



Case Study

In Hot Water: Olive oil plant gets peace of mind with Farenheit® high-temperature pump

Overview

California Olive Ranch (COR) is the largest olive oil producer in the United States. Its Artois orchard sits on 1,400 acres, but the company in total processes approximately 13,000 acres of orchards. Olive harvest begins mid-October and runs 24/7 for about 45 days. Once olives are harvested, they are milled and their oil is extracted. The oil is stored in large tanks, that when drained, are cleaned with hot, highly caustic cleaning solutions. These solutions, plus any overflow spillage from the plant floor, are then pumped into the waste treatment system.

Pipes for the wastewater system are located 70ft overhead to keep plant floors unobstructed. To reach the larger overhead pipes, pumps need to overcome 70ft of static head through smaller 3" pipes. The combination of hot, caustic cleaning fluids, plus debris from plant floor, and stress from pumping such high head were causing the plant's pumps to fail frequently.

In addition, COR's original pumps were sourced overseas, which meant replacement parts were expensive and time consuming to obtain. COR lost valuable manufacturing time with every repair.

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PROBLEM

- Corroding pumps due to caustic liquids
- Pumps not able to handle hot temperature water
- High head wearing pumps out
- Expensive to repair and maintain



Solution

COR's authorized pump distributor decided to test a BJM Pumps® Fahrenheit® JXF Series high temperature pump. This corrosion resistant, high flow dewatering pump heads up to 100 ft, which would well surpass the original pump's capacity. It can withstand temperatures up to 200°F (93°C). All wet parts are cast of 316 stainless steel and all wear parts made of cast material. This rates the JXF Series pumps at A or B for corrosion resistance, ideal for COR's application.

The winding protection and (NEMA) Class R motor insulation with thermal cut out switch allow an internal temperature of up to 300°F. This is superior to pumps rated with Class A or B insulation. Between its capacity to pump high heads, the ability to withstand high temperatures, the JXF corrosion resistant dewatering pump was perfectly capable of withstanding long production hours. After a successful trial period, COR invested in several JXF Series pumps.

"Previously, we would need to physically walk the plant to ensure pumps were working because we never knew when one would fail," states Mat Martin, COR maintenance manager. "We haven't had to touch the pumps in over a year. We know they are working," he concludes.

"The JXF pumps are very reliable and that provides peace of mind," Mat Martin, COR maintenance manager.



FEATURES

- Fahrenheit® high temperature shredder pump
- Withstands temperatures up to 200°F (93°C)
- 304 stainless steel for superior corrosion resistance
- Wear-resistant shredding system

APPLICATIONS

- Food & Beverage
- Industrial
- Mining & Minerals
- Pharmaceutical & Medical

RESULTS

- Zero pump failures
- Achieved 70ft high head
- Reduced maintenance and labor costs
- Increase peace of mind



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