

# Summery

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## Product/Technology to be introduced

- Engineering, Procurement, & Construction Services for Solar Rooftop and Ground Mounted Installations for Commercial, Industrial and Utility Scale segments
- Operations and Maintenance of solar PV systems

## Application

- End-to-end of solutions from



of solar PV systems

## Counterpart we would like to meet with through matching

[Distributors] Battery Energy Storage Systems (BESS)

[Engineering Company]

Rooftop EPC: Solar Developers, Financing Companies, and Investors in RE Facilities

Utility PV Scale: Landowner (land broker), Consultants, and Land Developers

[End-Users] Cold Storages, Manufacturing Firms, Malls, Pharmaceuticals, Cement Plants

[Others] Private Resorts, Oil, Chemical, and Gas Companies

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

**Operations is focused in the Philippines**

[Sales results in the Philippines or outside Japan]

**42 megawatts (MW) of cumulative installed capacity nationwide in 2023**

## Features and Superiority

### Excellence at best price

- ✓ Systems are optimally priced and designed
- ✓ Uses only the best-in-class components sourced at the lowest cost
- ✓ Projects are executed with the highest safety and quality standards



Licensed **Philippine Contractors' Accreditation Board** company

### Extended after-sales support

- ✓ Proactively monitors the performance of all the system on a real time basis
- ✓ All issues encountered are addressed in a timely manner



Strong track record as solar EPC provider for **Japan's Joint Crediting Mechanism** program

### Enabler of Net Zero Carbon Emissions

- ✓ Helps companies successfully and efficiently transition to clean energy to attain their carbon emission reduction goals



**ISO 9001:2015 & ISO 45001:2018** Certified

## Quantitative effect by application of this product or technology

- ❖ **Reduces electricity costs.** Solar PV systems displace expensive power sourced from the grid and from diesel gensets, especially during daytime when power is most expensive. This translates to immediate savings on electricity bill.
- ❖ **Durable and low maintenance.** Solar PV systems' modules carry a **25-year performance warranty** but can last much longer than that. This means that the benefits of solar power can be enjoyed for a long time.
- ❖ **Environmentally sustainable.** Solar does not produce greenhouse gases and does not emit any pollution and noise. It has the least negative impact on the environment compared to any other energy source.



UYENO

## TRANSNATIONAL UYENO SOLAR CORPORATION

(TUSC) is a joint venture between a Filipino company, **Transnational Diversified Group**, and a Japanese company, **Uyeno Group**, which are two stable and well-respected business groups with shared advocacy to promote clean energy and environmental sustainability.



### **Alsons Aquaculture | PHILIPPINES**

- ❖ 1.6 MWp ground-mounted
- ❖ Grid-tied PV system



### **HMRID Compound | PHILIPPINES**

- ❖ 1.2 MWp cold storage facility and office building
- ❖ Grid-tied PV system
- ❖ Recipient of Japan's Joint Crediting Mechanism Program



### **TeaM Energy | PHILIPPINES**

- ❖ 3.1 MWp manufacturing facility
- ❖ Grid-tied PV system



## Product/Technology to be introduced

### *Products*

1. Energy Management System
2. Solar System
3. Battery System
4. Emergency Back Up System

### *Technologies*

1. Net Zero Energy Planner
2. Micro Grid Smart City

## Application

### *Total Energy Solution*

Solar Power, Battery Storage, Energy Saving, Emergency Power Supply, Net Zero Energy Building, Micro Grid Smart City

## Counterpart we would like to meet with through matching

[Distributors]

[Engineering Company]

[End-Users] Public and Private Facilities/ Developers/ Property Management Companies, Power Distributors

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

73 Owned Solar Farms Capacity 210MW    Sales Revenue in Year 2022    USD120 million

[Sales results in the Philippines]

Pampanga Economic Zone Solar System Installation with PEZA    5MW

Solar Farm In Davao Del Sur Power Supply to Local Distributor    5.5MW

## Features and Superiority

### *Features*

- 1.Total Energy Solutions ( Solar Power, Battery Storage, Emergency Power Supply)
- 2.ZEB ( Net Zero Energy Building)
- 3.Micro Grid Smart City

### *Superiority*

- 1.More than 20 years experiences in Japan
- 2.Competitive Cost for System investment but Also PPA (Power Purchase Agreement) is available for NO Investment Cost

## Unique technology behind features

Certified by Japanese Ministry of Economy, Trade and Industry as ZEB50(Super Market) and ZEB100 (Hotel) developed in Micro-Grid Smart City

## Quantitative effect by application of this product or technology

### 1.ZEB 50

Our Micro Grid Smart City achieved saving more than 50% less compare to the other supermarket located in same local city.

