



KMX is making Technology
that increases
tomorrow's value.



www.kmxkorea.com

KMX CO., LTD

Company Introduction

Since its foundation in 2005, KMX is developing products and innovating technology to meet expectations of its customers. Our company is growing into a company that responds to environmental concerns by diversifying its business.

We have the technology of cleaning maintenance that improves the efficiency of the equipment and applies this technology to nuclear / thermal power plants, petrochemicals and general equipments.

Those years of our accumulated technology have made the chemical cleaning of the UAE desalination plants successful for the first time in the world, proving the efficiency improvement and leaping to become a global company.

In addition, our company develops scale removal devices (**DAJABARA**) to improve the efficiency of cooling towers at manufacturing sites and supplies them to domestic and foreign markets, which is energy-saving, and eco-friendly product.

Another new product, '**Safety Lighting System/ K360 Safety Light**', is very useful product in the industrial field for the purpose of safe work.

We try to become a global leading company with continuous efforts. From now on, KMX will produce better products and develop customized technologies in both domestic and global markets. The foundation for continued innovation growth will bring inspiration to customers and make us to grow into a global trend leader.

I promise to make it again. Thank you...

- Desalination Plant Efficiency Project in United Arab Emirates
- Exported Scale Collector for cooling tower (Indonesia)
- Patent registration / Scale Collector (DaJaBaRa)
- Patent registration / Safety Helmet Light (K360 Safety Light)
- Descaling Device installed in Hyundai Department Store (4 locations)
- Desalination Plant Efficiency Project in United Arab Emirates (1st)
- World's First Development of Ultrasonic Cleaning System in CPP prefilter
- Carry out many domestic power plant facilities (Condenser . CCW H/E . L/O Cooler. PHE H/E)

Company history

BUSINESS AREA

Business Area

- Manufacturing and selling Cooling Tower ScaleRemover (PATENT HOLDING)
- Manufacturing and selling K360 SAFTEY LIGHT (PATENT HOLDING)
- Designing, Manufacturing and selling CleaningEquipment (PATENT HOLDING)
- Providing Cleaningservices (Condenser. CCW H/E. L/O Cooler. PHE H/E etc)

- Supply Cleaning Agent
- Supply Industrial Pumps and valvs
- Business for Nuclear and Thermal Power Plant
- Participate in R&D



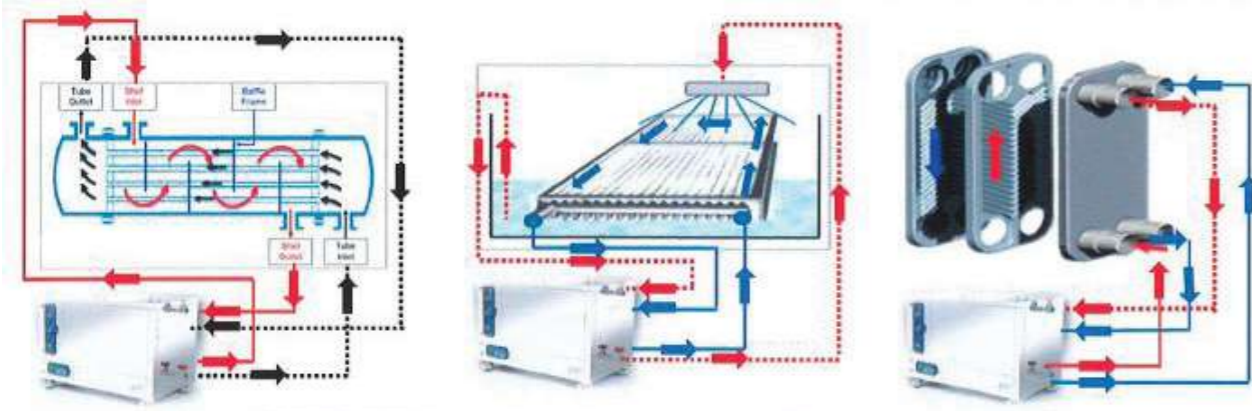
Certificates and Test Reports



DIFFERENT TYPES OF CLEANING METHODS

Cleaning Method which uses chemical with Cleaning Equipment.

Drawings OF Different Heat Exchanger with Different Types of Cleaning Methods (Shell & Tube, Fin Tube, P/E)



Decide the Cleaning Method (Circulation, Spraying, Dipping) dependent on Size of Facilities and Scale.

