax: +81-3-6423-2857 E-mail: kansai_eigyo@kansaidenshi.co.jp

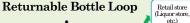
URL: https://www.kansaidenshi.co.jp Won the Special Award at the 2016 New Value Creation

Won the Special Award of the Going-Global Innovation Competition at the Tokyo International Industry Exhibition 2017 Selected as "Prototype Customer Needs Evaluation, Improvement and Subsidized Business" and "Subsidized Business of the Next Generation'

Eco-friendly and 100% natural glass bottles













Glass bottles attract attention as an eco-friendly resource since the main component of the glass bottles used to contain food and drink is made of silica sand, lime and soda ash that exist in our natural world.

Glass bottles are classified into two types. Glass bottles used as 1.8 liter bottles and beer bottles are called returnable bottles and reduced environmental burdens can be expected since CO₂ emissions can be reduced and suppressed by washing them repeatedly. Glass bottles used for jams and salmon flakes are called one-way bottles and people sort them by color to recycle the raw materials for new glass bottles.

In recent years, glass bottles are contributing to environmental preservation since the increasing weight reduction of glass bottles lessens fuel consumption for transportation. With the cooperation of the National Bottle Trade Association and glass bottle manufacturing factories, we are continuing research on bottle shapes that are easy to wash, even with small amounts of water. Glass bottles are recognized once again as eco-friendly resources leading to no waste and having a low environmental burden since most of them are reusable and recyclable.

Kyofuku Shoten KK

Add.: 2-15-3 Keihinjima, Ota City, Tokyo 143-0003

Tel.: +81-3-5755-7031 Fax: +81-3-5755-7036 URL: http://www.kyo-fuku.jp

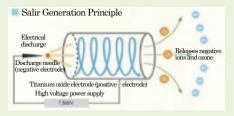
Eco-Action 21 certified

Salir Medical Substance Generator (Air Purifier)



Patented Product

The Salir core is a device we have developed that uses a new method to generate negative ions and low-concentration ozone.



Salir is a filter-free and motor-free medical substance generator (air purifier).

Concern for short motor lives is now irrelevant since Salir is motor-free and will run for many years. The titanium electrode that strongly attracts dust can also be used for a very long time since it is washable. No disposable filter is needed and Salir is truly friendly to our global environment.

Salir is motor-free, making it quiet compared to standard air purifiers with motors and promoting usage in locations such as care homes for the elderly and hospitals.

Cleaning maintenance is required every 3 months to remove fine dust adhesion from the electrode.

Kyoritsu Denki Sangyo KK

Add.: 1-10-5 Higashimagome, Ota City, Tokyo 143-0022

Tel.: +81-3-3777-1998 Fax: +81-3-3777-2024 Email: salir@outlook.jp URL: http://kyoritsu-e.com

Digital pack test & Multi SP



Product name: Digital pack test & Multi SP Model: DPM-MTSP

Display languages: Japanese, English Power supply: AC adapter or 5 AA-size alkaline batteries

Dimensions: L $185 \times W 205 \times H 95 \text{ mm}$ Weight: 1.1 kg

[Features]

- Measurement of up to 70 items is available with a single unit*
- Simultaneous measurement of up to 4 specimens and 4 items is available
- Density, absorbance, spectrum, timescanning
- Convenient battery drive for mobility
- Required reagent for measurement differs depending on the item.

The digital pack test & Multi SP is a water quality meter that can express the conventional pack test in numerical values to satisfy this demand. In addition, it also has a spectrophotometer and saves data. It is a portable multi-item water quality meter.

A pack test, which is a simplified water inspection test that anyone can conduct anywhere, is used in a wide range of applications since approximate measurement values can be easily obtained by visual inspection. However, in addition to obtaining approximate values by visually checking, the demand for numerical value management has also been increasing in recent years due to stricter regulations and rising awareness of environmental issues.

KYORITSU CHEMICAL-CHECK Lab., Corp.

