2016 EDITION

KROSYS

PRODUCT PORTFOLIO

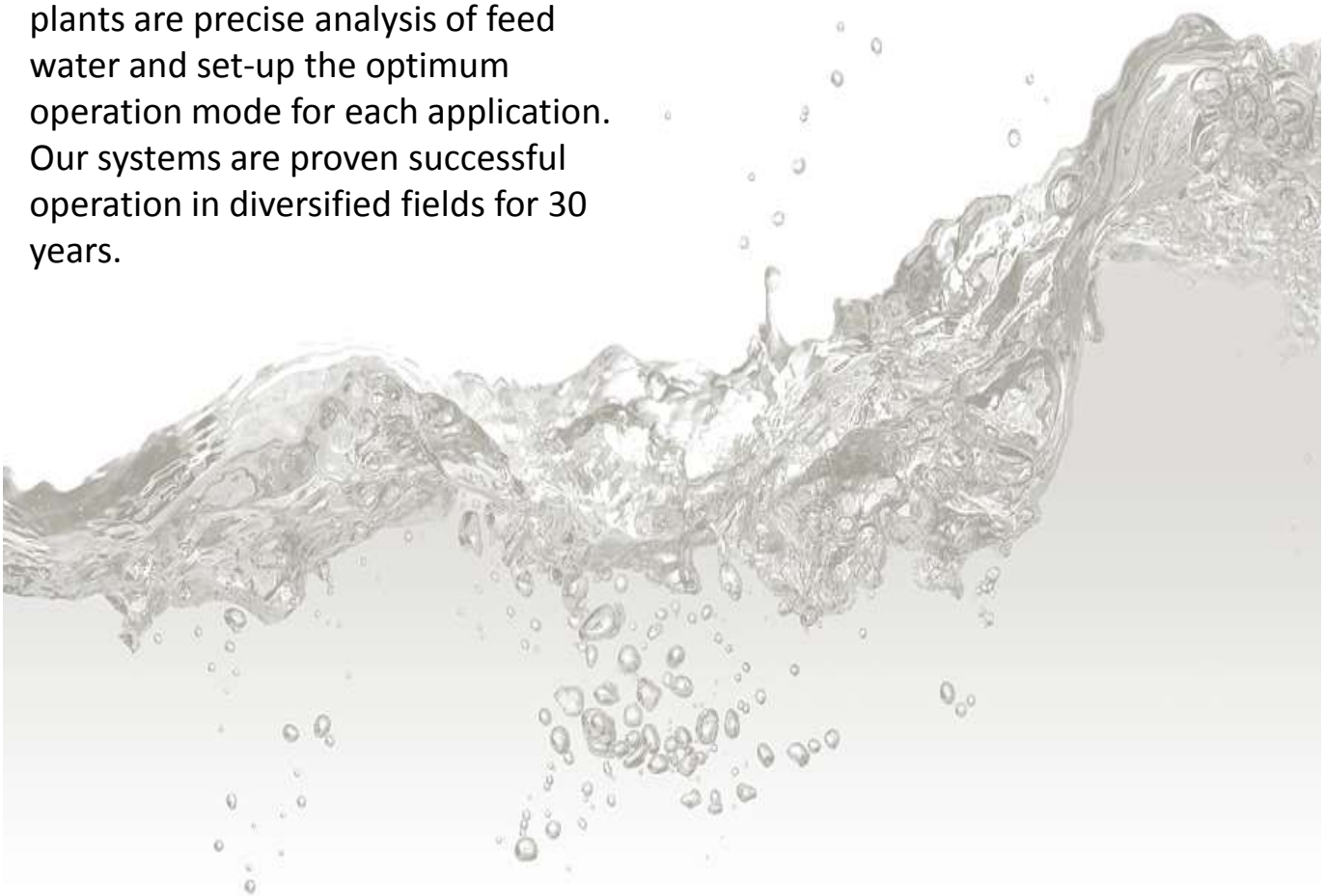
An Introduction for our Product's Reference Lists and Information

www.krosys.com

KROSYS

Water Treatment Plant

The first priority for successful design and operation of water treatment plants are precise analysis of feed water and set-up the optimum operation mode for each application. Our systems are proven successful operation in diversified fields for 30 years.



www.krosys.com

KROSYS

PRODUCT PORTFOLIO

Seawater Desalination Plant
for CEBU Power Plant

APPLICATION

- Power plant

WATER QUALITY

- Meets or exceed drinking water quality of latest edition of STANAG2136

CAPACITY

- From Seawater
  : 1,000ton/day
  (250ton/day X 4 bocks)

SPECIFICATION

- RO Membrane
  : TFC Spiral wound, 8” dia
- Energy recovery system
  : Turbo-charger

END USER / YEAR

- Cebu Power Plant(KEPCO)
- Cebu, Philippines
- Deployed in 2009

DESIGN CONCEPT

- System Consist : UF UNIT + SWRO UNIT + BWRO UNIT
- Seawater desalination for drinking water production

KROSYS

PRODUCT PORTFOLIO

Seawater Desalination Plant

For CJJV/TORAY PNG LNG

APPLICATION

- LNG power plant

WATER QUALITY

- Meets or exceed drinking water quality of latest edition of STANAG2136

CAPACITY

- From Seawater
  : 4,000ton/day
  (1,000ton/day X 4 blocks)

