

# Water Solutions for the Manufacturing Industry



Manufacturers are constantly looking to reduce costs, reduce wastage and streamline operations. MAK Water specialises in water and wastewater treatment solutions for manufacturing applications.

From high purity demineralised water or process water treatment for re-use and recycling, to wastewater treatment for disposal or re-use, MAK Water's wide range of plant design means we can meet all your site water and wastewater treatment requirements. MAK Water takes a consultative approach to solving our clients' water problems; you can rely on us for smart advice.

# Reliable Manufacturing Expertise

## **COMPLIANT DISCHARGE EXPERIENCE.**

MAK Water has experience in many different types of manufacturing applications and provides custom designed solutions for your site to comply with local discharge requirements.

**FLEXIBLE SOLUTIONS.** Our wide range of standard designs can be fully customised to meet project specifications and applications. For short-term requirements, rapidly deployable hire plants are available. Where project funds are better employed in other areas, MAK Water can offer build-own-operate, or lease-to-own solutions.

**EQUIPMENT RELIABILITY.** In manufacturing operations equipment reliability is paramount. MAK Water has an established track record of manufacturing fully automated, high quality equipment for maximum reliability and minimum operator intervention.

**END TO END SOLUTIONS.** From the supply of process technology only, to turnkey installations, we can design, build, install, operate and maintain all of your site water and wastewater treatment requirements.



## **HEALTH, SAFETY AND THE ENVIRONMENT**

MAK Water places the Health and Safety of our people, clients and contractors, and care of the Environment as our highest priority.

**INNOVATIVE DESIGNS.** MAK Water is always looking for innovative ways to better deal with clients' water treatment solutions. We offer innovative technologies to deliver the best results in manufacturing applications.

## **24 HOUR LOCAL SUPPORT IN EACH STATE.**

A service team located in every mainland state in Australia allows for rapid deployment to sites across Australia, for both planned and unplanned maintenance and technical support of water and wastewater treatment plants.





## ≡ INDUSTRIAL WASTEWATER

### Compliant Discharge

MAK Water understands the importance of regulatory compliance for trade waste discharge and can provide full custom solutions for your manufacturing project.

MAK Water works collaboratively with you to develop solutions to meet your site discharge requirements.

Typical applications include:

- ◆ Oil water separators, gravity clarifiers and dissolved air flotation plants for wash bays
- ◆ Gravity clarifier, filtration and pH adjustment for building materials manufacturing
- ◆ Dissolved air flotation and gravity clarifiers for printing, paper and cardboard manufacturing
- ◆ Dissolved air flotation, screening and filtration for plastic and foam manufacturing
- ◆ Gravity clarifiers, filtration and pH adjustment for chemical manufacturing

### Recycling and Reuse

As water becomes more expensive and less abundant, recycling water can result in significant cost savings for your business.

MAK Water provides innovative treatment systems for water recycling and reuse onsite to minimise your wastewater discharge and water usage costs.

Typical applications include:

- ◆ Oil water separators, clarifiers and dissolved air flotation plants for vehicle or equipment wash bays
- ◆ Dissolved air flotation, screening, filtration and clarifiers for factory process water recycling
- ◆ Oil water separators, clarifiers and dissolved air flotation plants for Australian Quarantine and Inspection Service (AQIS) wash down
- ◆ Screening, filtration and clarifiers for construction sites and equipment hire locations
- ◆ Oil water separators, clarifiers and filtration plants for rain and storm water harvesting

## ≡ WATER TREATMENT

### Industrial Process

Many industrial plants require clean treated water for internal operations. MAK Water can provide solutions to produce high purity water at your manufacturing facility for various processes including operations, chemical mixing and product cleaning.

Typically the available source water used for process requires additional treatment to meet the purity standards necessary for a specific application. Reliable water treatment reduces maintenance costs for boilers, cooling towers, pumps and other process equipment.

Typical applications include:

- ◆ Demineralised water plants for boiler and cooling tower make-up
- ◆ Water softening and Ion exchange plants for boiler and cooling tower make-up
- ◆ Demineralised water for process water
- ◆ Ultrafiltration or media filtration for process water

### Potable/ Drinking Water

As water becomes more expensive, producing your own potable water, which is often used throughout the process as well as for drinking, can result in significant cost savings to your business.

MAK Water has a wide range of technologies we can use to design smart solutions for your onsite potable water production.

Typical applications include:

- ◆ Desalination plants for potable water
- ◆ Water softening plants for potable water
- ◆ Ultrafiltration or media filtration plants for potable water
- ◆ Sterilisation systems to maintain safe water storage and distribution

# Solutions

## BRACKISH WATER REVERSE OSMOSIS

Treat brackish ground, surface or industrial water to achieve potable water quality. Standard process includes pre-treatment, RO desalination and a clean-in-place (CIP) system for membrane cleaning. Add additional treatment steps as required.