Add.: 5-37-11 Denenchofu, Ota City, Tokyo 145-0071

Tel.: +81-3-3721-9207 Fax: +81-3-3721-0666

Email: kyoritsu @kyoritsu-lab.co.jp

URL: http://kyoritsu-lab.co.jp/english/index.html

17th-20th Ota New Product & New Technology Contest -

Encouragement Prize

24th Ota New Product & New Technology Contest - Award of

Excellence

22nd and 26th Ota New Product & New Technology Contest - Ota ECO Promotion Award

Ota Craftsman Next Generation in 2014 - Award of Excellent

Technician

DO Saver Bottom Water Circulator





↑ Dramatic increase in dissolved oxygen

Water Cannot Get Cleaned Without Cleaning Up Sludge
The DO Saver supplies oxygen to bottom water in canals and
rivers to prevent bottom sediments from eutrophication, a cause of
water quality degradation. The result is an increase in water
clarity and the prevention of foul odors, because the water is
cleaned up by aerobic bacteria live in the bottom sediments.

Zero Running Cost

Designed to be installed on river and canal revetment, the DO Saver soaks up bottom water via tidal power and aerate the water with solar powered air pump. Accordingly, once installed and excluding maintenance, the DO Saver can be operated without using commercial power; that is, zero running cost.

Craft Works Co., Ltd.

Add.: Techno Front Morigasaki 501, 4-6-15 Omoriminami,

Ota City, Tokyo 143-0013 Tel.: +81-3-3745-4501

Fax: +81-3-3745-4501 Fax: +81-3-3745-4501 Email: affair@cwc.jp URL: http://cwc.jp

Aug. 2013 Tokyo Trial Order Certified Product Nov. 2013 New Market Pioneer Support Product

Patent: Application no. 2011-150609

Dedicated refill pack - Refillable-as-is



Hanging a liquid dish soap bag enables space-saving since there is no need to place a bottle in a narrow area near the sink; you are free of slimy bottles and bathroom slime.

In addition, it also solves the inconvenience of having difficulties in pouring the refill due to the small opening of the bottle since the contents of the replacement bag can easily be poured by widely opening the bag.

- ① Attach Refillable-as-is to the dedicated pack and hang it on the dedicated base.
- 2 Pour liquid dish soap into the dedicated bag.
- ③ Close the zipper on the dedicated bag.
- ④ Dispense the dish soap liquid from where the bag is hung.

Sanki Co., Ltd.

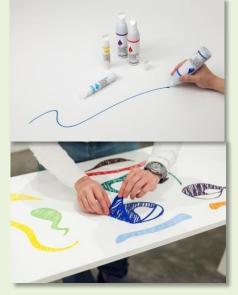
Add.: Sanki Bldg., 1-20-8 Kitakojiya, Ota City, Tokyo 144-0032

Tel.:+81-3-3742-2345 Fax: +81-3-3745-2359 Email: info@sanki-web.net URL: https://www.sanki-web.net/

33rd Ota New Product & New Technology Contest -Won the Ota ECO

Promotion Award

Masking Color: Water-based Paint that Can Be Painted On, Peeled Off and Affixed Again



- Good Design Award: Best 100 Prize
- iF Design Award Prize Masking Color Site: http://www.maskingcolor.com

When we entered our strippable water paint "Strippable" that we developed to prevent products becoming damaged and dirty during transportation and storage into the 1st Tokyo Business Design Awards, our pen type water paint "Masking Color" that can be painted on, peeled off and then can be re-adhered was created by a proposal from the designer Ryuichi Kozeki!! This product received great response when we exhibited it at the Interior Lifestyle Exhibition in June 2013 and went on to be covered extensively on television and in newspapers and magazines. Masking Color is a paint that can be used without concern about the odor even indoors because it is water paint. Moreover, this paint does not come off under rain or sunlight even outdoors. This product is friendly on people and the environment because it can be disposed of as general waste by stripping it off if it is not needed anymore. This allows everyone - from designers and artists to elementary school children - to enjoy art.

TAIYO TORYO CO., LTD.