SPECIFICATION

- RO Membrane
  : TFC Spiral wound, 8” dia
- Energy recovery system
  : Turbo-charger


Service Water Pumps


SWRO Unit


CIP


Pretreatment Unit


SWRO Feed Pumps Unit

END USER / YEAR

- CJJV/Toray, Japan
- Papua New Guinea
- Deployed in 2010

DESIGN CONCEPT

- System Consist : Pretreatment(DMF) UNIT + SWRO UNIT
- Seawater desalination for drinking water production

KROSYS

PRODUCT PORTFOLIO

Water Treatment System Power Plant

for KIMCHEON Multi Power Plant

APPLICATION

- Process water production
- Brackish water treatment

WATER QUALITY

- Less than 10 ppb TDS

CAPACITY

- From UF Module
  : 166ton/hour
- From RO Module
  : 146ton/day
- From MBP Module
  : 98 ton/day

SPECIFICATION

- Dimensions

UF UNIT
: 3,700 x 1,900 x 3,300 mm

BWRO UNIT
: 7,000 x 2,700 x 3,300 mm

END USER / YEAR

- Lucent Engineering Co.,LTD
- Gimcheon City, Korea
- Deployed in 2011

DESIGN CONCEPT

- Compact System Footprint
- High capacity
- Easy maintenance
- Safe and reliable

KROSYS

PRODUCT PORTFOLIO

Water Reuse Pilot Plant
for KICT

APPLICATION

- Research and Development
  : Water recycle

WATER QUALITY

- Less than 100 ppm TDS

CAPACITY

- From NF Module
  : 72ton/day

SPECIFICATION

- Dimensions
  : 2,400 x 12,000 x 2,700 mm
- Weight
  : 5,500 kg
- Power Consumption
  : 30 kW
- Equipment Control
  : HMI w/ PLC Control

END USER / YEAR

- Korea Institute of Construction Technology (KICT)
- Paju city, Korea
- Deployed in 2011

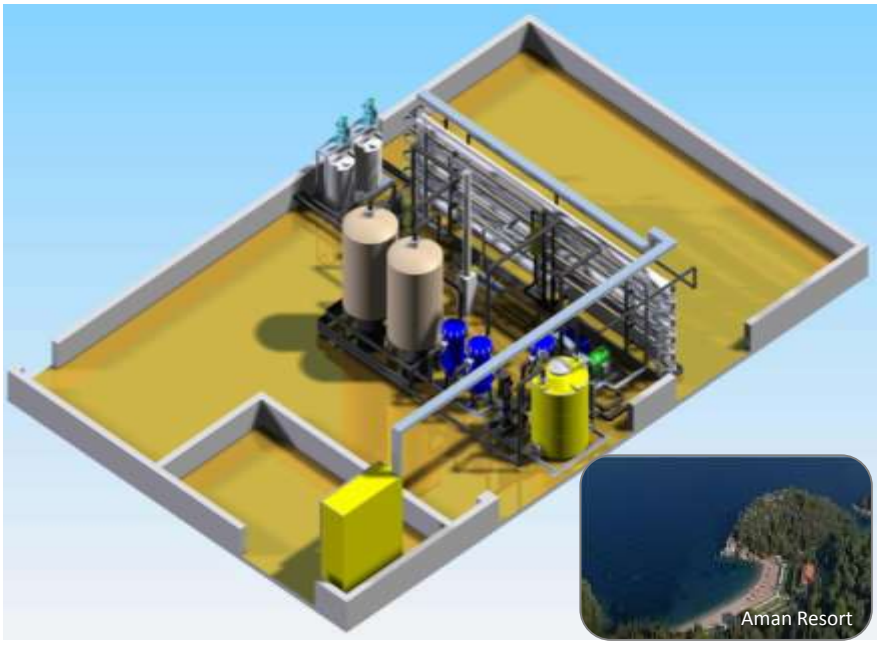
DESIGN CONCEPT

- UF/NF membrane facilities
- HMI system for Data Collections
- Containerized system

KROSYS

PRODUCT PORTFOLIO

Seawater Desalination Plant
for Philippine Amanpulo Resort



APPLICATION

- Aman Resort

WATER QUALITY

- Meets or exceed drinking water quality of latest edition of STANAG2136

CAPACITY

- From Seawater
  : 300 ton/day

SPECIFICATION

- RO Membrane
  : TFC Spiral wound, 8” dia
- Energy recovery system
  : Pressure Exchanger (PX)

END USER / YEAR

- Amanpulo Resort
- Philippines
- Deployed in 2011

DESIGN CONCEPT

- System Consist
  : Pretreatment UNIT(DMF) + SWRO UNIT
  + Post treatment Unit (U.V.)
- Seawater desalination for drinking water production

KROSYS

PRODUCT PORTFOLIO

TEST-BED UF/RO UNIT

for KOLON Environment Service

APPLICATION

- Water recycle

WATER QUALITY

- Less than 40 ppm TDS

CAPACITY

- 250 ton/day

SPECIFICATION

- Dimensions

  : 3,400 x 10,000 x 2,500 mm

- Weight

  : Approx. 7,000kg

- Power Consumption

  At Normal Operation
  : 35 kW

  At Maximum Load
  : 45 kW

- Equipment Control

  : PLC Control w/ Touch PC

END USER / YEAR

- KOLON Environment Service
- Gimcheon city, Korea
- Deployed in 2012

DESIGN CONCEPT

- UF / RO Membrane Facilities
- Cleaning-In-Place (CIP) system
- HMI system for Data Collection
- Easy operation and maintenance

