

PRODUCT DATA SHEET

Brackish Water Reverse Osmosis (BWRO) Desalination

water | wastewater | sewage



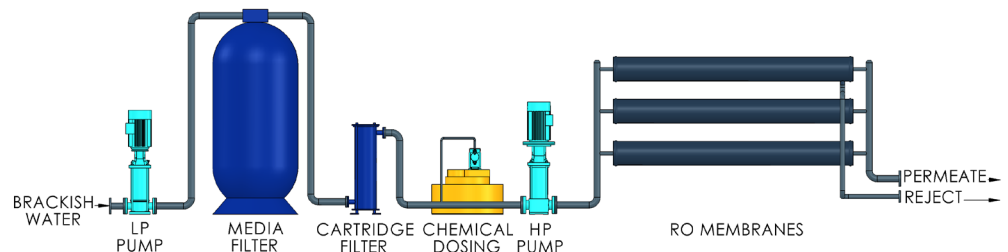
OVERVIEW

MAK Water's Brackish Water Reverse Osmosis (BWRO) plants are designed to treat ground/surface or industrial water with <5,000 mg/L of dissolved solids (TDS) and <30 mg/L of suspended solids (TSS), to achieve potable water quality. The standard treatment process involves pre filtration (auto backwashing multimedia filters and cartridge filters), anti-scalant dosing to prevent membrane scaling, RO desalination and a CIP system for membrane cleaning.

Additional pre-RO and post-RO treatment steps may be added as required to suit feed water conditions and/or treated water quality requirements. The MAK BWRO plants are available as skid mounted or containerised systems.



ADDITIONAL FLOW RATES AND CUSTOMISED SOLUTIONS ARE AVAILABLE. JUST ASK US.



STANDARD SPECIFICATIONS

Parameter	Units	BWRO-50	BWRO-100	BWRO-150	BWRO-250	BWRO-500	BWRO-1000
Permeate Flow Rate	m ³ /day	50	100	150	250	500	1000
Permeate Recovery Rate	%	60~85 (varies according to feed water quality and RO configuration)					
Permeate TDS	mg/L	<500 (typical)					
Raw Water TDS	mg/L	<5000					
Raw Water TSS	mg/L	<30					
Raw Water Temperature	°C	15 ~ 35					
Ambient Design Temperature	°C	5 ~ 45 (-15 ~ 50 for insulated containerised system)					
Feed Water Inlet Pressure	kPa	>15 (flooded suction)					
Permeate Discharge Pressure	kPa	~40 (higher discharge pressures available on request)					
Brine Discharge Pressure	kPa	~40 (higher discharge pressures available on request)					
Power Supply	–	AC 380~450 V, 3 Phase, 50/60 Hz					
Power Consumption	kW	4.1	7.7	10.5	15	29.5	52
No. Containers (Optional)	–	1 x 20'	1 x 20'	1 x 40'	1 x 40'	2 x 40'	2 x 40'

STANDARD INCLUSIONS + OPTIONS

Equipment		BWRO-50	BWRO-100	BWRO-150	BWRO-250	BWRO-500	BWRO-1000
Skid Mounted Plant & Equipment		✓	✓	✓	✓	✓	✓
Low Pressure Feed Pump		✓	✓	✓	✓	✓	✓
High Pressure RO Pump		✓	✓	✓	✓	✓	✓
Pre-filtration	Multimedia	o	✓	✓	✓	✓	✓
	Ultra Filtration	o	o	o	o	o	o
	Cartridge Filters	✓	✓	✓	✓	✓	✓
Anti Scalant Dosing System		✓	✓	✓	✓	✓	✓
Membrane CIP System		✓	✓	✓	✓	✓	✓
PLC Control System with HMI		✓	✓	✓	✓	✓	✓
Containerised system, c/w A/C & Lights		o	o	o	o	o	o
Container Insulation (walls & ceiling)		o	o	o	o	o	o
Container non-slip floor coverings		o	o	o	o	o	o
Container Side Access Door		o	o	✓	✓	✓	✓
Additional Pre-RO Treatment		o	o	o	o	o	o
Additional Post-RO Treatment		o	o	o	o	o	o
Premium Instrumentation Package		o	o	o	o	o	✓
Permeate Distribution Pump Set		o	o	o	o	o	o

✓ = Standard Supply, o = Optional Supply, – = Not Applicable

Instrumentation	Standard Package	Premium Package
Pressure Gauges	✓	✓
Pressure Transmitters (4-20 mA)	–	✓
HP RO Pump Inlet Low Pressure Switch	✓	✓
Flow Gauges (Rotameters)	✓	–
Flow Transmitters (4-20 mA)	–	✓
Conductivity Transmitter (4-20 mA)	✓	✓
Float Switches (Feed/Permeate, Chemical Dosing & CIP Tanks)	✓	✓
Remote Monitoring & Control Capabilities	–	✓

MODEL SELECTION

0050	50 m³/day - permeate flow
0100	100 m³/day - permeate flow
0150	150 m³/day - permeate flow
0250	250 m³/day - permeate flow
0500	500 m³/day - permeate flow
1000	1000 m³/day - permeate flow
XXXX	Custom permeate flow
XX	Skid mounted
CX	Containerised - standard
CF	Containerised - with floor coatings
CP	Containerised - with floor coatings & insulation
X	Pre RO treatment - standard
C	Pre RO treatment - custom
X	Post RO treatment - standard
C	Post RO treatment - custom
X	Standard instrument package
P	Premium instrument package, c/w remote monitoring
C	Custom instrument package
	Permeate distribution pump set
X	Without
C	Custom
X	Specifications - standard
C	Specifications - custom



Disclaimer: MAK Water is continuously updating and improving its products and services, so please contact us for more detailed information or to confirm specifications. MAK Water takes no responsibility for any errors resulting from the use of information contained within this document.

NEED A QUOTE?

**COMPLETE THIS TABLE
AND EMAIL TO...**

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BWRO _ _ _ _ _

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