Circulation



Spraying



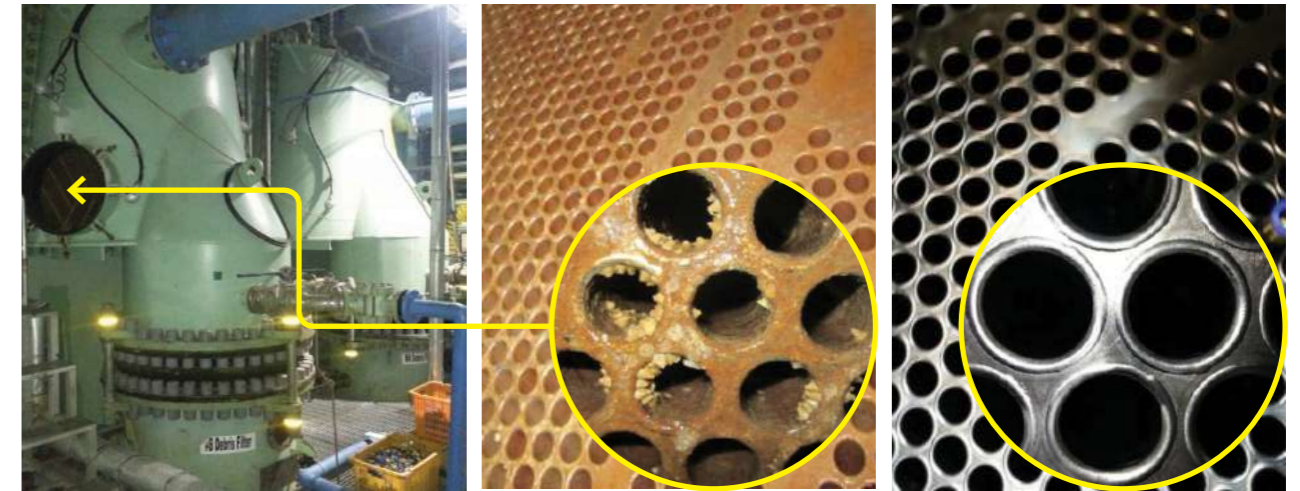
Dipping



APPLICATIONS IN POWER PLANTS

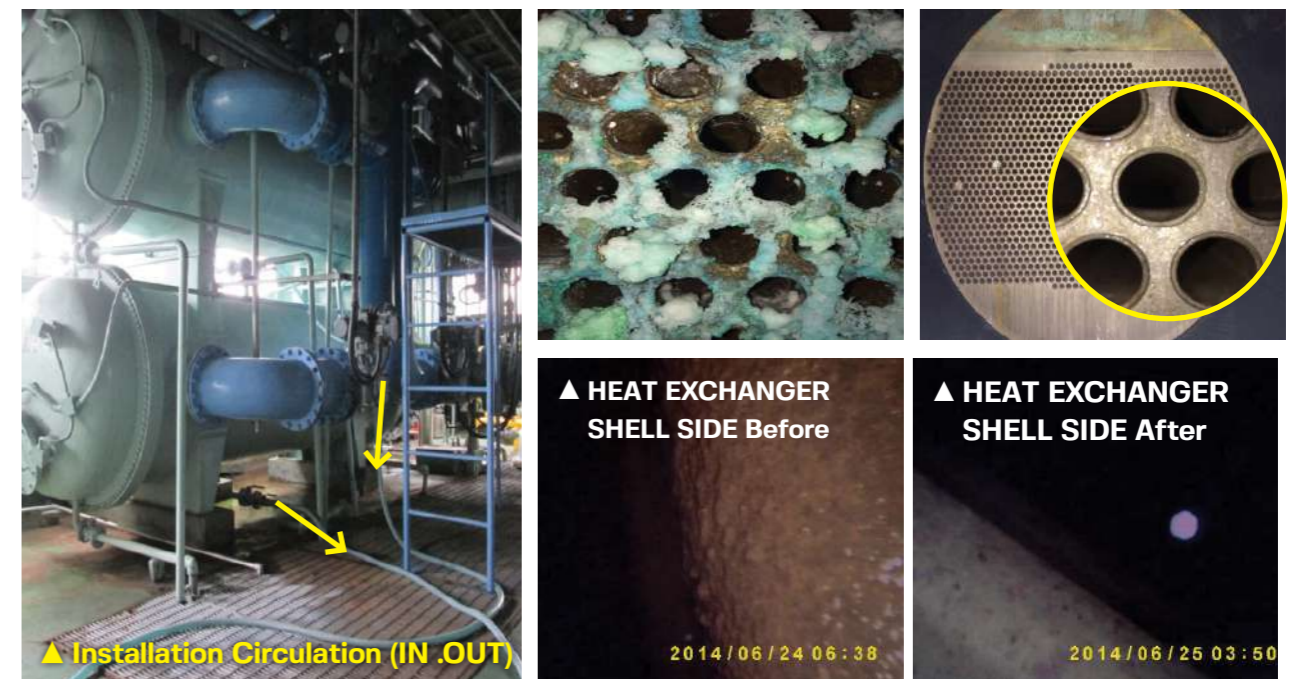
► Optimal Cleaning Method : Can remove Existing Scale which has been stuck for long period of time, Shortens Maintenance Time, Can save Costs.