KROSYS

PRODUCT PORTFOLIO

MF Test Unit

for K-Water Research Institute

APPLICATION

- Research and Development
  : Media Filtration test

CAPACITY

- From MF Module
  : 120ton/day

SPECIFICATION

- Dimensions
  : 2,300 x 1,300 x 2,540
- Weight
  : 3,000 kg
- Power Consumption
  : 9 kW
- Equipment Control
  : HMI w/ PLC Control
  Touch Screen

END USER / YEAR

- K-Water Research Institute
- Daejeon city, Korea
- Deployed in 2012

DESIGN CONCEPT

- Various operation mode
- MF membrane facilities
- HMI system for data collection
- Compact design

KROSYS

PRODUCT PORTFOLIO

NF Test Unit

for K-Water Research Institute

APPLICATION

- Research and Development
  : Nano Filtration Test

WATER QUALITY

- Less than 500 ppm TDS

CAPACITY

- From NF Module
  : 25ton/day

SPECIFICATION

- Dimensions
  : 2,350 x 5,900 x 1,700 mm
- Weight
  : 3,000 kg
- Power Consumption
  : 11.5 kW
- Equipment control
  : HMI w/ PLC Control
  Touch Screen

END USER / YEAR

- K-Water Research Institute
- Daejeon city, Korea
- Deployed in 2012

DESIGN CONCEPT

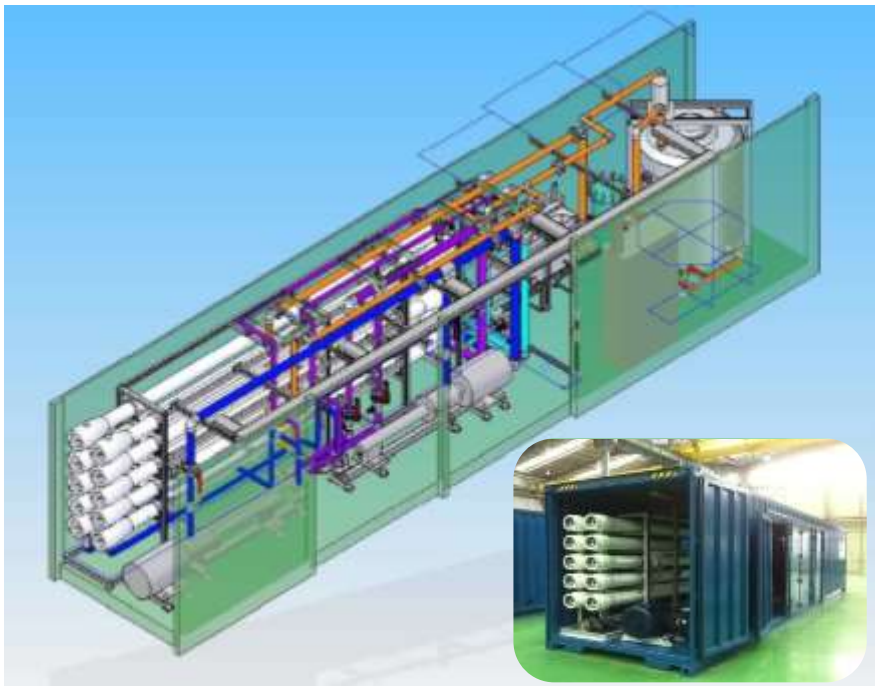
- Various operation mode
- NF membrane facilities
- HMI system for data collection
- Compact design

KROSYS

PRODUCT PORTFOLIO

Containerized SWRO System

for Daewoo Eng.&Const.



APPLICATION

- Drinking Water
- Construction Water

WATER QUALITY

- Less than 500 ppm TDS

CAPACITY

- 648ton/day (27ton/hour)

SPECIFICATION

- Dimensions
  40ft High Cubic Special Container 2 sets
  : 2,438 x 12,192 x 2,896 mm
- Power Consumption
  At Normal Operation
  : 110 kW
  At Maximum Load
  : 155 kW
- Equipment control
  : PLC Control w/ Touch PC
- Low Pressure Piping
  : PVC sch80
- High Pressure Piping
  : Duplex 2205

END USER / YEAR

- Daewoo Engineering & Construction
- Deployed in 2012
- Libya Zwitina Combined Cycle Power Plant

