

A PERFECTLY PAIRED PORTABLE PUMP FOR JUICE AND MUST

PUMP CASE STUDY

Bear Creek Winery

Lodi, California

Pump Replacement

CUSTOMER APPLICATION AND KEY CHALLENGES

Bear Creek Winery, established in 1934, is a custom crush facility located in California's Central Valley. Bear Creek secures, crushes, filters, and processes enormous amounts of crushed grapes every year as a contract service to several wine makers. The wine makers then bottle, age, market, and sell the wine under their own individual labels.

After fermentation is complete the free run juice is racked to tanks and the remaining solids are pumped to a bladder press to extract as much juice as possible. Bear Creek had been using some older piston style pumps on this application but these pumps were worn and parts were no longer available. The winery needed to look for new pumps.



Grape must consists of juice, skins, seeds, and sometimes stems

THE R.F. MACDONALD CO. ANALYSIS & SOLUTION

Bear Creek Winery contacted R.F. MacDonald Co. before the 2010 crush season to replace an old piston pump that was no longer able to maintain the flow rates and pressure required for their portable filter press system.

R.F. MacDonald Co. recommended the Börger FL518 stainless steel pump, operating at 400 gpm and 90 psi, with a variable frequency drive for increased control and energy efficiency. The pump contains 6" flange inlet and outlets with stainless steel male cam-locks and buna elastomers to optimize the flow between the tank and the change filtration. A 40 hp 1750 rpm gear motor provides the required power and is capable of pulling a wet vacuum up to 18 feet.

A special safety feature was included to turn the pump off in case the discharge valve closed. This prevents over pressurizing and damaging the pump and surrounding piping.

The entire system is mounted on a custom-made portable cart that can easily be moved between tanks.



The Börger FL518 Rotary Lobe Pump on the portable cart

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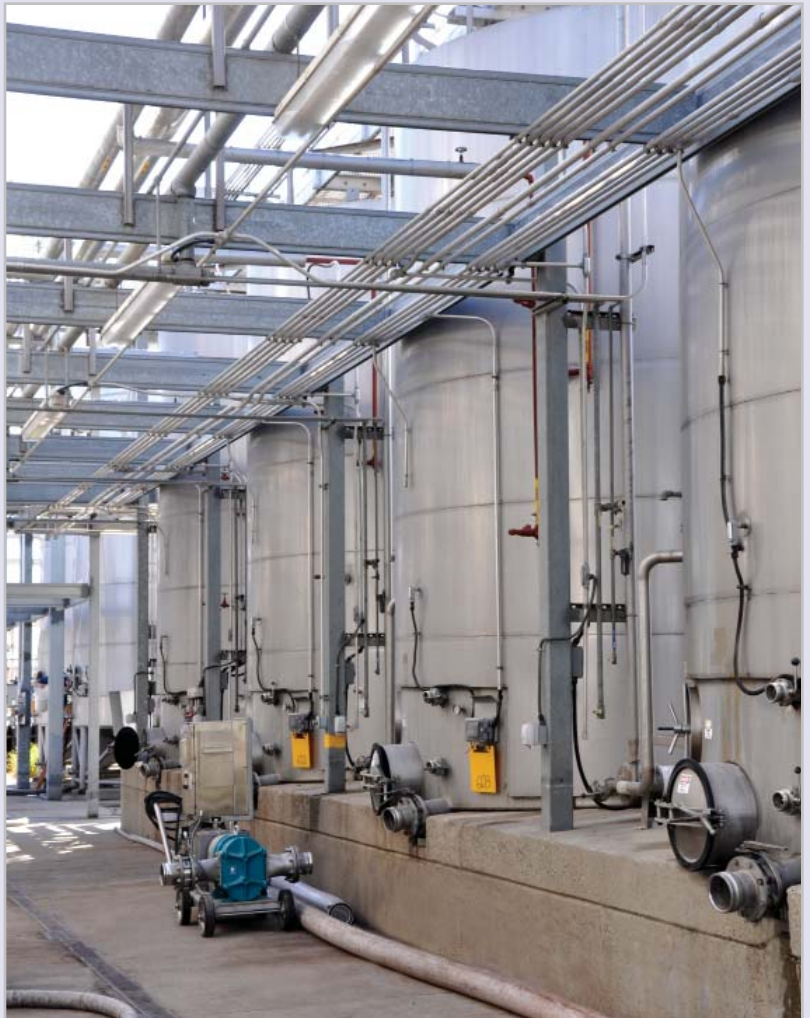
PROJECT RESULTS

The customer was extremely pleased with the performance of the two pumps.

In addition to easy transport, the pump offers quick and easy maintenance. The Börger lobe tips and liners are extremely cost effective to repair and replace. The reversible liners can be flipped and reused, further extending the lifespan. The mechanical seal design is highly resistant to abrasion, enabling longer operation before seal change outs. The pump also offers in-place maintenance, with the ability to replace the rotor tips and mechanical seals in the field.

As their existing pumps wear out, Bear Creek continues to replace them with the same portable Börger FL518.

Börger offers a full line of sturdy industrial pumps with easy maintenance and attractive options



Portability to each of the tanks makes the Börger FL518 a flexible option