## DEMINERALISED WATER REVERSE OSMOSIS

Treat fresh water to achieve high purity demineralised water. Standard process includes pre-treatment, two-pass RO desalination, permeate polishing with ion exchange or continuous electro-deionisation (CEDI), and a clean-in-place (CIP) system for membrane cleaning. Add additional treatment steps as required.



## OIL WATER SEPARATOR

Remove free floating hydrocarbons (diesel, hydraulic fluid, oil) and heavier solids from wastewater (prior to discharge) for any wash bay where hydrocarbons are present. Add additional treatment steps for reuse as required.



## MULTIMEDIA FILTRATION

Treat ground, surface, storm and waste water with suspended solids to achieve potable or process water. Standard process includes auto-backwashing multimedia filtration. Add additional filtration media and other treatment steps, such as sterilisation or pH correction, as required.



## GRAVITY CLARIFICATION

Clean water prior to reuse, or discharge to the sewer or environment to minimise the use of potable water or water supply while protecting users and the environment from contaminants in the waste stream. Compliant with local Council, DEHP, DAFF and OH&S requirements.



## DISSOLVED AIR FLOTATION

Counter-current system designed to achieve maximum treatment efficiency in a compact footprint. Removes a variety of contaminants to meet trade waste or reuse requirements.



## ULTRAFILTRATION

Treat ground, surface, storm and waste water to achieve ultra-clear filtrate that is free of viruses and bacteria. Standard process includes pre-filtration, ultrafiltration and automated membrane cleaning systems. Add additional treatment steps as required.



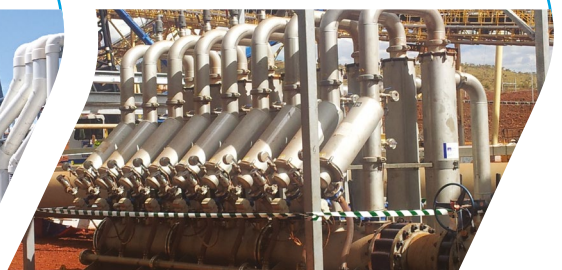
## SCREENING AND PRIMARY CLARIFICATION

Free-standing units used for the separation of settling solids from wastewater and process water through sedimentation. Sludge thickening and dewatering are performed in one compact unit, producing dry sludge. Low investment and requires very little maintenance.



## FILTRATION

Filters liquids with suspended solids through a high grade stainless steel filter element, trapping solids inside. The innovative suction pad design enables the filter to be cleaned without stopping the filtration process, automatically cleans the filter and minimises water used for backwash.







[makwater.com.au](http://makwater.com.au)  
[info@makwater.com.au](mailto:info@makwater.com.au)

#### WA

##### Perth

36 Beringarra Ave  
MALAGA WA 6090  
T +61 8 9249 8007

##### Karratha

3 Giles Crescent  
DAMPIER WA 6713  
T +61 8 9185 4118

#### NSW

##### Sydney

28/17 Lorraine Street  
PEAKHURST NSW 2210  
T +61 2 9584 3687

##### New Castle

Unit 4, 38 Wanya Road  
TEA GARDENS, NSW 2324  
T +61 7 5455 1400

#### NT

75 Woods Street  
DARWIN NT 0800  
T +61 8 8981 4042

#### QLD

##### Sunshine Coast

16/2-4 Focal Avenue  
COOLUM BEACH QLD 4573  
T +61 7 5455 1400

##### Townsville

Unit 5, 42 Keane Street  
CURRAJONG, QLD 4812  
T +61 8 8395 6122

#### VIC

17/167 Princess Highway  
HALLAM VIC 3803  
T +61 3 9314 9181

## Client Services

MAK Water are packaged plant specialists, providing industrial waste water, sewage and water treatment solutions in Australia and overseas.

For more than 20 years, our solutions have been helping clients achieve cleaner water solutions that are both cost-effective and regulatory compliant.

MAK Water offers customised water management systems, owns a substantial hire fleet, and provides service and maintenance for all types of water and wastewater treatment systems. A wide variety of consumables and chemicals for ongoing system performance and a complete range of standard products are also available.

MAK Water has built a reputation for delivering superior service and high performing systems, enabling clients to reduce operating costs and extend equipment life-cycles.

- ◆ Design
- ◆ Project Management
- ◆ Procurement
- ◆ Manufacturing
- ◆ Installation
- ◆ Commissioning
- ◆ Operation
- ◆ Service and Maintenance
- ◆ Consumables
- ◆ Spare Parts
- ◆ Equipment Hire