

RYMILL COONAWARRA, SOUTH AUSTRALIA

CASE STUDY

THE CUSTOMER

Based in the Coonawarra region of South Australia, Rymill Coonawarra prides itself on having built a certified sustainable winery with a focus on minimising the impact on the environment, and making the very best the unique terra rossa soil and cool climate.

Rymill Coonawarra produces a selection of red wines, white wines and alternate wines used to explore low impact techniques in winemaking and the potential for their core range.

Water quality plays a big part in the success of winemaking, variations in water profile can impact not only the plant and equipment operation and life but also the taste and aroma of the wine. Using filtered water ensures the winemaker has better control and consistency, key for any premium product.



THE WATER CHALLENGE

There are two sources of water at Rymill Coonawarra, each with different solutions required to address the water quality challenges. Both supplies are collected on-site; Rainwater is the primary source, with the bore providing backup when required.

As is common in the area, the bore water is hard and requires softening to avoid scale deposition in equipment. The unique 'terra rossa' soil overlays chalky limestone, which naturally introduces calcium carbonate to the water. So it is no surprise that the region is known as 'The Limestone Coast'.

THE SOLUTION

Working together with a Plumber and a local Puretec dealer, the following recommendations were made for a custom setup at Rymill Coonawarra that would deliver the best possible results for their water requirements.

1

Coarse Sediment Filtration.

To stop large sediment particles from interfering with downstream treatment systems such as a softener, a MPB202B filter housing fitted with a 5 micron filter bag would be required. This also reduces the load on any final cartridge filtration, extending cartridge life.

2

Softening the Water.

To treat the elevated hardness that causes limescale, the SOL60-E3 was selected. This unit offers long resin media life and incorporates a built-in water meter to ensure the balance of continuous soft water and optimised salt use. When rainwater is in use, it bypasses the SOL60-E3, as rainwater is naturally soft.

3

Fine Sediment Filtration

To remove finer sediment from the water, the popular EM2-140 heavy-duty dual-stage filter system was selected. This system provides final filtration down to 1 micron for both water sources, prior to UV disinfection.

4

UV Sterilisation

The final stage is what makes the water safe to use. The Radfire RI-10K sterilisation kills 99.9% of bacteria and viruses, and delivers pure, microbiologically-safe water to the facility, without introducing any chemicals.

MPB202B

The Puretec MaxiPlus™ bag filter housing assembly is commonly used in high sediment, chemical and process applications where longer service life is required. Durable and lightweight polypropylene construction is used giving a compact assembly. The Puretec MPB Series is capable of flow rates of up to 180 litres per minute, 38°C temperature, and a maximum pressure of 520 kPa.

Available in 1½" connection size. The Bag filters come to suit in 1, 5, 10, 25, 50, 100 and 200 micron grades. Duplex systems, manifolded together are recommended for higher and/or uninterrupted flows. Custom design manifolds can be designed and supplied.

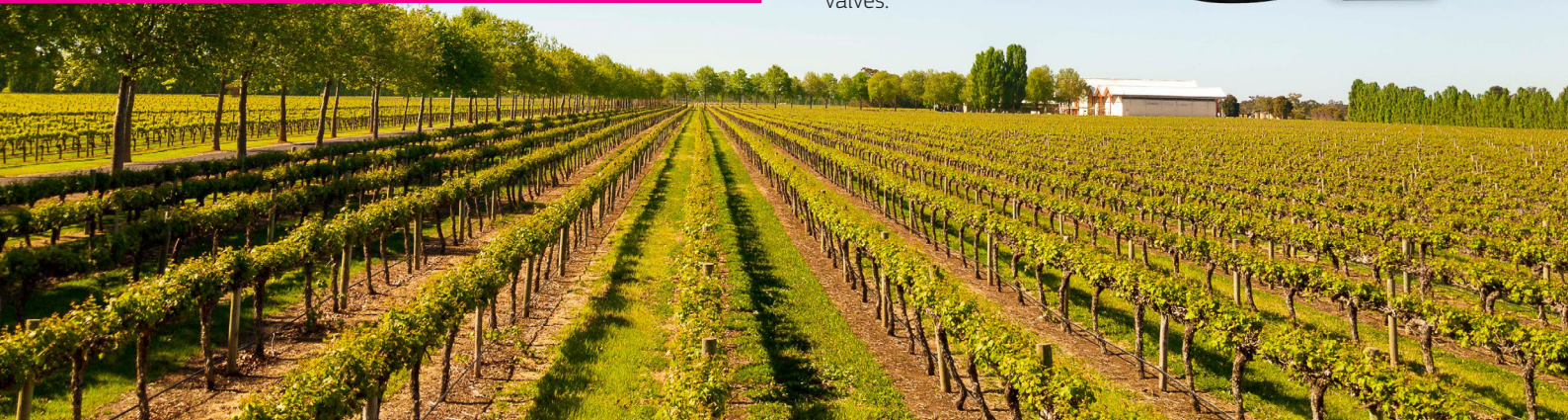


SOL60-E3

The Puretec SOL60-E3 softens water by removing hardness ions, calcium and magnesium.

Hard water is water that contains dissolved minerals such as limestone, lead, iron, sulphur, calcium and magnesium. If these minerals are not removed from your water, they will cause scaling, eventually blocking plumbing and shortening the life of appliances. These elements are not always easily detected, but numerous negative effects can be unpleasant and costly.

The Puretec SOL60-E3 achieves long life of the filter bed through regeneration using brine solution which can be operated through timer or volume based control valves.



EM2-140

The Puretec EM2-140 system is the appropriate choice for providing safe, clean and healthy water throughout the house or building.

Providing maximum filtration with minimal flow restriction, these systems provide peace of mind throughout the house, office, protecting appliances from sediment and sludge build-up and extending the service life of ceramic disc tapware.



RI-10K

The RI-10K is a feature-laden, premium UV system. When looking at this line, it is easy to see how this product is truly different from everything else in the market.

Radfire™ technology Kills 99% of E. Coli, Giardia and Cryptosporidium cysts, and is a natural purification process that's completely eco-friendly and chemical-free.

Puretec Radfire's state-of-the-art controller is a constant current electronic power source housed in a splash-proof case and comes standard with a "future-proof" expandability port for future upgrades or options



MAINTENANCE

As with any water purification product, regular maintenance is what keeps these systems performing at their best for years to come.

MPB202B (Bag Filter): Will require occasional cleaning guided by the pressure gauge. If after cleaning the pressure rating doesn't lower it is time for a replacement bag.

SOL60-E3 (Softener): Will require a scheduled salt top, aside from this, typical media life is 8 - 10 years.

EM2-140 (Fine Sediment): Cartridge replacement every 6 - 12 months (depending on water quality and volumes) and can be preformed in minutes.

RI-10K (UV Steriliser): Yearly replacement of the UV lamp, occasional cleaning or replacement of the quartz sleeve.

THE RESULT

The result for Rymill Connawarra is a tidy, professional custom installation. The system provides the assurance of safe drinking water, regardless of the water source in use, and peace of mind by enabling the customer to use bore water when the rainwater is not available during extended dry periods.

Working together with Rymill's local plumber and Puretec dealer, not only solved the issues but but with this level of attention to detail, the outcome is a solution which has "made a world of difference!".

For all water treatment solutions/recommendations call our water specialists on **1300 140 140** (AU) **0800 130 140** (NZ).