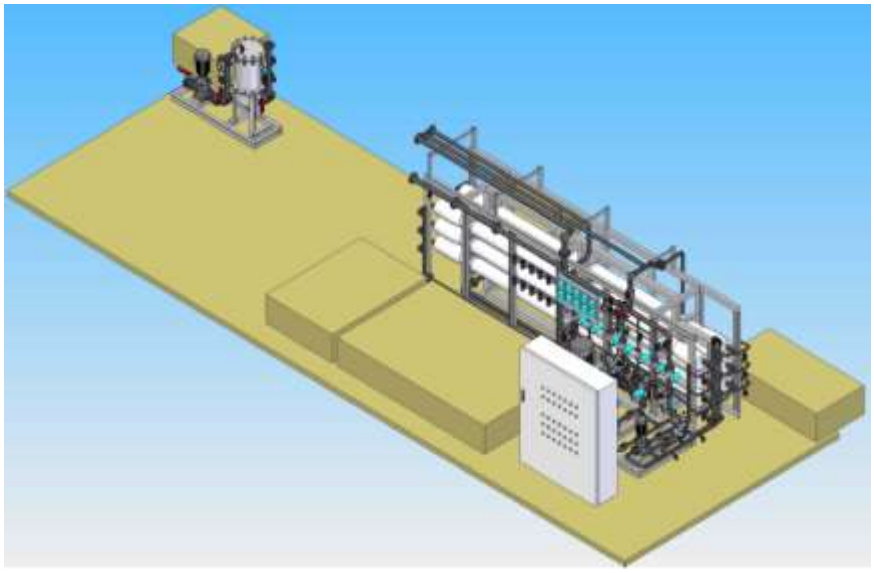
DESIGN CONCEPT

- Easily installable modular Containerized System
- Operator friendly control interface
- Energy saving by High Pressure Energy Recovery System
  : Turbine Type

KROSYS

PRODUCT PORTFOLIO

High Recovery BWRO System
for “A” Company



APPLICATION

- Research and Development
  : High recovery BWRO

WATER QUALITY

- Less than 100 ppm TDS

CAPACITY

- 450 ton/day

SPECIFICATION

- Dimensions
  : 3,120 x 6,000 x 2,100 mm
- Weight
  : Approx. 1,600 kg
- Power Consumption
  : 22 kW
- Equipment Control
  : HMI w/ PLC Control

END USER / YEAR

- “A” Company : Anonymity
- Seoul, Korea
- Deployed in 2012

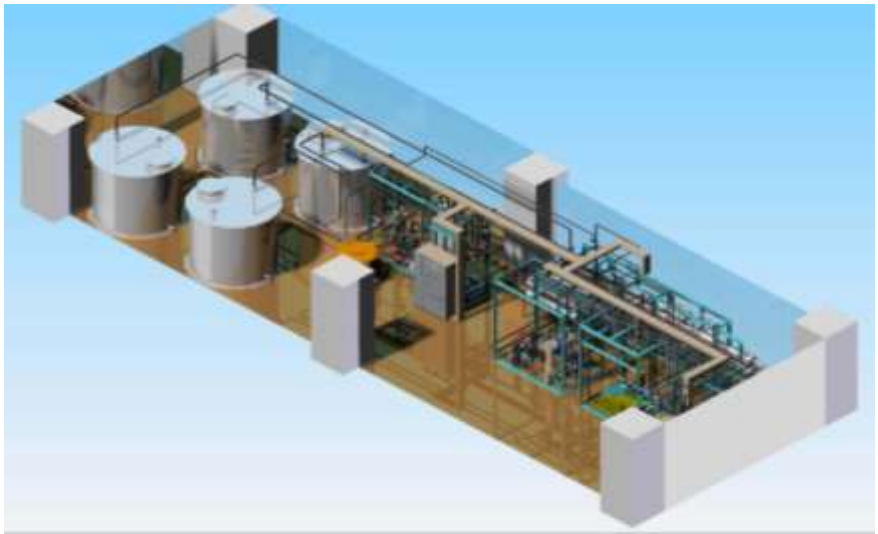
DESIGN CONCEPT

- Compact design
- HMI system for DATA COLLECTION

KROSYS

PRODUCT PORTFOLIO

Seawater Desalination Pilot Plant
for “A” company



APPLICATION

- Research and Development
  : Seawater Desalination

WATER QUALITY

- Less than 100 ppm TDS

CAPACITY

- 40ton/day

SPECIFICATION

- Dimensions
  : 3,120 x 6,000 x 2,100 mm
- Weight
  : Approx. 1,600 kg
- Power Consumption
  : 22 kW
- Equipment Control
  : HMI w/ PLC Control

END USER / YEAR

- “A” Company : Anonymity
- Seoul, Korea
- Deployed in 2012

DESIGN CONCEPT

- Compact design
- HMI system for DATA COLLECTION

KROSYS

PRODUCT PORTFOLIO

Seawater Treatment System
for Hoe-yuk Island

APPLICATION

- Seawater desalination
- Remote residential communities

WATER QUALITY

- Less than 500 ppm TDS

CAPACITY

- 20 ton / day

SPECIFICATION

- Operating Pressure
  : 50 ~ 65 kg/cm2
- Operating Temp.
  : 4 ~ 35 ℃
- Operating Salinity (Maximum)
  : 40,000 ppm TDS
- Power Consumption
  : 6.6 kW
- Equipment Control
  : PLC Control w/ Touch PC

END USER / YEAR

- Bo-Rung City Water and Wastewater Agency
- Hoe-yuk Island, Korea
- Deployed in 2012

DESIGN CONCEPT

- Operator friendly control interface
- Low maintenance requirement
- Water level transmission system installed
- Safe and reliable

