

Turning Up The Heat On Savings!

Fristam's Double Screw Pump Creates Annual Savings Of €24,000 For Hot Sauce Manufacturer!

Application:

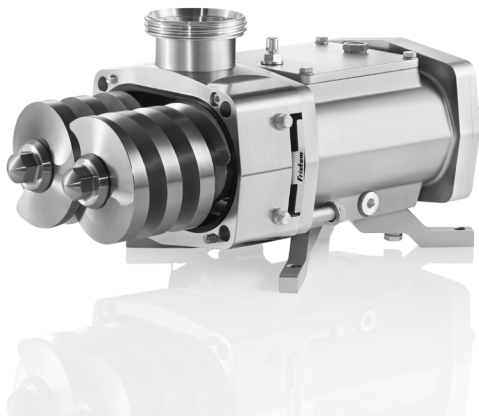
Pumping hot sauce with corrosive properties.

Challenge:

x3 PC pumps breaking down every 6-8 months due to lack of suitability for pumping corrosive product. Breakdowns were costly and repairing the pumps was challenging due to lack of space. Downtime was creating issues with supply.

Goal:

To stop breakdowns occurring by replacing PC pumps with an FDS suitable for pumping corrosive products.



Max discharge pressure: 25 bar
Max flow rate: 500m³/h
Max viscosity: 1,000,000 cP

Customer brief:

A leading hot sauce manufacturer faced major production issues. Three progressive cavity pumps, unsuitable for pumping corrosive, non-lubricated products like hot sauce, broke down every 6–8 months. Spare parts alone cost over €24,000 annually!

The large, bulky PC pumps, located in a tight space below a vacuum tank, de-aerated the hot sauce (20–50cP viscosity, ambient temperature, pressures below 3.5 bar/50 PSI). Engineers struggled to access and repair the pumps, which had a complex design. Each breakdown required 2 engineers for an entire shift. The combined costs of parts, downtime, and labor prompted the manufacturer to urgently seek a cost-effective solution.

The Solution:

The Fristam FDS 2 double screw pumps, with Hastelloy wet ends, were installed to handle the hot sauce's corrosive ingredients. These pumps operated flawlessly under vacuum, pumped CIP between batches for full cleaning, and were significantly smaller than the PC pumps handling the same duty. This freed up space under the tank, reduced energy use, and lowered running costs.

Outcome:

Remarkably, the FDS pumps ran for nearly three years without servicing—five times longer than the PC pumps!

The manufacturer cut €24,000 in spare parts costs annually and reduced downtime. Extra space under the tanks and lower energy usage were unexpected bonuses. Impressed by the pumps' performance, the company has since purchased two additional maintenance-free Fristam FDS-2 pumps with Hastelloy components.



Fristam
Hygienic Pumping Experts