Add.: 6-4-18 Higashikoujiya, Ota City, Tokyo 144-0033

Tel.: +81-3-3745-0111 Fax: +81-3-3743-9161

Email: postmaster@taiyotoryo.co.jp URL: http://www.taiyotoryo.co.jp

ISO14001 certified(2007)

Ota City certified excellent factory(FY2011)

26th Ota New Product & New Technology Contest - First Prize

Industrial Construction Waste Intermediate Management, Recycling, and Eco-Foam Production



Environmental Improvement Efficacy We are certified under the Eco-Action 21 environmental management system. Through the efforts of all our employees, our awareness of reducing CO₂ emissions and usage of water resources has changed. At the Tokyo Recycling Center, we set our own goals and are continuously working to improve the PDCA cycle. In addition, we have gained an understanding of underachieved goals and made their resolution easier through data visualization.

<u>Industrial Construction Waste Intermediate Management and Recycling</u>

We engage in the stable sorting and management of large volumes of mixed construction waste. In addition, we are aiming to achieve a 94% recycle rate by concentrating and integrating the knowhow, systems, technologies, networks, and safety measures we have cultivated.

Eco-foam Production

One of the new recycling techniques our firm has developed is Eco-foam production. This involves mixing the dust included in waste for which it is unavoidable to dispose of by landfill with wood chips and soft waste plastic, and shaping it. We gave the name "Eco-foam" to the formed products, and they are used as foam inhibitor in the converter used in steel manufacturing processes in steel mills.

Tokyo Recycling Center: TAKEEI Corporation

Add.: 3-4-3 Jonanjima, Ota City, Tokyo 143-0002

Tel.: +81-3-5755-8811 Fax: +81-3-5755-8815

URL: http://www.takeei.co.jp/

Eco Action 21 certified, industrial waste expert certification in the intermediate processing industry certified and patent certified as a foaming inhibitor in converters

Straight On-Off Valve (ST Type)



Helps environmental conservation via reductions in the amount of metal used in the valve and via reductions in production lines in which product is used.

A product which is lighter than conventional on-off valves (automatic globe valves) and which improves Cv performance, a weak point for globe valves, by approximately 20%. Accordingly, our product exhibits dramatic efficacy and cost reductions in new production lines it is installed in.

Product Specifications

Valve materials: SCS14/PTFE Valve bores: 15A-200A Fluid pressure: 1.0 MPa or less Fluid temp.: 150°C or less

Operation: Reverse acting Operating pressure: 0.4 MPa

TV Valve Co., Ltd.

Add.: 4-33-8 Omorihigashi, Ota City, Tokyo 143-0012

Tel.: +81-3-3763-4311 Fax: +81-3-3763-4317 Email: info@tv-valve.com URL: http://www.tv-valve.com ISO 14001 certified in 2015

Haganekko





Steel foundation
The reuse base is a foundation construction
technology that minimizes damage to the
ground and the environment like
Haganekko; the reuse base can be used for
benches, decks, pergolas and stairs.

Power generation using sunlight as a natural force is ideal. However, the initial cost is a bottleneck since it is too expensive. Our Haganekko is the result of pursuing great cost reduction by using a pile foundation construction that is more economical than the concrete foundation construction. This product firmly fixes solar panels to the ground as if they are the roots of a plant. It is easy to construct and remove thanks to the pile foundation, and minimizes damage to the ground. We promote renewable energy by publicizing Haganekko, offering quick delivery and economical solar panel installation. Haganekko is also free of landform restrictions.

TECH-TAIYO KOGYO Co., Ltd.

Add.: 4-22-8 Kamata, Ota City, Tokyo 144-0052

Tel.: +81-3-5703-1441 Fax: +81-3-5703-1444 Email: torigata-u@ttkk.co.jp URL: http://www.ttkk.co.jp

URL: http://www.ttkk.co.jp 27th Ota New Product & New Technology Contest -

Encouragement Prize

Virtual Filament Technology



Simple structure with great design, reduces manufacturing cost and increases excellent productivity.

Warm LED light source that emulates traditional incandescent lamps.

The Virtual Filament Technology is our original optic that enables to form light concentration at the tip of the transparent lens, imitating the light attribute of an incandescent filament. The LED lamp (EX-VI-WW) in which this original technology is being applied to is featured in one of Tokistar's main products, Exhibitor.

The Exhibitor Series is a decorative festoon lighting system widely used in amusement parks, shopping centers, street decorations and other commercial facilities all over the world and has succeeded to do a remarkable job of imitating the beauty and elegance of incandescent filaments.

