

CASE STUDY



PROJECT DEMINERALISED WATER FOR BOILER AND COOLING TOWER

PRODUCT Demineralised Water Reverse Osmosis
INDUSTRY Manufacturing
LOCATION Port Hedland, Western Australia

BACKGROUND

Polyfoam Australia was having issues with corrosion, scale and constant blowdown required for their boiler. The cooling tower was also having issues from poor water quality and subsequent biological growth. This is resulting in high water usage and maintenance costs.

Regular scheme water contains enough impurities to allow them to cycle up in the boilers and cooling towers causing corrosion, scale, high water usage and premature maintenance requirements. Reverse osmosis removes these impurities, preventing scale reducing maintenance and extending the life of injection moulds.

MAK Water were engaged to build a Demineralised Water Reverse Osmosis (RO) Plant to provide high quality, demineralised. water to boiler and cooling tower.

SOLUTION

A customised Demineralised Water Reverse Osmosis (DMRO) plant was required to polish scheme water and provide demineralised makeup water for both a boiler and cooling tower. Achieving the required treated water quality.

- Custom design and manufacture
- Containerised (1 x 20') with insulation, non-slip floor, air conditioning and PA door
- RO with Ion exchange polishing system
- Cooling tower side stream filtration system
- Premium instrumentation and remote monitoring
- Pressurised feed used to remove low pressure feed pumps and reduce the cost and footprint
- Fast 12 week delivery time
- On site commissioning and training of local operators

RESULTS AND BENEFITS

- **Quick response.** The DMRO plant was delivered in 12 weeks and on budget to meet the required client specifications.
- **Footprint.** Custom designed to fit into a 20' container and meet the strict footprint requirement
- **Compliance.** Maintains compliance with the required treated water quality.



Containerised Brackish Water Reverse Osmosis Plant



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