

Michigan Apple Pumping

Application market	Food
Market segment	Fruit & Vegetables
Pumped medium	Water with whole Apples
Pump product	Bearing frame
Country	United States



Challenge

Burnette Foods company produces apple sauce in bulk. The previous production process consisted of feeding whole apples into a single-port impeller, which was causing damage to the apples and lessening the quality. Hidrostal was contacted with the goal of optimizing this process and pumping apples in their whole form with minimal damage to the product.

Solution

Two **Hidrostal Screw Centrifugal Pumps** with stuffing box bearing frame on a belt-driven arrangement are used for the task. The Hidrostal system provides a method of transporting whole apples suspended in water to the processing location that will produce applesauce. The large free passage of the pump, combined with a low operating speed and the resulting low flow velocity, allow delicate products – such as apples in this case – to be conveyed without further damage.

Benefits

The task was completed reliably and to the great satisfaction of the customer. Since the installation of the pump station in 2017, the **Hidrostal Screw Centrifugal Pumps** have been operating without any issues.

- There is no more significant damage to the apples and
- gentle pumping allows the fruit to the production site without loss of quality.

Quantity of units sold	2 pcs.
Pump type	F10K-MD4R + F2S10
Motor data	approx. 15 kW / 1'200 rpm
Material combination	Pump body of cast iron with Hidrohard impeller and wear parts
Duty point	Flow : 95 liters per second / Head : 10.6 meters
In operation since	2017