### 2.ZEB 100

We built up and operate ZEB 100 Hotel which is not buy electricity from local power distributor, generate Solar Power, Charge into the batteries and supply power to the hotel in 24 hours

## Product/Technology to be introduced

- Heat Exchanger Tube Cleaning System
- The system inject sponge balls which clean the tubes and totally avoids scale.

## Application

- Saving on Water cooled turbo chiller to energy consumption about 20% and more.
- Reduce maintenance and chemicals cost.

## Counterpart we would like to meet with through matching

[Distributors] Heat Exchanger chiller , Maintenance

[Engineering Company] Heat Exchanger installer.

[End-Users] Factory, building, Shopping mall, Hospital, School

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

- **Over 500 systems in Japan.**

[Sales results in the Philippines or outside Japan]

- **Already installed 5 customer on Japanese factory in Philippines.**

## Features and Superiority

- The mechanism of the ball cleaning system is simple. The system passes sponge balls through the tubes of a shell-and-tube heat exchanger to physically clean the tubes.
- The tubes can be cleaned repeatedly while the system is in operation. Therefore, the tubes can always stay clean. As a result, energy savings, extended equipment life, and effective maintenance are expected.

## Unique technology behind features

- The system injects sponge balls which clean the tubes and totally avoid scale.
- Less moving parts = higher reliability.
- No moving parts in the ball trap means absolutely no sponge balls are lost.

## Quantitative effect by application of this product or technology

- Energy savings of up to 20%
- With opportunities for utility rebates, our technology offers rapid financial returns
- Automation replaces manual chiller tube cleaning reducing operating costs.
- Improved chiller performance reduces carbon emissions and increases sustainability.
- Extension of capital equipment life-cycle.



## Product/Technology to be introduced

- Without using chemicals, high-frequency electrolyzed water and citric acid remove scale from cooling pipes and increase the efficiency of the heat exchanger to save energy.

## Application

- By removing scale, silica, and red rust from the water pipes of heat exchangers, condensers, and oil coolers with electrolyzed water, heat exchange efficiency is increased and energy savings of 10% to 15% is realized.

## Counterpart we would like to meet with through matching

[Distributors]

[Engineering Company]

[End-Users] Factory, Building

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

- **Over 50 Machines in Japan and overseas**

[Sales results in the Philippines or outside Japan]

- **Already installed 10 customer on Japanese factory in Philippines.**

## Features and Superiority

- By eliminating the use of any chemicals, the system is environmentally friendly, ensures worker safety, and reduces running costs. About 1% citric acid is added to high-frequency electrolyzed water, and the electrolyzed water is turned inside the water pipe for about 6 hours to remove scale.

## Unique technology behind features

- Electrolyzed water with high frequency removes scale and silica. No chemicals are used.
- No chemicals are used, so wastewater can be discharged directly into the sewage system after cleaning.

## Quantitative effect by application of this product or technology

- The heat exchange efficiency of exchangers, condensers, etc. is improved, resulting in energy savings of 10-15%. In addition, since no chemicals are used, there is no damage to the equipment to be cleaned. The system can be used for a wide range of applications, including water-cooled packaged air conditioners, compressors, and oil coolers. In addition to equipment sales, we are also developing a cleaning service business.



## Product/Technology to be introduced

IGADEN, Cooling Water and Wastewater treatment system

## Application

Purification of Cooling tower circulation water and Wastewater without using Chemical

## Counterpart we would like to meet with through matching

[Distributors]

[Engineering Company]

[End-Users] Factory, Office building, Industrial estate

[Others] A household user who has trouble with wastewater treatment or cooling system.

