SPXFLOW

Pumps in Action

Coconut Processing

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APV

Pump:
APV Wi+ Inducer Centrifugal Pump

Industry:
Food & Beverage

Application:
Pumping coconut water, coconut milk and coconut cream as required from a balance tank to the UHT infusion chamber (~ 60°C to 65°C, ~150 Cp) at a UHT plant in Sri Lanka.

Challenge:
Using the data provided by the customer and based on the required flow rate, pressure, and net positive suction head available (NPSHa), a Wi+ 70/40 model was selected for the application using a single mechanical seal. After a few hours of pumping coconut milk or cream, the pump started to leak, the customer tried replacing the mechanical seal on the pump, but the problem persisted.

Solution:
Upon investigation SPX FLOW found the pump did not leak on coconut water but there was a buildup of dry Guar Gum, an additive sometimes used in the production of coconut milk and cream, that SPX was not aware of at the time of selection. Over time the buildup on the seal faces created a gap and subsequent leakage. The versatile Wi+ design allowed for a simple change over to a water flushed, double mechanical seal, enabling the seal faces to be kept lubricated preventing the buildup of Guar Gum.

The range of APV of W+ centrifugal pumps are designed for flexibility and the change from a single to double mechanical seal can be quickly and easily carried out on site. Following the change to a double mechanical seal the pump has operated without leaking, paying dividends to the customer with reduced downtime, improved reliability and reduced maintenance while always maintaining the highest hygienic standards.

About Wi+ Series Pumps
The Wi+ inducer pump is ideal for applications with low inlet pressures. It uses an inducer to boost inlet pressure, reducing the risk of cavitation and keeps NPSH requirement to a minimum throughout its entire operating range.

Find your nearest authorized distributor to learn more about the product.