KROSYS

PRODUCT PORTFOLIO

Seawater Treatment System
for Jang-go Island

APPLICATION

- Seawater desalination
- Remote residential communities

WATER QUALITY

- Less than 500 ppm TDS

CAPACITY

- 75 ton / day

SPECIFICATION

- Operating Pressure
  : 50 ~ 65 kg/cm2
- Operating Temp.
  : 4 ~ 35 ℃
- Operating Salinity (Maximum)
  : 40,000 ppm TDS
- Power Consumption
  : 20.7 kW
- Equipment Control
  : PLC Control w/ Touch PC

END USER / YEAR

- Bo-Rung City Water and Wastewater Agency
- Jan-go Island, Korea
- Deployed in 2012

DESIGN CONCEPT

- Operator friendly control interface
- Low maintenance requirement
- High capacity and compact size
- Safe and reliable

KROSYS

PRODUCT PORTFOLIO

Ultra-Pure Water System
for NFRI

APPLICATION

- Ultra-Pure water production

WATER QUALITY

- Less than 1.0 ppm TDS
- Resistivity : 17 ~ 18.2 MΩ

CAPACITY

- 240 ton/day

SPECIFICATION

- Dimensions
  : 2,100 x 9,300 x 2,500 mm
- Operating Pressure
  : 10 ~ 12 kg/cm2
- Operating Salinity (Maximum)
  : 500 ppm TDS
- Power Consumption
  : 30.0 kW
- Equipment Control
  : PLC Control w/ Touch PC

END USER / YEAR

- National Fusion Research Institute(NFRI)
- Gunman City, Korea
- Deployed in 2012

DESIGN CONCEPT

- Ultra-Pure water production
- Customized solutions : respond to all specific requirements
- State-of-the-art engineering : Mixed Bed Plusher and EDI Unit
- Reliability and guaranteed efficiency

KROSYS

PRODUCT PORTFOLIO

S3 SHUWEIHAT IPP Treatment System

For SAPCO Power Plant

APPLICATION

- Construction power plant
- Boiler water

WATER QUALITY

- Desalinated water(Service Water)
  - TDS at 25'C : < 50 μs/cm
- Demineralized water
  - Conductivity at 25'C : <0.2 μs/cm

CAPACITY

- From RO Package
  : 5,280 ton/day
- From MBP Package
  : 2,200 ton/day

SPECIFICATION

- Pretreatment system
  : Auto Strainer + UF
- RO system
  : SWRO + BWRO + Chemical dosing system
- Demi system
  : Mixed Bed Polisher

END USER / YEAR

- SAPCO
- Abu Dhabi, UAE
- Deployed in 2012

DESIGN CONCEPT

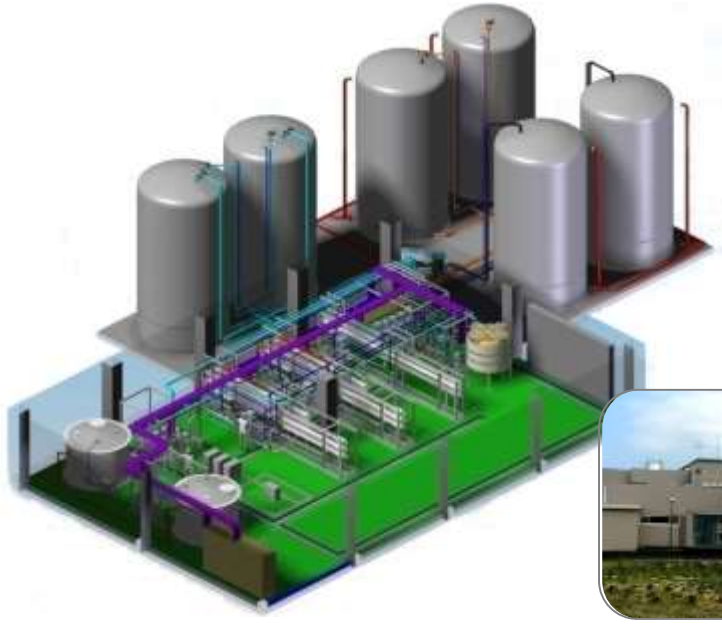
- Suitable for Power Plant
- Pure-water Production

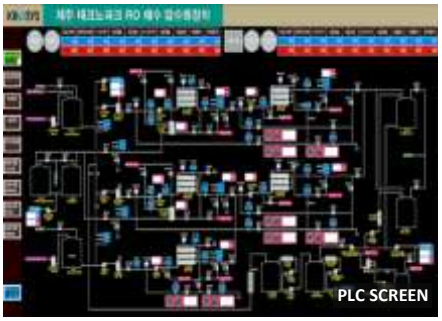
KROSYS

PRODUCT PORTFOLIO

Magma Seawater Desalination Plant

For Jeju Seawater Agency





APPLICATION

- Magma seawater desalination

WATER QUALITY

- Less than 10 ppm TDS

CAPACITY

- From Seawater
  : 500 ton/day
  (250 ton/day X 2 blocks)

END USER / YEAR

- Jeju seawater agency
- Jeju, Korea
- Deployed in 2013

DESIGN CONCEPT

- System Consist
  : SWRO UNIT + BWRO UNIT
- Concentrated water reuse

KROSYS

PRODUCT PORTFOLIO

Water Treatment Package

For LNG Floating storage & Regasification facilities

APPLICATION

- LNG Floating Storage & Regasification facilities

WATER QUALITY

- Less than 500 ppm TDS
- Meets or exceed drinking water quality of latest edition of WHO Standard