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

This product is now used by various well-known car companies and electronic companies in Japan

[Sales results in the Philippines or outside Japan]

**San Miguel : Their trial test results are good, although they have not been sold. They are currently considering purchasing.**

**Other major Japanese electronics manufacturers.**



## Features and Superiority

### **Water Quality and Water Purification Treatment without Chemicals**

Water quality improvement treatment system that uses electro-physical chemical reactions with no additional agent. Using our self-developed electrode material, a small amount of electrolytes with salt/ industrial salt/ seawater are used to flocculate pollutants by means of electric charges, and solid-liquid separation is performed. Another usage is to decompose and decolorize water that contains organic and nitrogenous compounds through the electrochemical oxidative decomposition process.

- No need for the chemical injection treatment conventionally used in the wastewater treatment process.
- Capable to process both organic and inorganic materials.
- Also effective against persistent substances and enables advanced treatment of a wide variety of wastewater.
- It can remove deposited silica from water, peel off and remove scale blocking pipes in circulating water lines such as in cooling tower systems. The whole process is performed without any chemicals, so no secondary environmental pollution will be caused.



## Major Features and Advantages

- Polluted wastewater treatment

It can be used to mitigate pollution in lakes, rivers, and drain water discharged from factories. Wastewater treatment tests are conducted to meet the regulation of discharge standards for rivers, oceans, lakes, marshes, and other specified discharge destinations. The product also provides custom designs to meet the needs of each customer.

- Improvement of circulating water quality such as cooling tower system

As for the water quality improvement system, its primal target is cooling tower systems where water is circulated. Namely, the system can be used for air conditioning, mold cooling, and other kinds of cooling towers owned by factories.

“MICRO WATER SYSTEM®”: Electrolysis Type Wastewater Treatment Unit | United Nations Industrial Development Organization ([unido.or.jp](http://unido.or.jp))

## Product/Technology to be introduced

LORENTZ MG: Voltage and Power Optimizer/Energy Saver.

## Application

Auto transformer that reduces the unnecessary power and losses to supply the optimal power to reduce the electricity cost.

To mitigate the current and voltage surge to conserve the equipment from surge strikes.

To provide a soft start-up of the motors.

To improve power factor.

## Counterpart we would like to meet with through matching

[Distributors] Power distribution related company and Energy saving company(ESCO)

[Engineering Company]

[End-Users]

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

**Including the predecessor company, over 10,000 units installed in Japan. Comprehensive users.**

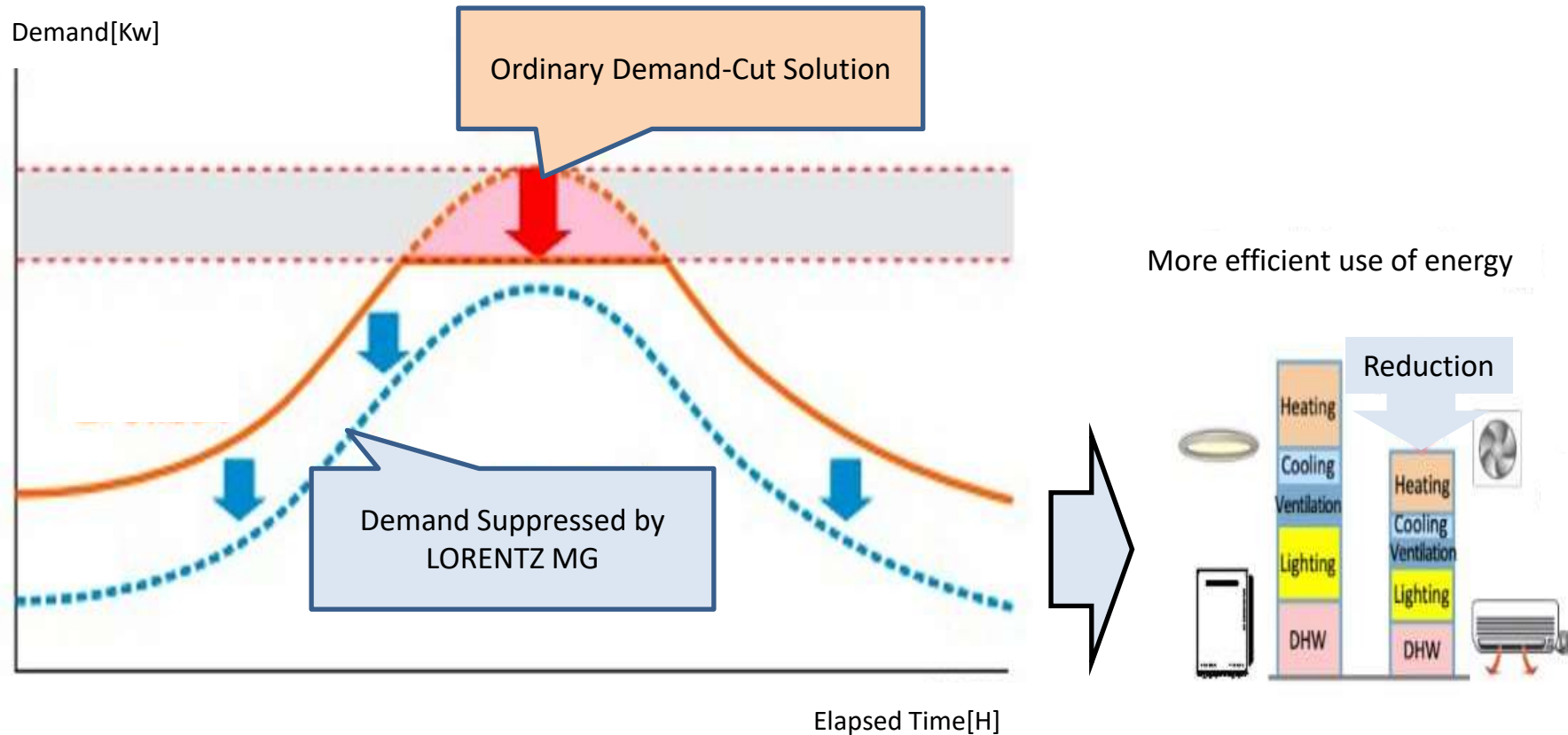
[Sales results in the Philippines or outside Japan]

