

LOCAL SUPPORT AND QUALITY PRODUCTS A RECIPE FOR SUCCESS!

Introduction

The Australasian wine industry is renowned throughout the world for quality, innovation and depth. In fact, the region consistently produces wines that feature in the world's best and hence, the local market is ever increasing. Hand in hand with this large market comes even greater competition as wine makers seek to produce the best wine they can.

Naturally then, the process of mixing together the liquids and flavours that make up the complexion of a make of wine is critical. Thankfully, for winemakers like Warburn Estate there are machines called agitators that help with this process. Central to controlling elements such as the velocity and direction of liquid during the fermentation of a tank of wine, the performance of agitators can be the difference between a top drop, and well, a flop.

Warburn Estate Winery is a proudly independent, fourth generation family wine business with humble beginnings dating back to 1952.

Project Overview

Recently, Warburn Estate were presented with the challenge of updating their control equipment to provide up-to-date data and trending information on every tank of wine they produce. In particular, this involved an upgrade of their cellar Tank Agitators and to achieve this, Luke Pandolfo, Warburn Estate's onsite maintenance electrician and technician engaged NHP to help with the design and installation of the motor control circuit, as well as the HMI programming.

"We embarked on this project so that during a fermentation of a tank of wine the agitators could be stopped and started without disrupting the ferment and losing wine. This was achieved by implementing a slow starting sequence to each individual agitator on each tank." said Mr Pandolfo.

"There were a total of 35 agitators that were upgraded from the old DOL starting and because of the power saving we were able to install an additional 16 agitators to tanks that didn't have any before which will allow the fermentation process to be a lot more efficient".

Solution

The NHP solution assisted in upgrading from a fully manual DOL system using zincalume cabinets, to a modern networked solution including variable speed drives and HMIs (Allen-Bradley PowerFlex 523 variable speed drives and Allen-Bradley PanelView Plus 700 HMI), all housed in an IP rated stainless steel cabinet (Eldon) with air conditioning (Cosmotec). When it came to the switchgear used in the enclosures, a number of MOD6 circuit breakers were also used.

The order was received in early December 2014 and thanks to NHP's local stockholding and flexible delivery, final components were delivered the day before Christmas to coincide with the site's tight deadlines. This allowed first works to commence in early January 2015 with the boards commissioned in February 2015. Work at the site will be ongoing to implement a fibre optic network with Ring Topology for redundancy and control information data capture and trending.

"NHP's high quality local support made our working relationship really strong and we not only had faith in their expertise, but their industry recognised brand names with proven track record. Once we had made the decision to implement the plant-wide Logix platform, it was of great assistance having NHP to help with the design", Mr Pandolfo continued.



Project Fact File

Project: Warburn Estate Winery

Location: Tharbogang, New South Wales (Australia)

Details: Recently, Warburn Estate were presented with the challenge of updating their control equipment to provide up-to-date data and trending information on every tank of wine they produce.

NHP Products/Services:

- Allen-Bradley PowerFlex 523 VSDs
- Allen-Bradley PanelView Plus 700 HMI
- Stainless Steel Eldon Enclosures
- Cosmotec Air Conditioning System
- NHP MOD6 Circuit Breakers

