

# Case Study: Mechanically Separated Chicken

## Application

Pumping mechanically separated chicken (MSC)

## Challenge

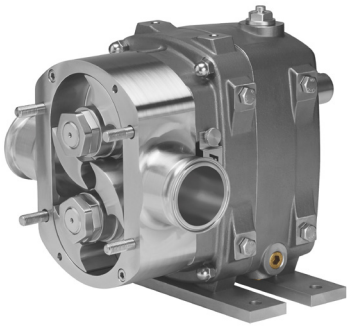
The high viscosity of the chicken creates elevated pressure in the pump

## Issue

The higher pressure can cause wear in the pump housing and broken shafts

## Products with similar challenges

- Mashed potatoes
- Mechanically deboned meat (MDM)
- Meat emulsions



## FKL COP Capabilities

FKL Models: 7

Max. Discharge Pressure: 500 psi (35 bar)

Max. Flow Rate: 450 gpm

Max. Viscosity: 1,000,000 cps



## FKL COP Eliminates \$108K in Rebuild Costs Yearly

A large US meat processing company was using a competitor's positive displacement pumps to transport their mechanically separated chicken (also known as MSC). MSC is highly viscous, which means that pumping it creates a lot of back pressure. This pressure was causing the rotors in their pumps to deflect, creating wear from the rotors rubbing against the pump housing, as well as shaft breakage in as little as six months. As a result, the customer was spending 50-70% of their pumps' original cost on rebuilds each time their pumps broke. Along with this expense, the company was experiencing downtime while pulling the pumps offline and installing replacements.

## Solution

The processor replaced their old positive displacement pumps with two FKL COP model 150 pumps and three FKL COP model 250 pumps, all with rectangular inlets.

## Why It Worked

Fristam's FKL COP pump was able to eliminate the meat processor's rebuild costs, because it is built to last. The balanced rotor design of the FKL COP reduces the possibility of deflection and wear, because the force is distributed evenly on the rotors. Also, the FKL COP has lifetime guaranteed shafts, meaning no breakage and no rebuilds. The processor has now had Fristam's FKL COP pumps for two years, without needing any repairs. This led to an estimated savings of \$108K in yearly rebuild costs, as well as savings on maintenance time.

To read the complete story, visit: [www.fristam.com/fkl-apps](http://www.fristam.com/fkl-apps)  
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