CAPACITY

- From Brackish Water
  : 7.7 ton/hour

SPECIFICATION

- Dimensions
  : 8,000 x 2,200 x 2,400 mm
- Weight
  : 5,000 kg
- Power Consumption
  : 30 Kw

CLIENT / YEAR

- PT REKAYASA INDUSTRIES
- Deployed in 2013
- Lampung, Indonesia

DESIGN CONCEPT

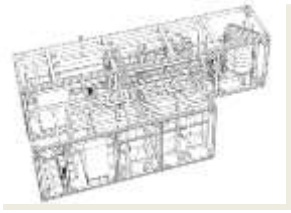
- System Consist
  : MMF Unit + RO Unit + AC Unit + CIP Unit
- High IP Rating for Outdoor Installation

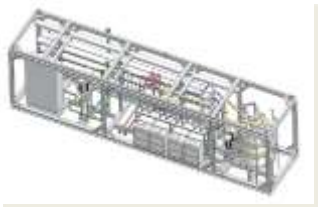
KROSYS

PRODUCT PORTFOLIO

Water Treatment System

for Construction Site for UGCC





APPLICATION

- Drinking & Utility water supply on a construction site

WATER QUALITY

- Less than 500 ppm TDS
- Meets or exceed drinking water quality of latest edition of WHO and NSF Standard

CAPACITY

- From Brackish Water
  : 600 ton/day

SPECIFICATION

- Dimensions

  Pretreatment Unit

  : 2,030 x 6,600 x 2,505 mm

  BWRO Unit

  : 2,265 x 10,000 x 2,350 mm
- Weight

  Pretreatment Unit

  : 2,600 Kg

  BWRO Unit

  : 4,950 kg
- Power Consumption

  : 70 Kw

CLIENT / YEAR

- Samsung Engineering
- Deployed in 2013
- Surgil, Uzbekistan

DESIGN CONCEPT

- System Consist

  : MMF Unit + BWRO Unit
- Installation in a container for delivery
- High recovery

KROSYS

PRODUCT PORTFOLIO

RO Membrane Test Unit

for K-water

APPLICATION

- 8” membrane test

DESIGN CONDITION

- Feed Water

  Capacity : 200 ton/day

  TDS : 100 ~ 10,000 mg/L

  Temp. : 25’C

- Product Water

  BWRO : 30 ton/day

- Recovery Rate

  15 %

END USER / YEAR

- K-water
- Daejeon, Korea
- Deployed in 2014

DESIGN CONCEPT

- System Consist

  : Chiller + Cartridge Filter + BWRO UNIT
- Circulation system of concentration and product water
- constant flux and constant pressure operation

KROSYS

PRODUCT PORTFOLIO

Containerized BWRO System
for IRAQ Badra CPF Phase 2 PJT




APPLICATION

- Drinking & Utility water supply on a construction site

WATER QUALITY

- Less than 500 ppm TDS
- Meets or exceed drinking water quality of latest edition of WHO and NSF Standard

CAPACITY

- From Brackish Water
  : 400 ton/day

SPECIFICATION

- Dimensions
  : 12,180 x 2,438 x 2,897 mm
- Weight
  : 12 ton (at dry)
- Power Consumption
  : 35 kW

CLIENT / YEAR

- Samsung Engineering
- Deployed in 2014
- Badra, Iraq

DESIGN CONCEPT

- System Consist
  : Sand Filter + Micro Filter + BWRO Unit
- High recovery : 70%
- ISO container

KROSYS

PRODUCT PORTFOLIO

Containerized SWRO System
for Ad Duwayhi Gravity-CIL GOLD PJT

APPLICATION

- Drinking & Utility water supply in the processing plant and the village

WATER QUALITY

- 1ST Pass RO Unit
  Less than 500 ppm TDS
- 2ND Pass RO Unit
  Less than 2.19 ppm TDS

CAPACITY

- 1ST Pass RO Unit
  : 192 ton/day
- 2ND Pass RO Unit
  : 124.8 ton/day

END USER / YEAR

- MG BM(Ma'aden Gold & Base Metals Co.)
- Deployed in 2014
- Ad Duwayhi, Saudi Arabia

DESIGN CONCEPT

- System Consist
  : Auto Disc + Micro Filter + 1ST Pass RO Unit + 2ND Pass RO Unit + CIP
- Recovery Rate
  1st Pass RO Unit : 40%
  2nd Pass RO Unit : 80%
  Total system : 35%

KROSYS

PRODUCT PORTFOLIO

BWRO System
for NR BWRO PJT

APPLICATION

- Supply industrial water

WATER QUALITY

- Less than 300 ppm TDS

CAPACITY

- From Brackish Water
  : 150 ton/day

SPECIFICATION

- Dimensions
  : 8,000 x 2,200 x 2,920 mm
- Weight
  : 3,364 kg (at dry)
- Power Consumption
  : 16.29 kW

END USER / YEAR

- Nihon Recycle Corporation
- Deployed in 2014
- Japan

DESIGN CONCEPT

- System Consist
  : UF Unit + BWRO Unit
- Indoor use
- Automatic operation, PLC + Touch screen