TOKI CORPORATION

Add.: 2F JS Progre., 4-1-23, Heiwajima, Ota City, Tokyo 143-0006

Tel.: +81-3-5763-6121 Fax: +81-3-5763-6130

Email: http://www.toki.co.jp/tokistar/contact

URL: http://www.toki.co.jp/tokistar/

Ota New Product & New Technology Contest

26th Award of Excellence - Virtual filament technology

25th Award of Ota ECO Promotion - Advantage LED

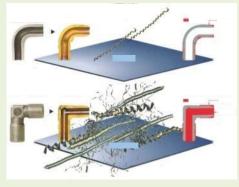
30th Excellence Award Micro Lightcannon

The 39th Invention Award, Tokyo Metropolitan Governor Prize -

Color-temperature changing Advantage LED

Haganekko





Energy Saving

LCA (Life Cycle Assessment) results show that in a comparison of a forged product with Marumi-kun from material production to product manufacturing processes, Marumi-kun achieves reductions of 21% in CO₂ emissions, 21% in NOx emissions, 27% in SOx emissions, and 27% in PM (dust and minute particle) emissions.

Unlike the conventional manufacturing method in which pipe joints are machined from forged pieces, the Marumi-kun high pressure pipe joint utilizes a new manufacturing method in which thick-walled pipes are bent and machined. This method makes possible a highly efficient integrated production system which omits the forging process, resulting in a product which significantly exceeds conventional products, as well as improvements in quality, cost, durability (passed JIS B2351 pressure test and impact resistance test), and material yields. Further, the flow path is r-shaped, reducing in-pipe pressure loss (flow path resistance) and improving the fuel consumption of equipment and machinery using Marumi-kun.

Tokiwa Seiki Co., Ltd.

Add.: 2-14-12 Omorihigashi, Ota City, Tokyo 143-0012

Tel.: +81-3-3762-5511 Fax: +81-3-3763-9144

Email: t-fukui@tokiwa-seiki.com URL: http://www.tokiwa-seiki.com

ISO 14001 certified

14th Ota New Product & New Technology Contest - First Prize 2nd New Machine Promotion Award - Small and Medium

Enterprise Agency Director-General Award

Tube forceps completely made from resin



Usable for multipurpose from medical use, disputes and disaster sources to handicraft, fishing gears and miscellaneous goods.

Our product is the world's first eco-friendly forceps, which are completely coated with surface finishing, 2-piece pean, and are all resin forceps. We alone can manufacture carbon-made black pean that appeared in dramas in Japan and caught viewer attention.

[Added value]

- Since this is all resin-made and no metal is used, it can be used for medical treatment with X-rays, used in MRI rooms, recycled and disposed of by burning.
- By using only two components, our product was slimmed down and achieved 73 percent reduced weight compared to stainless steel-made product, which is hard to achieve with conventional products.
- By applying resin materials including carbon fiber and cellulose nanofiber, we achieved products from a product having holding force as strong as metal-made products that offer greater flexibility with the same shape. It is possible to support autoclave sterilization and provide antimicrobial properties.

Nisshin Kogyo Co., Ltd.

Add.: 2-39-2 Chidori, Ota City, Tokyo 146-0083

Tel.:+81-3-3750-7593 Fax: +81-3-3757-4384

E-mail: info@nisshin-kogyo.jp URL: http://www.nisshin-kogyo.jp

Acquired ISO EMS certifications: ISO 9001/ISO 13485

Type 3 medical device manufacturing/marketing business, medical device manufacturing business

Awards received

Ota City "Certified excellent factory" (2012)

Ota Craftsman Next Generation in 2013 - Excellent Technician

Award

30th Ota New Product & New Technology Contest - First Prize Going-Global Innovations Competition 2019 - Special Award in the Product/Technology category

HHV coupler-A quick fluid coupler for high pressure hydrogen filling





[Filling on the vehicle side] [High pressure hydrogen filling nozzle]

A fuel cell automobile that runs on electricity created by the reaction of hydrogen and oxygen in the air is the ultimate eco-friendly car that emits no carbon dioxide, protecting our planet from global warming. The HHV coupler, the quick fluid coupler for high pressure hydrogen filling is a coupler that supplies high pressure hydrogen gas to a fuel cell automobile via a nozzle at hydrogen stations. Nitto Kohki Co., Ltd. is Japan's first company to produce a coupler for fuel cell automobiles as a product. The technology that enables the connection to safely and firmly supply hydrogen with pressure at 70 MPa (700 atmospheric pressure) is highly esteemed and employed for domestic hydrogen stations and Toyota's fuel cell automobile: MIRAI.