**3 Units (300KVA~1250KVA)**

# Product Name: LORENTZ MG



## Features and Superiority

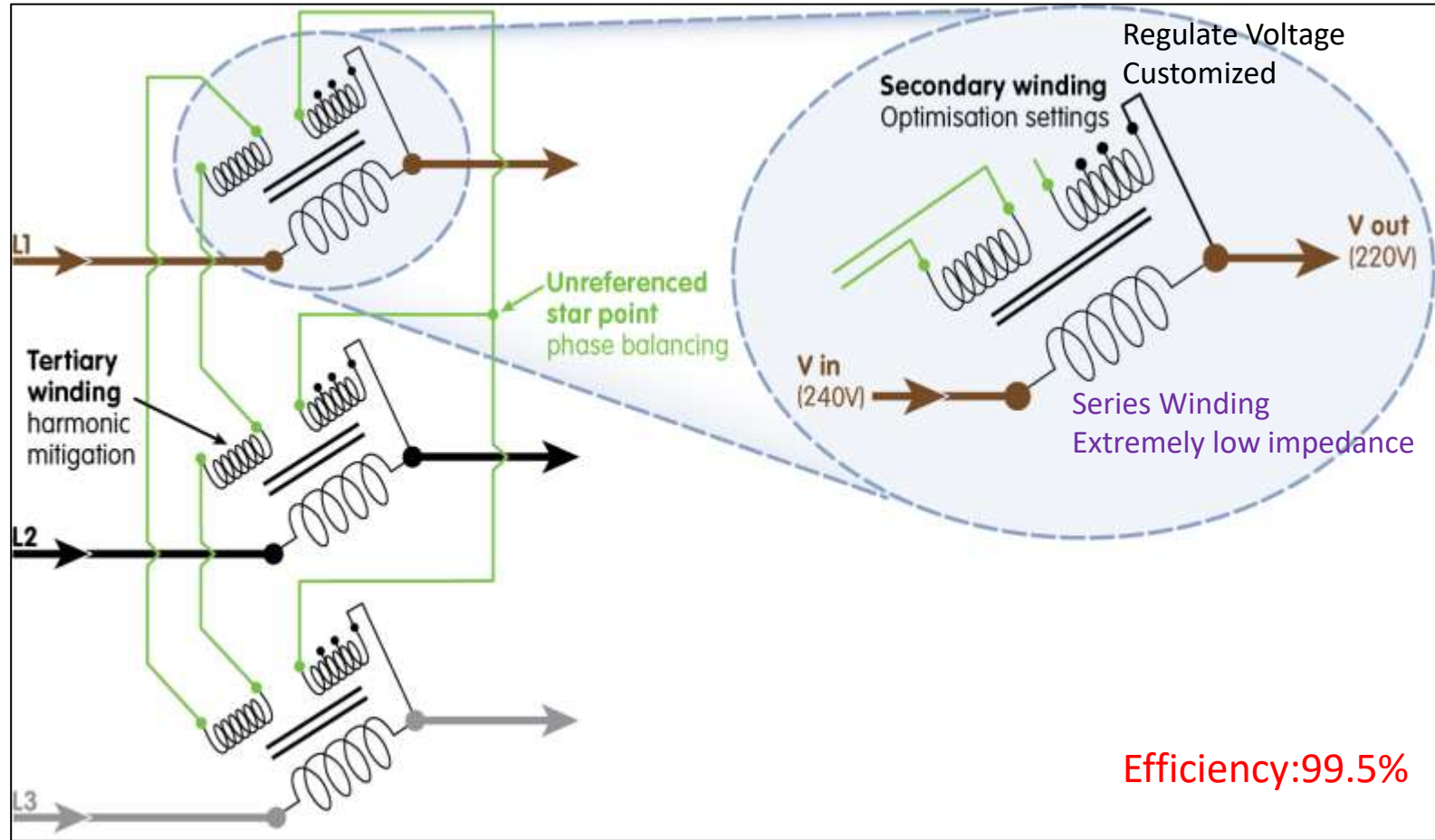


Advantageous feature—1. continual saving in 24H,365days. 2. Reduce carbon emission.  
3. Easy installation. 4. Certified by Gov “Kawasaki City”

# Product Name: LORENTZ MG



## Unique technology behind features




- Can enjoy the fruits of **energy saving by 5% to 10%**
- ✖ Saving ratio differs depending on the type of load and value of voltage.



# Product Name: LORENTZ MG



## Quantitative effect by application of this product or technology

			
Category : Office	Hotel	Factory	Supermarket
Model: 3 Phase 100KVA	3 Phase 300KVA	3 Phase 1,250KVA	3Phase 1,000~1400KVA
Yearly reduction in bill : 377,342 [JPY]	2,671,680	5,245,853	5,408,409
Return on investment: 3.2 [Years]	1	1.5	1.2
Demand reduction: 5 [Kw]	12.2	24	60.5
Yearly reduction in Kwh: 14,856 [Kwh]	105,600	207,346	348,480

Average ROI 1 ~ 3 years . No operation cost is charged. Minimum Life cycle Cost.

※ROI mainly differs depending on the operation time ,electricity rate/Kwh and conversion rate of currency.

## Product/Technology to be introduced

CMFiber

## Application

Improving the cooling tower environment to reduce power consumption

## Counterpart we would like to meet with through matching

[Distributors] Trading company

[Engineering Company]

[End-Users]

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

**10000 pieces in the past 3years**

**3million JPY (net sales in 2022FY)**

[Sales results in the Philippines or outside Japan]

**200 pieces in Thailand in the past 2 years (No sales in the Philippines)**

## Features and Superiority

- CM Fiber does not need a power source, just putting it in circulating water, absorbing impurities such as scale, slime and rust.
- It prevents obstacles such as high pressure cutting and realizes smooth operation of equipment.
- CM fiber can install with equipment operation continued.

## Unique technology behind features

CM Fiber does not need a power source,  
Just putting it in circulating water,  
Absorbing impurities such as scale, slime and rust.

## Quantitative effect by application of this product or technology

Scales and slime adhering to the inside of the cooling tower, piping and inside the heat exchanger impose a heavy burden on heat exchange.

When scale and slime are removed, the operation load of the fan and pump is greatly relaxed, and the pressure of the pump is also reduced.

## Product/Technology to be introduced

Compressor Optimization control system (EneOpt Comp)

## Application

To control compressors optimally and reduce electric power consumption.

