

# PRODUCT PORTFOLIO

An Introduction for  
our Product's Reference Lists  
and Information



# Offshore Fresh Water Generator

In the most sophisticated offshore field, FWG for offshore is specially designed to help increase the performance of mission-critical process . No system detail has been overlooked with features of easy master control, 316L stainless steel and duplex piping connections, as well as major components like high pressure pump and membranes from world-renowned manufacturers.



# PRODUCT PORTFOLIO

## *Offshore Fresh Water Generator* KRO-100-SOS

### APPLICATION

- Offshore
- Applicable to high-salinity water

### WATER QUALITY

- Less than 500 ppm TDS

### CAPACITY

- From Seawater  
: 100 ton/day

### SPECIFICATION

- Dimension  
: 3,875 x 1,500 x 1,900 mm
- Weight  
: 600 kg
- Power Consumption  
: 33 kW
- Equipment control  
: PLC +HMI



### END USER / YEAR

- Doo-Sung Drilling Rig
- Deployed in 2013



### DESIGN CONCEPT

- Drinking water production at 40,000 ppm TDS
- Corrosion-resistant stainless frame
- All Explosion-proof valves and gauges
- Compact design and high quality

# PRODUCT PORTFOLIO

## *Offshore Fresh Water Generator* KRO-060-SOS

### APPLICATION

- Offshore
- Applicable to high-salinity water

### WATER QUALITY

- Less than 500 ppm TDS

### CAPACITY

- From Seawater  
: 60 ton/day

### SPECIFICATION

- Dimension  
: 1,900 x 1,350 x 1,700 mm
- Weight  
: 1,200 kg
- Power Consumption  
: 19.2 kW



### END USER / YEAR

- Drilling Jack-Up Unit, CJ46-X1000D
- Quantity : 4 units
- Deployed in 2013

### DESIGN CONCEPT

- Corrosion-resistant stainless frame
- All Explosion-proof valves and gauges
- Compact design and high quality

# PRODUCT PORTFOLIO

## SWRO Desalination System KRO-4800-SOD

### APPLICATION

- Shell-Technip Prelude FLNG

### CAPACITY

- 1,200 ton/day x 4 blocks

### PRODUCT FLOW QUALITY

- 1<sup>st</sup> Stage  
: 5,600 TPD / 500ppm TDS  
(50% recovery rate)
- 2<sup>nd</sup> Stage  
: 4,800 TPD / 10ppm TDS  
(85% recovery rate)
- MDG  
: below 100 ppb  
as Dissolve Oxygen

### OPERATION CONDITIONS

- Feed water quality  
: 30,000 ~ 35,000 mg/L TDS
- Feed water temp.  
: 5 ~ 30 °C
- Pressure  
: 40 ~ 70 bar
- Turbidity  
: 200 NTU Max