 In Ota City, Tokyo, hydrogen stations are installed at three locations: Ikegami, Minamirokugo and Haneda Airport. (As of October 2021)

Nitto Kohki Co., Ltd.

Add.: 2-9-4 Nakaikegami, Ota City, Tokyo 146 - 8555

Tel.: +81-3-3755-1111 Fax: +81-3-5700-7192

Email: kouho@nitto-kohki.co.jp URL: http://www.nitto-kohki.co.jp

ISO 14001 certified

Manufacturing and Sales of Environmentally-friendly Precision Rubber.



We Also Accept Orders for Export Product Parts

There are strict regulations overseas on the materials used in import products in order to reduce environmental loads; we provide parts which meet these requirements.

At Hatada, we use integrated production in order to be able to control the materials and chemicals used in our products, enabling us to:

- Control amounts used in accordance with PRTR
- Use materials controlled by SDS, etc.
- Manufacture products in conformance with REACH and RoHS.

We are also engaged in the management and reduction of the chemical substances used in our products.

Hatada Co., Ltd.

Add.: 2-38-18 Minamirokugo, Ota City, Tokyo 144-0045

Tel.: +81-3-5710-2818 Fax: +81-3-5710-2811

Email: rubber1955@ha-ta-da.co.jp URL: http://www.ha-ta-da.co.jp

ISO 14001 certified/Green Procurement certified

ISO 9001 certified

JIS Q 9100/9001 certified

Ota Čity certified excellent factory (FY 2021) - City-friendly product award certification

Automatic light control of natural light and lighting apparatus Product name: Hikari Yane Tsunagu (patented)



[Energy saving, energy creation and friendly light with roof]

This innovative system estimates the indoor illuminance based on solar panel output and performs automatic light control of lighting apparatuses without light sensors. Hikari Tsunagu Yane enables significant reduction in power consumption during daytime and achieves power-savings of more than 60 percent a year.

[Patent applied for in 13 countries - Contribution to the SDGs of the world: CO_2 reduction]

Patent applied for in the USA, China, India, Indonesia, Brazil, Philippines, Vietnam, Thailand, South Korea, Algeria, Canada, Malaysia and Australia

[Oasis of light project]

Hikari Yane Tsunagu has started a new development project that can create lights with various illuminances and become available for a variety of purposes by combining the lights with storage batteries.

Hikariyane Co., Ltd.

Add.: 6-6-1-404 Haneda, Ota City, Tokyo 144-0042

Tel.: +81-3-6423-2771 Fax: +81-3-6423-2771

E-mail: shigenaga.yukitoshi@hikariyane.com

URL: http://www.hikariyane.com

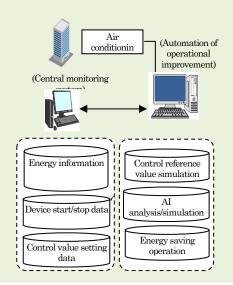
28th Ota New Product & New Technology Contest - Ota Eco

Promotion Award

Patent title: Light control system of lighting apparatus, product

name: Hikari Yane Tsunagu

Power-saving navigation system for building facilities: DiAs



[Introduction of successful use example]

A large shopping mall in Tokyo successfully reduced their electric energy consumption 47 percent by automating the start/stop and adjusting the air volume of the outside air conditioner exhaust units according to the CO₂ concentration.

DiAs*1, which we developed, is a system capable of assisting operators on site by obtaining measurement data for energy used in different areas from the central monitoring system, analyzing and simulating them with AI and graphically displaying a control method of the heat source system optimized for energy saving. DiAs is also capable of automatically operating the central monitoring system in place of operators using RPA*2 technology.

DiAs was certified with the L2-Tech*3 of the Ministry of the Environment in 2020.