Power Plant's Condenser Tubes – Scale Removal



Division	Effect of Vacuum level increase			Remark
Degree of Vacuum(mmHg)	715	719	4mmHg ↑	75MW output standard ※ Maker heat consumption rate / output revision curve applied
Turbine Heat consumption Rate(kcal/kg)	1,988.8	1,977.7	11.1 ↓	
Turbine Efficiency (%)	43.24	43.48	0.24 ↑	
Revision Output (MW)	74.30	74.70	0.40 ↑	

Power Plant's CCW Tubes – Scale Removal



▲ HEAT EXCHANGER SHELL SIDE Before

▲ HEAT EXCHANGER SHELL SIDE After

▲ Installation Circulation (IN .OUT)

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APPLICATION TO DESALINATION PLANT IN MIDDLE EAST

REMOVAL OF SCALE IN EVAPORATOR



◦ Preparation Before Cleaning



◦ Before and After Cleaning



APPLICATION TO DESALINATION PLANT IN MIDDLE EAST

REMOVAL OF SCALE IN STEAM TRANSFORMER



◦ Connecting Tube Sides with Equipment



◦ Before and After Cleaning



APPLICATION TO DESALINATION PLANT IN MIDDLE EAST

REMOVAL OF SCALE IN CONDENSER



◦ Preparation of Cleaning



◦ Before and After Cleaning

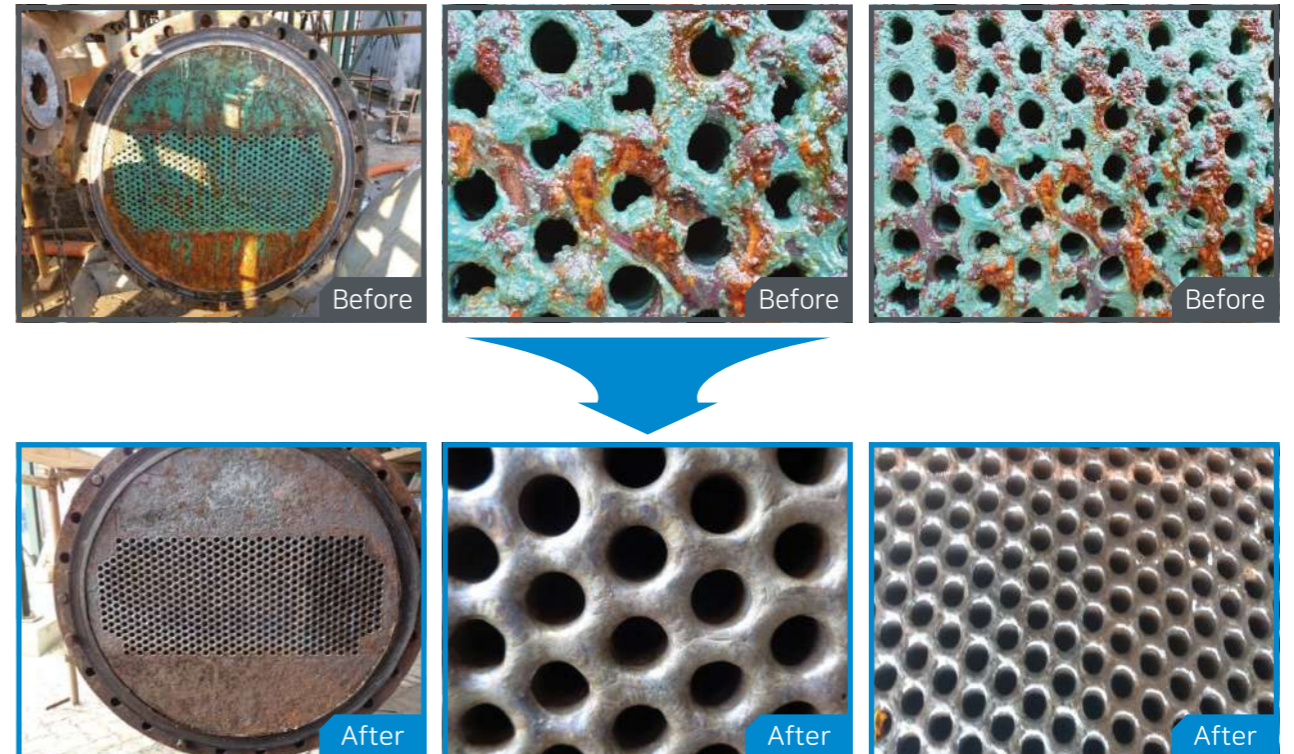


APPLICATION TO DESALINATION PLANT IN MIDDLE EAST

REMOVAL OF SCALE IN PRE HEATER



◦ Before and After Cleaning



APPLICATION TO OTHER PARTS

▶ Productivity and efficiency will improve by removing scale effectively.



Scale Removal OF Other Parts



Before



After



Before



After

Description of Scale Resolver

PRODUCT NAME	COLOR / PH	Suggested Temp. and Dilution Rate	Target Scale	Applicable Facilities
KSR-1000	1.0 ± 0.5	20~50°C 10~15%	Seawater Scale, Salt, Calcium, Lime, Corrosion, Complex scale etc.	Water Pipeline, Condenser, Boiler, H/E, Fin Tube, Shell & Tube, P/E, Chiller, Cooling Tower.
