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all things flow

The pump that's a real hot potato!

It's a near perfect world where a food manufacturer can handle industrial wastewater efficiently, economically, responsibly and even profitably. But seepex can make this happen!

A crisp manufacturer found that disposing of vegetable peelings and waste could be time-consuming, messy and expensive at its potato processing plant which handles over a million pounds of potatoes daily. The resulting potato waste is then sold on.

The starting situation

Previously, the waste was pumped by means of lobe pumps into a bin at the end of the inspection conveyor. It was then transported manually to another bin that could hold a capacity of only six to seven tons. From there, the waste was sent to a nearby facility that further processed it into fertilizer or potato starch. However, the lobe pumps frequently broke down. The resulting downtime was costly: first, the waste had to be transported by skip to the nearby facility while the pumps were down; second, the repairs to the pumps were expensive.

The solution

The company turned to consultant engineers who recommended a seepex BTM progressive cavity pump. The BTM is equipped with an auger feed screw in front of the rotor and the stator and has a hopper above. Handling viscous and non-flowable products at pressures up to 48 bar, the seepex BTM is used in both the production and waste processes in many factories handling fruits and vegetables (potatoes, carrots, apples, and citrus fruits).

In the BTM, the feed screw is additionally fitted with rotating and stationary knives - a patented design – thereby thoroughly macerating the potato waste as it is being pumped. Water in the waste is released, eliminating the need for adding water in the pumping procedure and reducing the volume to be transported. Now all the company's potato waste – hot peel waste, culls, and floor waste – goes directly into the BTM hopper from the peeler.

The benefit

Because additional grinders are no longer needed as part of the process, efficiency has increased dramatically. And replacement of its lobe pumps with the BTM design has greatly reduced downtime for the seepex pumps have never had to be shut down for maintenance. For a food manufacturer, increased productivity and effective handling of industrial waste may well be a perfect world.



Potatoes in the feed hopper before ...



... and after being macerated

Key Facts

- No additional water required to transport product
- More reliable than lobe pump
- No separate grinders required

Significant Cost Savings

- Reduced down time
- Lower maintenance



Installed Pump Type

Range BTM

Please visit www.seepex.com for further information and contacts.