*1 DiAs: (Daily energy improvement AI system)

*2 RPA: (Robotic Process Automation)

*3 L2-Tech: (LeadingLow-carbonTechnology)

Advanced low carbon technology that produces a maximum effect on reducing energy-originated CO_2 emissions

HIROSAWA ELECTRIC Co.,Ltd.

Add.: 2-13-14 Nishikojiya, Ota City, Tokyo 144-0034

Tel.:+81-3-3742-0261

Fax: +81-3-3743-1641

E-mail: takeno@e-hirosawa.co.jp (Representative: Takeno)

URL: https://www.e-hirosawa.co.jp/

Obtained ISO certificate: 9001:2015, 14001:2015

Ota City certified excellent factory

* Award in the overall category in 2009 and 2014

Environment-friendly printing



Once printed matter has completed its purpose and mission, we no longer need it. However, the best option is using paper to transmit information while keeping it economical, accurate and safe. We can help you demonstrate approaches to social contribution by promoting environmental consciousness for printed matter.

We are delivering environment-friendly printed matters that is made in comprehensive manufacturing policy by mainly using the "Waterless printing" technology that does not discharge harmful waste liquid, "FSC® certified paper" that is made in consideration of environmental protection, "Vegetable Oil Ink" that suppresses generation of VOC (volatile organic compounds), and easy-recyclable materials after use. We provide the services adopting the carbon-offset of printed matter to contribute to preventing global warming. Our 24-hour operation factory ensuring thorough implementation of energy saving measures is approved as a Green Printing Factory by the Japan Federation of Printing Industries and also certified as an Ota Excellent Factory.

Bunseikaku Co., Ltd.

Add.: 1-5-32 Showajima, Ota City, Tokyo 143-0004

Tel.:+81-3-3763-8370 Fax: +81-3-3768-2130

Email: soumu@bunseikaku.net URL: http://www.bunseikaku.co.jp ISO14001 certified (May, 2003) FSC-COC approved (April 2004)

Approved as an Excellent Environmental-conscious Factory by the Japan Federation of Printing Industries, the Commerce and Information Policy Bureau Director-General's Award of the Ministry of Economy, Trade and Industry (September 2004), Ota Excellent Factory (February 2021)

Sustainable natural lighting System "Sky Shower®"





Our Meeting Corner

Training and recreation facility





Office building

Ota City Techno Core Installation

The special mirror surface aluminum material has a reflection rate of more than 95%. This cuts ultraviolet rays and delivers bright and healthy natural light. This provides energy saving with zero power consumption.

Healing Space Produced by Natural Light: Value Greater Than Energy Saving with Lighting

By installing a special device below sky lights and light ducts, it is possible to diffuse light and brighten entire rooms. This creates a light pattern like sunbeams shining through branches of trees emerge when the sun shines and adds the

appearance of a visual production to the comfort of natural light, creating an impressive space that artificial light cannot express.

Also, by automatically adjusting the quantity of incident light without using electricity, it achieves comfortable natural illumination throughout the year and contributes to airconditioning load reduction.

You can use this to surprise guests and present the advantages of your environmental measures.

MATERIAL HOUSE CO., LTD.

Add.: 1-19-3 Nakaikegami, Ota City, Tokyo 146-0081

Tel.: +81-3-3751-5113 Fax: +81-3-3755-0065

Email: contact@materialhouse.co.jp URL: https://www.materialhouse.jp

2004: Japan Aluminum Association Award (Technical Prize) and Illuminating Engineering Society of North America Award

(International Lighting Design Prize)

2005: Illuminating Engineering Society of Japan Award (Main Prize) and 20th Ota New Product & New Technology Contest

Outstanding Performance Prize

20th Ota New Product & New Technology Contest - Award of Excellence

2009: Manufacturing Japan Award (Outstanding Performance Prize) and Eco Stage certified

2018: Illuminating Engineering Society of North America (Special Citation)

2021: JCD PRODUCT OF THE YEAR (Sustainable Product Award)

Power Saving Brushless DC Compact Compressor



We are promoting energy saving and working to reduce CO₂ emissions to contribute to global warming countermeasures.