KSR-2000	Light Yellow 1.0 ± 0.5	20~50°C 20~30%	Oxidized Scale of Various Metals and Nonferrous Metals, Industrial Water Scale, Salt, Cooling Water Harness Component etc.	Hot & Cold Water Pipeline, Condenser, Boiler, Fin Tube, Chiller, Air Cooler, Cooling Tower, Repair for Metallic Parts.
KSR-3000	Colorless and Transparent 4.5 ± 0.5	20~60°C 20~100%	Oxidized Scale of Various Various Metals and Nonferrous Metals, Aluminum Equipment Corrosion Scale. etc.	Various Industrial Machinery, Equipment and Part, Hot & Cold Water Pipeline, Fin Tube, Power Plant Combustion Engine Valve, Chiller, Air Cooler, Repair for Metal and Resin Filter.
KSR-5000	Colorless and Transparent 11.5 ± 1.0	20~80°C 20~100%	Lubricants, Fuels and Oil scale.	Various Machine Parts and Lubricants, Fuel Oil, H/E.
KSR-7000	Colorless and Transparent 1.5 ± 0.5	20~50°C 20~100%	Silica and Complex Scale including. Silica.	Water Pipeline, Condenser, Boiler, H/E, Fin Tube, Shell & Tube, P/E, Chiller, Cooling Tower.
KSR-9000	Colorless and Transparent 11.5 ± 1.0	20~80°C 20~100%	Lubricants, Fuels and target hard Oil scale.	Various Machine Parts and Lubricants, Fuel Oil, H/E. Tank.

Analysis of Suitability for Different Materials

● Good ■ Suitability × Incongruity

Chemical	Carbon Steel	Stainless Steel	Copper & Brass	Aluminum	Titanium	Rubber & Plastic	Glass
KSR-1000	●	●	●	■	●	●	●
KSR-2000	●	■	●	■	●	●	●
KSR-3000	●	●	●	●	●	●	●
KSR-5000	●	●	●	●	●	●	●
KSR-7000	■	●	■	×	●	●	×
KSR-9000	●	●	●	●	●	×	●



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Factory

- Gumi Factory
- Busan Factory