## Counterpart we would like to meet with through matching

[Distributors]

[Engineering Company]

[End-Users] Manufacture Factory(Related Car Manufacture, Chemical, food, steel company)

[Others]

## Sales results in Japan and in the Philippines or overseas

[Sales results in Japan]

**We already installed 140 systems in Japan factory.**

[Sales results in the Philippines or outside Japan]

**In Philippines we have one system in the past three years, We have experience Indonesia, Malaysia, Thailand.**

## Features and Superiority

- The system controls compressors optimally and save electricity cost.
- You can monitor compressor running status at the centralized control system.
- The system provides many standard functions.
- No need replace old compressor.

## Unique technology behind features

- Energy savings by matching the actual load.  
(Reduce compressor operation due to unnecessary pressure fluctuations. Appropriate loading, unloading, and stopping of compressors.)
- Energy savings that match the production schedule  
(Operation automatically matches the production schedule for weekdays, holidays, and production start time. In addition to compressor operation status (load/unload/off), settings for pressure, wait time between unloading and shutdown, etc. can also be scheduled.)
- You can know the maintenance timing of compressors.

## Quantitative effect by application of this product or technology

- Can **reduce roughly 10 % of power consumption** per system according to the result among customers in Japan.

# MIURA SINGAPORE CO Pte.Ltd. Philippine Branch

URL: <http://miurasingapore.com.sg/>

## Product/Technology to be introduced

High-efficiency one-through Steam Boiler ,Water treatment equipment and Miura Intelligence Flexibility System

## Application

Heating, Boiling, Drying, Sterilization, etc.

## Counterpart we would like to meet with through matching

[Engineering Company]

[End-Users] Food, Brewery, Pharmaceutical company

[Others] Companies using steam boiler

## Sales results in Japan and in the Philippines or overseas

[Sales Steam Boiler results in Japan]

Installed Boiler 111,095 units

Sales Result 5,036 units (2021)

[Sales results in the Philippines]

Philippines Installed Boiler 180 units in the past 27 years

# One-through steam boiler : SI series

The Best Partner of  
Energy, Water and Environment

**MJURA**

## Features and Superiority

It retains less water and starts up quickly, so there is less loss.

The system that controls the number of small, high-efficiency boilers installed and reduces the risk of shutdowns.

Boiler Efficiency : 98%(Gas) , 95%(Oil)

## Unique technology behind features

Easy operation with advanced microcomputer-based boiler control technology.

Equipped with various AI functions and reports valid data in real time.

Maintenance and safe operation using sensing technology.

## Quantitative effect by application of this product or technology

Saving energy and reducing CO2 emissions and space-saving

High degree of safety

## Features and Superiority

MW water softener is designed to deliver a more consistent, highly softened water supply

24-hours continuous water service

## Unique technology behind features

Conservation of regenerating salt through split-flow regeneration

Function for evaluating regenerating salt concentration

Function for adjusting amount of regenerating salt

## Quantitative effect by application of this product or technology

Saving salt and water

Sustain the boiler efficiency



## Features and Superiority

- Real-Time monitoring
- Alarm monitoring & History
- Automatic Report Generation
- Historical Trend

## Unique technology behind features

PLC Host Communication(Optional)

The system automatically collects the operation status of equipment that Has a MIURA controller and management data including reports. The information of MIURA equipment can be easily imported into the customer's own system.

## Quantitative effect by application of this product or technology

Measurement and recording can be performed automatically without human intervention.

## Product/Technology to be introduced

- Eco Keeper System energy-saving controller For recirculating pumps

## Application

- Controller to reduce power consumption

## Counterpart we would like to meet with through matching

[Distributors]

[Engineering Company]

[End-Users] Factory, Office building, Hotels and Hospitals

## Sales results in Japan and in the Philippines or overseas

- **Pre-COVID-19: ¥18 million overseas, ¥78 million domestic**

[Sales results in the Philippines or outside Japan]

- **20 units overseas before the coronavirus. We don't have sales results in the Philippines yet.**

# Eco Keeper Meister

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## Features and Superiority

- Can be retrofitted to existing facilities and automatically switched to the conventional system in the event of a system malfunction.

## Unique technology behind features

- To achieve energy saving by controlling the carrying flow rate of a pump and the rotation speed of a fan by original control technology based on measurement sensor data.

## Quantitative effect by application of this product or technology

- Japanese customers have achieved a 35% to 65% reduction in power consumption per unit.