The greatest feature of the MP-30D is that it has a DC power drive.

Since it is DC, it can be used with power supplies across the world in addition to Japan. We have been able to make the driver that controls the rotational speed in a compact size through our independent development. This is now the size of a postcard.

You can use this device under optimal conditions by controlling the rotational speed of the compressor to 1,000 to 2,000 rpm. It is possible to use this product as a vacuum pump as well as a compressor.

Energy Saving: We have reduced power consumption to 70% of conventional models

Lightweight: We have achieved a reduction in weight of 55% Please contact us if you have any problems with compact vacuum pumps and compressors.

MITSUMI MFG. CO., LTD.

Add.: 2-16-13 Higashikamata, Ota City, Tokyo 144-0031

Tel.: +81-3-3736-4341 Fax: +81-3-3736-4381

Email: info@mitsuvac.co.jp

URL: http://www.mitsuvac.co.jp

ISO9001 certified

23rd Ota New Product & New Technology Contest - Encouragement Prize Nikkei Superior Products Service Prize

Recognized as one of the "Top 300 Vibrant Manufacturing Small and Medium Sized Companies" by the Ministry of Economy, Trade and Industry Conferred the medal of the Order of the Rising Sun, Silver Rays in 2019.

High Quality and High Efficiency Metal Recycling

Tokyo Factory: Re-Tem Corporation



Manufacturing of Used Small Home Appliance Collection Boxes (Otaku)



Metals Produced by the Crushing process

Environment Improvement Effect We have expanded our business with our technological skills and management capabilities.

We realize high quality and high efficiency recycling utilizing LCA analysis and also contribute to reducing CO₂ emissions by using green power.

In addition, we publish our corporate information on our website, our company guide, CSR reports and industrial waste portal "SANPAINET".

[Recycling of Metal Waste and Consulting] We were founded in the city of Mito(Ibaraki Prefecture) in 1909 and began recycling business. After introducing a high performance special crushing sorting line in 1993, we became successful in the recycling of metal-plastic composite materials that were considered to be difficult to recycle. We built our Tokyo factory in the Tokyo Super Eco Town (Jonanjima, Otaku) zone in 2005. Here, we perform environment conscious processing that has improved the processing flow and we have achieved zero emissions in coordination with our Mito facyory. Moreover, we also provide services like environmental education and consulting by taking advantage of the expertise we have built up over many years.

The Small Home Appliance Recycling Act was enforced on April 1, 2013. Since then, we have been working to efficiently recycle useful metals and plastics from small home appliances collected in the area as an operator approved by the government.

Tokyo Factory: Re-Tem Corporation

Add.: 3-2-9 Jonanjima, Ota City, Tokyo 143-0002 Tel.: +81-3-3790-2100 Fax: +81-3-3799-8500

Email: info@re-tem.com URL: https://www.re-tem.com

Head Office: 3-6-10 Sotokanda, Chiyoda-ku Tel.: +81-3-3258-8586 Fax: +81-3-3251-5804

Mito Factory: 3520 Nagaoka, Ibaraki-machi, Higashi-Ibaraki-gun, Ibaraki311-3116

Tel.: +81-29-292-1220 Fax: +81-29-292-1225

 $ISO14001/ISO27001/OHSAS18001/JISQ31000\ certified\ Recognized\ as\ an\ Excellent\ Industrial\ Waste\ Disposal\ Operator\ (Tokyo\ and\ Ibaraki)$

Recognized as an Excellent Industrial Waste Collector and Transporter (Tokyo and Ibaraki)

Recognized as an Excellent Industrial Waste Collector and Transporter (Fukushima, Ibaraki, Tochigi, Gunma, Saitama, Chiba, Tokyo, Kanagawa and Shizuoka prefectures) Recognized as an "Industrial Waste Expert" author::zed by Tokyo Industrial Waste Processing Third-party Evaluation System

Government-certified business operator of small home electronics No.0005

Ota-ku certified excellent factory

Publication Date: March 2022

Environmental Planning Division in the Environmental Sanitation Department of Ota City

5-13-14 Kamata, Ota City, Tokyo 144-8621 Tel.: +81-3-5744-1625

Fax: +81-3-5744-1532