

Egg Processing

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Waukesha
Cherry-Burrell®

Pump:

Waukesha Cherry-Burrell Brand – Model [060 Universal 1 Series](#)

Industry:

Egg Processing

Problem:

Pump abrasive egg product with a wide viscosity range and small shell particles

Solution:

In this application, egg breaker machines feed the suction of eleven [Model U1-060 positive displacement \(PD\) pumps](#). The egg breakers are designed to separate the egg and shell, then the pump suction is equipped with a ¼" wire mesh strainer to remove large shell fragments, yet the liquid product still contains small, abrasive shell solids. The egg and shell solution is pumped through a 0.033 inch filter to remove the remaining unwanted shell particles and then transferred to holding tanks for further processing.

The Model U1-060 pumps with [External Circumferential Piston \("ECP"\) style rotors](#) with larger crossover clearances eliminated the timing problems experienced by previously installed pumps and provided tight clearances with a long slip path to efficiently pump the wide viscosity range of the product (ranging from 50 to 3,000 cps). The unique ability to pump thin or thick abrasive liquid without allowing the product to "slip" back through the rotor clearances kept erosive wear to a minimum.

The pumps are dismantled daily and hand-cleaned, the availability of WCB's simple, economical single O-ring shaft seals provided an alternative to the more expensive and sensitive mechanical seals offered on the competitive pumps.

