

3MLD RIVER WATER TREATMENT SYSTEM

LARGEST OF ITS KIND INSTALLED IN AN AUSTRALIAN WINERY



THE CHALLENGE

One of Australia's largest wineries needed a water treatment plant to provide filtered water equivalent to potable quality for use throughout their wine processing and bottling facility at Glossop, South Australia. Not only did the plant need to treat the historically high levels of organics and colloidal clays within the feed river water, it had to manage the variable blackwater levels that are influenced by rainfall, floods, drought and farming activities, amongst others. The winery uses, an average of 415 ML per annum of river water throughout the facility.

OUR SOLUTION

PROXA designed, supplied, delivered, installed and commissioned a new river water treatment plant that included:

- A coagulation dosing system
- 2 x 1.5MLD Ultra Filtration skids
- An automated activated carbon filtration system
- 3 x 500kL above-ground panel product storage tanks
- A booster pump skid with Ultra Violet disinfection system

HOW PROXA ADDED VALUE

PROXA's experience in delivering turnkey projects within a short time frame, coupled with our local presence and knowledge of the feed river water quality, meant that we were able to work closely with the client to achieve the winery's long-term sustainability objectives. Along with the seamless delivery of the water treatment plant. PROXA carried out the associated construction and civil works delivering a turnkey solution. The expertise displayed during the projects execution phase lead to the award of a service and maintenance contract.

PERFORMANCE TARGET

- 3MLD of potable water during vintage
- 1 MLD of potable water during non-vintage
- Filtered water quality equivalent to potable standards

FEED WATER

River Water

PRODUCT WATER

Potable Water

PROCESS

- Coagulation
- Ultra Filtration (UF)
- Media Filtration (GAC - the removal of taste odor and colour)
- Ultra Violet (UV) Disinfection

ENVIRONMENTAL PROTECTION

A blackwater event is a natural feature of lowland river systems and occurs during flooding when organic material is washed off the floodplain and into the river systems. As this material dissolves carbon levels increase and oxygen levels decrease with catastrophic short-term consequences for fish, crustaceans and other organisms. PROXA's water treatment solution manages these variable blackwater levels within the feed source maintaining product water to contractual standards.

Client: A MEMBER OF THE WINE INDUSTRY
IN SOUTH AUSTRALIA