

# Reliable Cooling System Solution for Premium Wine Producer

In the heart of the Mudgee Wine Region, a local winery faced the challenge of maintaining optimal temperature control in their processing plant's cooling tanks. The facility required a robust pumping solution that could handle the region's demanding climate conditions, with ambient temperatures reaching up to 45°C during summer peaks.

# The Challenge

The winery's cooling system played a crucial role in maintaining wine quality, but their existing competitor pump sets were no longer meeting operational requirements. The brine pumping system needed to perform reliably in extreme ambient temperatures of up to 45°C during summer months, while simultaneously managing variable flow requirements. Additionally, the facility needed a solution that would optimise energy efficiency to control long-term operational costs, making the replacement of their existing pumping system a critical priority.

### Our Solution

Dean from local Davey Master Dealer, The Mudgee Pump Company recommended the installation of two Davey 1MLV32-3H3-60 pump sets with variable speed drive technology, configured to deliver 6 litres per second. This comprehensive solution was designed to ensure reliable performance in high temperatures while maximising energy efficiency and operational flexibility through its advanced VSD capabilities.

### **Implementation**

The installation was carried out by The Mudgee Pump Company, replacing the existing competitor pump sets. The VSD configuration was set up to ensure:

- · Optimal flow rates for the cooling tank application
- Energy-efficient operation
- Extended pump life through controlled operation
- Flexible performance to match varying cooling demands





## Results

The implementation of Davey's pumping solution has delivered outstanding results for the winery's cooling system operations. The new system has consistently demonstrated exceptional reliability, even during the challenging summer months when ambient temperatures reach their peak. The VSD technology has proven particularly effective in managing variable flow requirements while maintaining optimal energy efficiency. The client has expressed high satisfaction with both the system performance and the professional support received throughout the installation process, noting:

- Consistent and reliable cooling system performance across all temperature ranges
- Significant improvement in energy efficiency through VSD operation
- Reduced maintenance requirements compared to previous installation
- Successful adaptation to varying cooling demands during peak periods

The installation of Davey's MLV series pumps with VSD technology proved to be an ideal solution for this winery's cooling system requirements. The combination of reliable hardware and intelligent control systems not only met the immediate needs but also provided a foundation for long term operational efficiency. This case study demonstrates Davey Water Products' capability to deliver robust solutions for specialised industrial applications in challenging environmental conditions





