# Contributes to reduction of fuel costs and CO2 emissions. B fuel oil in China has successfully reduced fuel costs by about 20%.

B fuel oil in China has successfully reduced fuel costs by about 20%. At the same time, CO<sub>2</sub> was also reduced by about 20%.

CO2削減

# SDGs

Japanese Technology

It is an excellent environmentally friendly product that simultaneously reduces fuel costs and CO2 emissions.

**FUEL REFORMER** 

# EXERGY





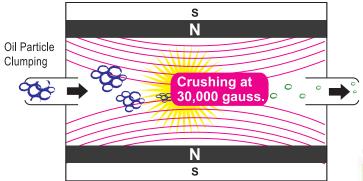
Patented in 20 countries including Japan. In the South China region, our equipment has already been delivered to more than 300 companies.

The function of our device is not to filter fuel like a filter.

It is to completely burn the fuel by pulverizing the large nonflammable oil particles in the fuel into small particles. This allows for the complete combustion of fuel that would otherwise be released into the atmosphere as soot and dust.

When the combined oil particles are 100 microns or larger, they settle in the piping and some go to the combustion chamber, where they cannot be burned and become dust soot.

# Ultra-strong repulsive force crushes clumps of oil particles.



- Oil particles of 100 microns or more are reduced to 30 microns or less through continuous circulation treatment.
- ◆Oil particles burn completely at less than 30 microns.

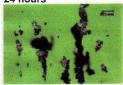
- The finer oil particles combine with oxygen to increase combustion efficiency and reduce fuel consumption.
- As combustion approaches 100%, oil particles that cannot be burned emitted as black smoke or PM decreases.
- The residual of incorporated oxygen is reduced, and the compounds NOx (nitrogen oxides) and SOx (sulfur oxides) are reduced.

\*PM is a solid or liquid component contained in black smoke and other emissions.

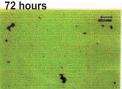
#### untreated



## Continuous processing 24 hours



Continuous processing



\*Chinese oil (heavy oil)

# Complete combustion reduces CO2 and SO2 remarkably!

It is easy to install and has a service life of approximately 18 years. No maintenance or replacement of parts is required.



#### **EFFECT**

Complete combustion of fuel oil reduces fuel consumption, and equipment costs can be amortized over a short period of time.

The reduction in fuel consumption reduces the same percentage of CO2 For a plant with an annual fuel consumption of 1,000 tones, the fuel consumption is reduced to 900 tones.

A reduction of 100 metric tons of fuel oil per year will reduce the CO2 produced by 100 metric tons to zero.

Japanese-affiliated factories in South China / Example of annual reduction (Fuel Oil A)

Company Name	Annual fuel consumption	Reduction	Fuel Reduction	Annual CO2 reduction
Omron	5, 400KL	15%	8 1 0 K L	2, 125t
Showa Plastic	1, 450KL	1 7 %	246KL	645t
Fuji Electric	830KL	20%	166KL	435t
Bridgestone	360KL	25%	90KL	197t

#### Model number and installation method will be designed after checking the site.

Model No.	Amount used/day	over-all length	Bore size
EX100	1000ℓ	810mm	3/4"
EX300	1000∼2000ℓ	900mm	3/4"
EX500	2000∼4000ℓ	1000mm	3/4"
EX800	4000∼6000ℓ	1100mm	1"
EX1000	6000∼7500ℓ	1350mm	1.5"
EX1200	7500∼10000ℓ	1500mm	2″

### **Introduction Field**

Generators, Boilers, Combustion furnaces, Trucks, Construction heavy equipment, Cranes, Ships, Kitchens, etc.

## Required Information

Monthly operating days ■Daily fuel consumption ■Monthly fuel consumption ■Oil type ■Fuel unit price ■Main tank capacity ■Day tank (small oil can) availability, etc.

Example of installation (Japanese company in China)



燃料改質装置 サブタンク上部設置



Daio seishi: Boiler



Bridgestone: Equipment & Pumps 2000 tons Ship

Omron Electronics: Generators

Delivery record (Japanese company in China)

Ricoh / YKK / Toshiba / Toray 2 plant / Brother Industries / Mandom / Meiji Dairies / Uniden / Yuasa Battery / Xerox / Seiko / Epson Mitsumi Electric / Seiko Electronics / Four Sanyo Group Companies / Toyo-Wanwa / Nisshin Kogyo / Arai Rubber / Yamashita Rubber Kanematsu Group / Takagi Auto Parts / Sankyo Seimitsu / 2 companies of Sumiden Group / 2 plants of Takahata Seiko / Shikoku Electric Wire Co. Nippon Seisen, Bando Electric Wire, Nidec, Shibakawa Denshi, Morito Jitsugyo, Hosiden, etc.