### END USER / YEAR

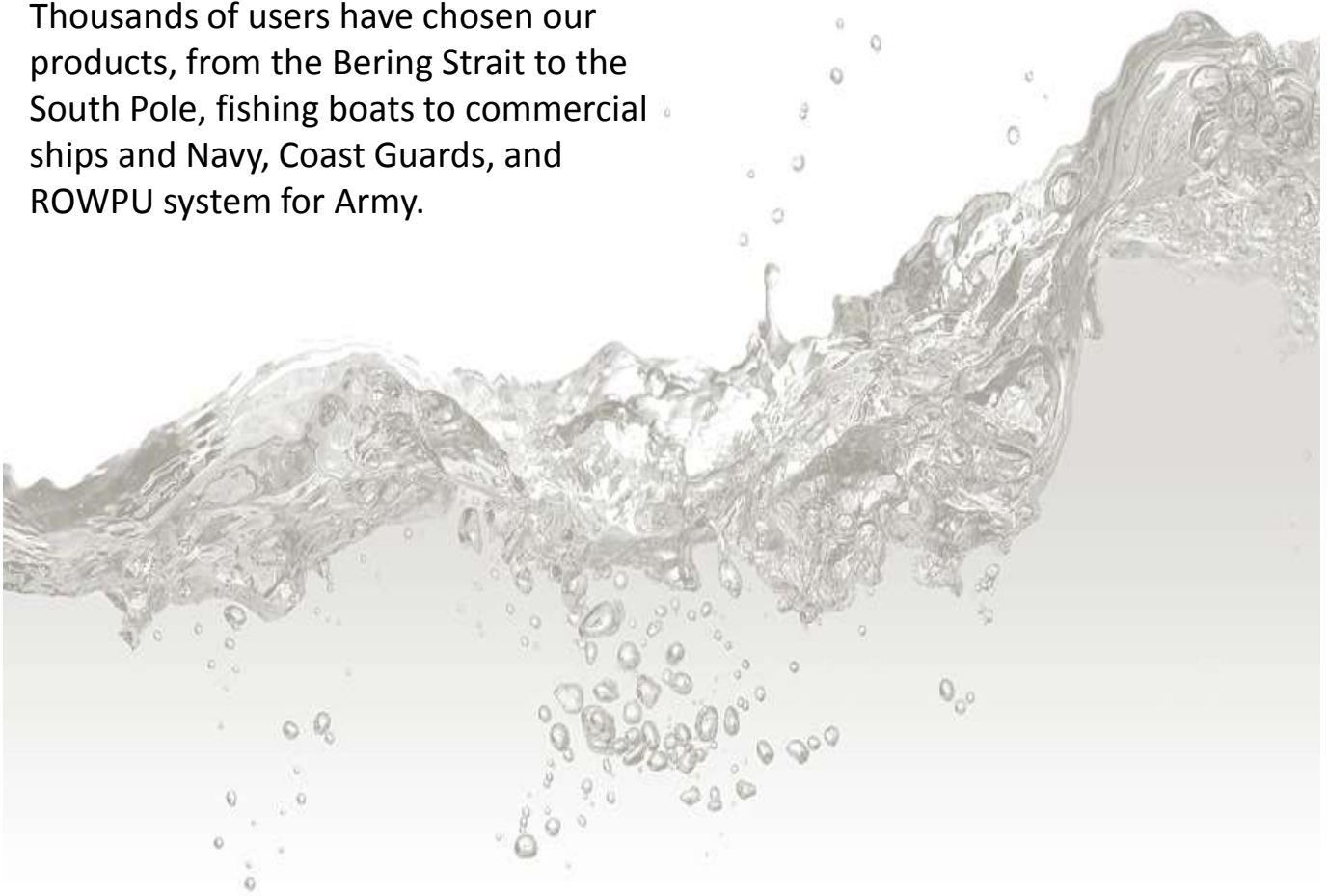
- Shell-Technip Prelude FLNG
- Deployed in 2013.09 ~ 2014.06

### DESIGN CONCEPT

- System Consist  
: Pre-treatment → 1<sup>st</sup> RO → 2<sup>nd</sup> RO → MDG
- Full double staged reverse osmosis SWRO system with MDG
- Work scope : Design, Construction, Supply & Installation

# Shipboard Fresh Water Generator

**S**ince 1980s, we have been the world leading marine SWRO manufacturer. Thousands of users have chosen our products, from the Bering Strait to the South Pole, fishing boats to commercial ships and Navy, Coast Guards, and ROWPU system for Army.



# PRODUCT PORTFOLIO

## *Shipboard Fresh Water Generator*

### KRO-050-SMD

#### APPLICATION

- Seawater desalination
- Navy or coast guard vessel

#### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS
- Pure water  
: Less than 10 ppm TDS

#### CAPACITY

- Drinking Water  
: 50ton/day
- Pure water  
: 2ton/day

#### SPECIFICATION

- Dimensions  
: 2,643 x 2,343 x 2,052 mm
- Weight  
: 3,310 kg
- Power Consumption  
: 26.2 kW
- RO Membrane  
: Spiral wound, Polyamide,  
Thin film composite
- High Pressure Pump  
: Spiral wound, Polyamide,  
Thin film composite



Aegis

#### END USER / YEAR

- Korean Navy
- Deployed from 2004

#### DESIGN CONCEPT

- Compact and light weight
- Produces drinking and pure water simultaneously
- Quiet and vibration free : meets US military specifications
- Design accredited to Korean military standards

# PRODUCT PORTFOLIO

## Shipboard Fresh Water Generator

### KRO-020-SMD

#### APPLICATION

- Seawater desalination
- Navy or coast guard vessel

#### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS
- Pure water  
: Less than 10 ppm TDS

#### CAPACITY

- Drinking Water  
: 20ton/day
- Pure water  
: 2ton/day

#### SPECIFICATION

- Dimensions  
: 1,600 x 1,500 x 1,950 mm
- Weight  
: 2,080 kg
- Power Consumption  
: 13.5 kW
- RO Membrane  
: Spiral wound, Polyamide,  
Thin film composite
- High Pressure Pump  
: Triplex ceramic  
plunger pump  
STS316 Manifold



D-040-MTS

KRO-050-MTS



DD-971

#### END USER / YEAR

- Korean Navy
- Deployed from 2004

#### DESIGN CONCEPT

- Compact and light weight
- Produces drinking and pure water simultaneously
- Quiet and vibration free : meets US military specifications
- Design accredited to Korean military standards



# PRODUCT PORTFOLIO

## *Shipboard Fresh Water Generator*

### KRO-015-SMD

#### APPLICATION

- Seawater desalination
- Navy or coast guard vessel

#### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS
- Pure water  
: Less than 10 ppm TDS