KROSYS

PRODUCT PORTFOLIO

Containerized Pre-treatment System
for Algeria TIMIMOUN PJT

APPLICATION

- Supply drinking water on a construction site

CAPACITY

- From well water
  : 800 ton/day

SPECIFICATION

- Dimensions
  : 12,190 x 2,440 x 2,930 mm
- Weight
  : 2,970 kg
- Power Consumption
  : 46 kW

END USER / YEAR

- Samsung Engineering
- Algeria
- Deployed in 2014

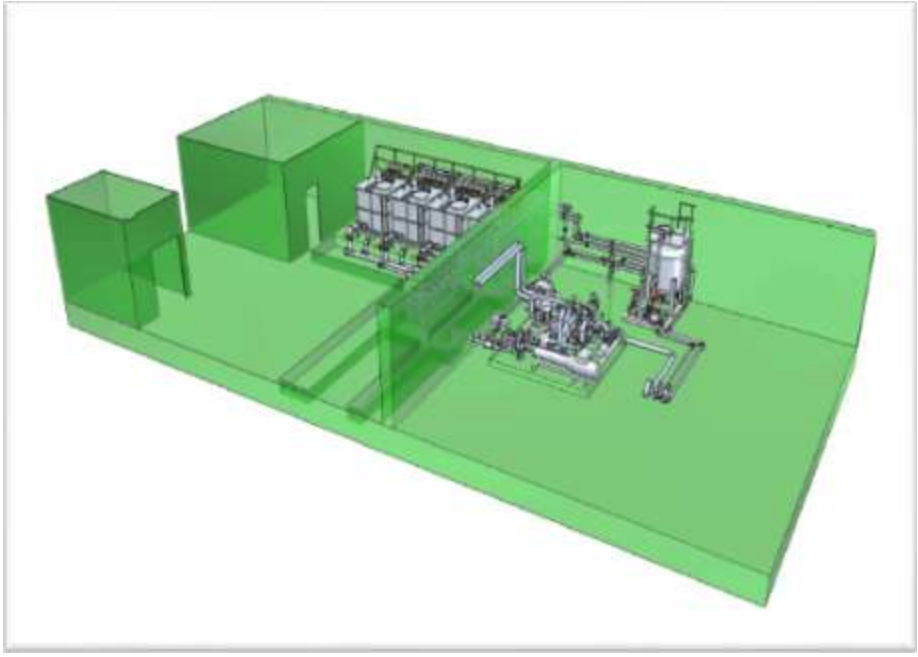
DESIGN CONCEPT

- System Consist
  : Booster Pump + Dual-Media Filter + Activated Carbon Filter
  + Micro Filter + UV

KROSYS

PRODUCT PORTFOLIO

RO Membrane Wet Test Unit
for LG Chem, Ltd.



APPLICATION

- RO Membrane Wet Test Unit

WATER QUALITY

- Less than 500 ppm TDS

CAPACITY

- SWRO Permeate 360 ㎥/day

SPECIFICATION

- Dimensions
  : 7,000 x 14,000 mm
- Weight
  : kg
- Power Consumption
  : 270 kW

END USER / YEAR

- LG Chem, Ltd.
- Cheongju, KOREA
- Deployed in 2015

DESIGN CONCEPT

- A/C Filter + Cartridge Filter + BWRO / SWRO

KROSYS

PRODUCT PORTFOLIO

Pilot Test Unit of Water Purification System
For Yangon Bottle Drinking Water PJT

APPLICATION

- Pilot test unit of water purification system

WATER QUALITY

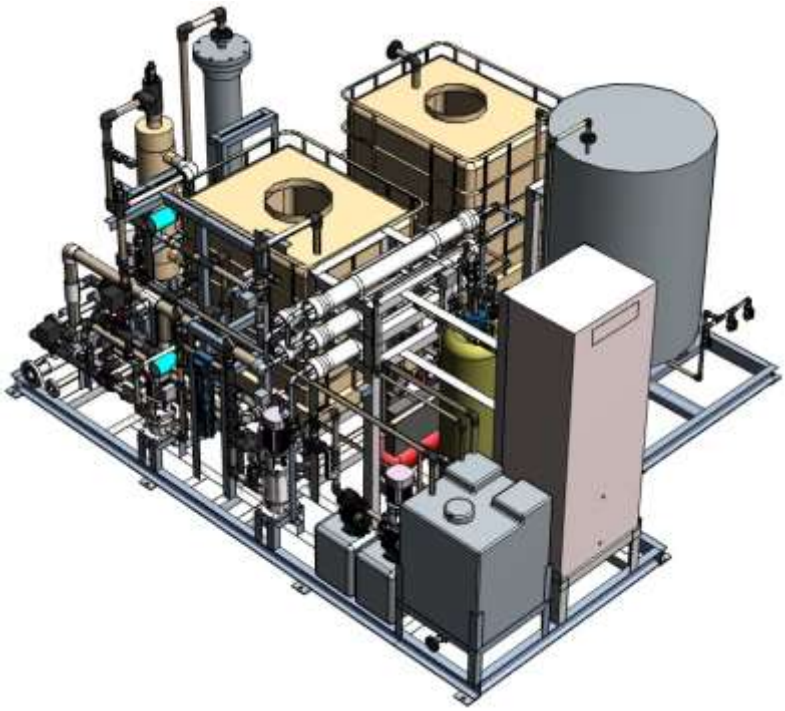
- Drinking water standard

CAPACITY

- 20 Cubic meter / day

SPECIFICATION

- Dimensions
  : 3,900 x 3,400 x 2,310 mm
- Weight
  : 1,782kg
- Power Consumption
  : 9.4 kW



