



ENQUIRY

Castle Pumps received an enquiry from Defined Wine, a contract winemaker based in the UK. They were looking for a food grade pump to transfer their wine around the winery at temperatures 2°C - 65°C. They required a pump that could handle their maximum flow rate requirement of 15,000 litres per hour, however variable speed would be ideal to enable the volume of wine being transferred to be controlled.

After discussing the application in more detail, the customer informed us that whilst they would be using the pump primarily to fill barrels, they would also like the same pump to be able to carry out tank to tank transfer, which would require a maximum head pressure of 8m. Furthermore, the customer also requested remote control and reverse operation features.

KEY CHALLENGES

- 1. Food grade for the safe handling of wine.
- 2. Various control and operating features.
- 3. Portability for use around the winery.



CASTLE PUMPS LTD

EQUIPMENT SUPPLIED

Liverani All in One Flexible Impeller Pump

Model Major 10-200

Fluid Wine

Flow 22,500 l/hr Pressure 1.6 bar

Voltage Three Phase 400v Body Stainless Steel

Impellers EPDM Inlet/Outlet DIN 40

SOLUTION

Given that the application was for wine transfer, we knew that this was a job for our flexible impeller pump range. Their low shear operation, food grade construction and smooth, steady pumping make them ideal for the accurate filling of barrels without altering the consistency of the wine. They are also able to handle small solids, enabling any sediment at the bottom of a tank to be handled without damage to the pump.

To ensure ease of manoeuvring around the winery, it was important that we offered a trolley mounted flexible impeller pump from our range. The additional requested features such as the remote control, variable speed drive and reversible operation meant that the Liverani All-in-One was a perfect fit.

The Liverani All-in-One is the ideal solution for winemakers who could benefit from having more control over their wine transfer operations and have less of their workers' time spent operating the pump. The addition of the control panel allows the user to schedule, automate, control, monitor and review wine transfer and filling operations. From the pre-set barrel filling setting to enable multiple barrels of the same size to be filled without the operator having to set all dispenses up individually, to the free transfer option to enable tank to tank transfer - a feature which this client had requested.

After analysing each model's performance table, we specified the Major 10-200 as this met the application requirements nicely, with the customer opting for the three phase 400v version. The pump was delivered within 4 weeks of order placement, and has been working great for them ever since.