

# PRODUCT DATA SHEET



## Brackish Water Reverse Osmosis (BWRO) Desalination

water | wastewater | sewage

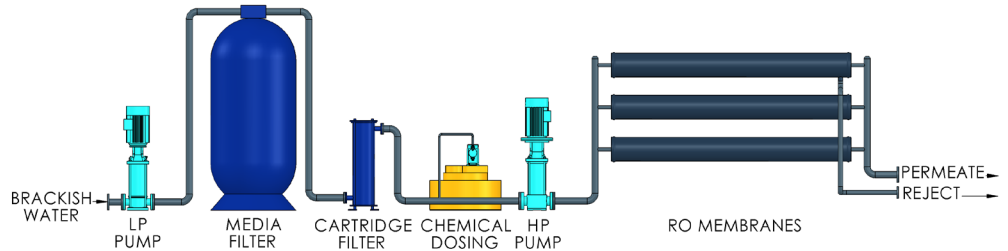
### OVERVIEW

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 <sup>3</sup> /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 m<sup>3</sup>/day - permeate flow
- 0100** 100 m<sup>3</sup>/day - permeate flow
- 0150** 150 m<sup>3</sup>/day - permeate flow
- 0250** 250 m<sup>3</sup>/day - permeate flow
- 0500** 500 m<sup>3</sup>/day - permeate flow
- 1000** 1000 m<sup>3</sup>/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

### NEED A QUOTE?

COMPLETE THIS TABLE AND EMAIL TO...

[sales@makwater.com.au](mailto:sales@makwater.com.au)



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BWRO

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