END USER / YEAR

- JFE Engineering Corp.
- Yangon, MYANMAR
- Deployed in 2015

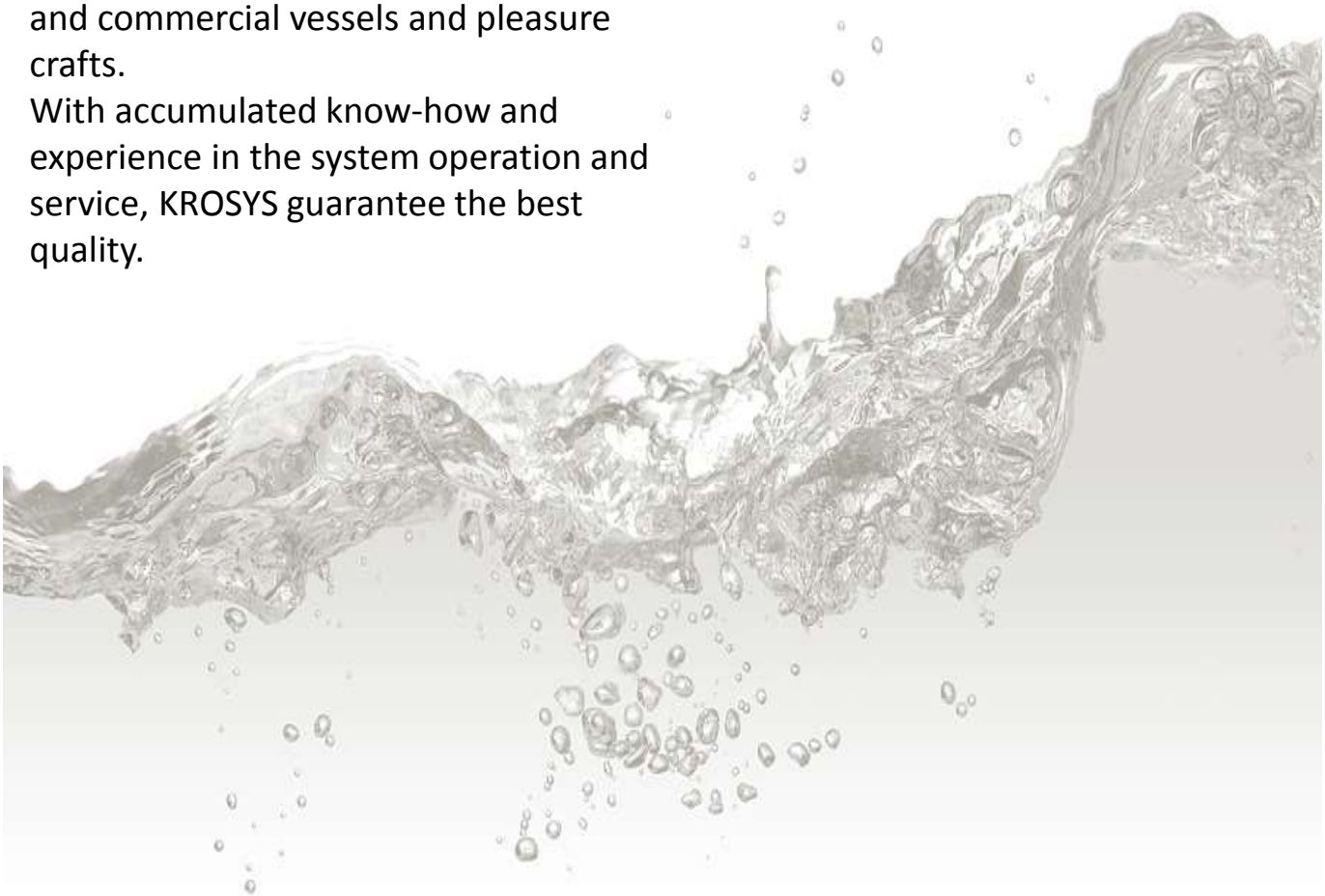
DESIGN CONCEPT

- Mn Filter -> UF- > BWRO -> Re-Mineral Filter

KROSYS

Other Systems

We also supply various range of marine equipment for both military and commercial vessels and pleasure crafts.
With accumulated know-how and experience in the system operation and service, KROSYS guarantee the best quality.



www.krosys.com

KROSYS

PRODUCT PORTFOLIO

Solar Powered Water Supply Unit

For Republic of Congo

APPLICATION

- Supply drinking water to local residents

CAPACITY

- From Deep well
  : 4 ton/day

SPECIFICATION

- Dimensions
  : 6,000 x 6,000 x 4,100 mm
- Weight
  : 1.200 kg
- Power Consumption
  : 465 W

CLIENT / YEAR

- STX COPERATION
- Republic of Congo
- 2,000 units deployed in 2013 ~ 2014

DESIGN CONCEPT

- System Consist
  : Solar pump unit + Ozone sterilizer unit + water storage tank
- Solar powered