#### CAPACITY

- Drinking Water  
: 15ton/day
- Pure water  
: 1.5ton/day

#### SPECIFICATION

- Dimensions  
: 1,600 x 1,500 x 1,950 mm
- Weight  
: 1,850 kg
- Power Consumption  
: 9.7 kW
- RO Membrane  
: Spiral wound, Polyamide,  
Thin film composite
- High Pressure Pump  
: Triplex ceramic  
plunger pump  
STS316 Manifold



#### END USER / YEAR

- Korean Navy
- Deployed from 1996

#### DESIGN CONCEPT

- Compact and light weight
- Produces drinking and pure water simultaneously
- Quiet and vibration free : meets US military specifications
- Design accredited to Korean military standards

# PRODUCT PORTFOLIO

## Shipboard Fresh Water Generator

### KRO-010-SMD

#### APPLICATION

- Seawater desalination
- Navy or coast guard vessel

#### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS
- Pure water  
: Less than 10 ppm TDS

#### CAPACITY

- Drinking Water  
: 10ton/day
- Pure water  
: 1ton/day

#### SPECIFICATION

- Dimensions  
: 1,600 x 1,500 x 1,950 mm
- Weight  
: 1,760 kg
- Power Consumption  
: 9.7 kW
- RO Membrane  
: Spiral wound, Polyamide,  
Thin film composite
- High Pressure Pump  
: Triplex ceramic  
plunger pump  
STS316 Manifold



KRO-040-MTS

KRO-050-MTS



MSH-571

#### END USER / YEAR

- Korean Navy
- Deployed from 1996

#### DESIGN CONCEPT

- Compact and light weight
- Produces drinking and pure water simultaneously
- Quiet and vibration free : meets US military specifications
- Design accredited to Korean military standards

# PRODUCT PORTFOLIO

## Shipboard Fresh Water Generator

KRO-002-SMD

### APPLICATION

- Seawater desalination
- Navy or coast guard vessel

### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS
- Pure water  
: Less than 10 ppm TDS

### CAPACITY

- Drinking Water  
: 2.5ton/day
- Pure water  
: 0.5ton/day

### SPECIFICATION

- Dimensions  
: 1,600 x 1,200 x 1,500 mm
- Weight  
: 2,080 kg
- Power Consumption  
: 13.5 kW
- RO Membrane  
: Spiral wound, Polyamide,  
Thin film composite
- High Pressure Pump  
: Triplex ceramic  
plunger pump  
STS316 Manifold



PKG-711

### END USER / YEAR

- Korean Navy
- Deployed from 1998

### DESIGN CONCEPT

- Compact and light weight
- Produces drinking and pure water simultaneously
- Quiet and vibration free : meets US military specifications
- Design accredited to Korean military standards

# PRODUCT PORTFOLIO

## Shipboard Fresh Water Generator

KRO-002-SSS

### APPLICATION

- Seawater desalination
- Submarine

### WATER QUALITY

- Less than 500 ppm TDS

### CAPACITY

- Drinking Water  
: 2.5ton/day

### SPECIFICATION

- Dimensions  
: 950 x 535 x 1,060 mm
- Weight  
: 280 kg
- Power Consumption  
: 0.98 kW
- Vibration  
: MIL-STD-167-1 Typell
- Anti-Magnetic, EMC  
: MIL-STD-461E
- Impact  
: MIL-S-901D Grade B,  
Class II, Type A



### END USER / YEAR

- Korean Navy
- Deployed from 2005



P214 Class Submarine

### DESIGN CONCEPT

- Small footprint & light weight
- Superior reliability and durability  
: All 316L STS Pressure regulating valves
- No need to worry about fluctuating pressure
- Extremely quiet  
: Noise level less than 60dB

# PRODUCT PORTFOLIO

## Shipboard Fresh Water Generator Up to 6 TPD for Industrial

### APPLICATION

- Seawater desalination

### WATER Quality

- Drinking Water  
: Less than 500 ppm TDS

### CAPACITY

- Up to 2 TPD  
: 2 ton/day
- Up to 6TPD  
: 6 ton/day

### SPECIFICATION

#### Up to 2 TPD

- Dimensions  
: 710x 395 x 700 mm
- Weight  
: 60 kg
- Power Consumption  
: 3kW

#### Up to 6 TPD

- Dimensions  
: 700 x 576 x 1,300 mm
- Weight  
: 200 kg
- Power Consumption  
: 3.3 kW



Up to 2 TPD

Up to 6 TPD

### END USER / YEAR

- Fisheries and sophisticated boats
- Deployed from 1985



### DESIGN CONCEPT

- Compact and light weight
- Easy master control
- World top major components  
including high pressure pumps and membranes