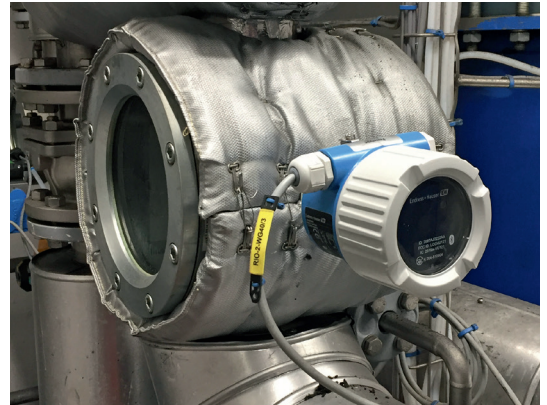


How the new Liquiphant FTL51 saves an hour of maintenance time a week



Edwin Loos, SRC



Application for bleaching edible oils

“The new Liquiphant FTL51 reduces the maintenance time per week and measuring point by an hour. Thanks to Heartbeat Technology, we can always see whether the device is working properly and can start verification of the device from a smartphone or PC. This increases the transparency of our process and thus contributes decisively to the quality of our products.”

Edwin Loos,
Technical manager

The Special Refining Company (SRC) in Zaandam, the Netherlands, refines high-quality edible oils for a wide variety of customers. The quality of the oil must comply with the HACCP global standard for food.

“It is therefore very important that the pipe systems are completely free of residues from the previous batch in order to avoid mixing different types of oils,” says Edwin Loos, technical manager of the plant.

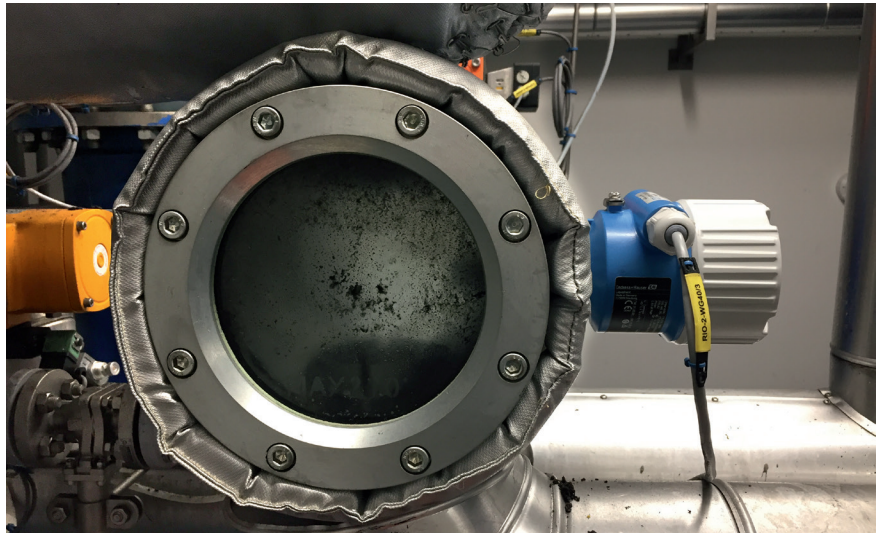
The challenge

To achieve this, SRC uses nitrogen to empty the pipe system. To check if the pipe system is empty, SRC uses level switches based on the tuning fork measuring principle. This includes the process step in which the oil is bleached to make it a lighter color. “We use bleaching earth for this,” says Edwin Loos. The conditions in the bleaching process are challenging. The temperature reaches above 80°C and the mixture of oil and bleaching earth forms a large amount of build-up at the measuring devices.

“In the past, we had the problem that the sensor signaled there is still oil in the process,” says Edwin Loos. This can happen due to build-up at the sensor. “Then we had to remove the device to verify if there is just build-up or actually oil in the system. This delayed production.”

The Endress+Hauser solution

Build-up lowers the frequency of the fork, and this change can be detected with Heartbeat Technology used in the new Liquiphant FTL51. This additional transparency in the process increases product safety. SRC uses the switch in places where it is not possible to optically detect build-up. The Heartbeat function uses a *Bluetooth*[®] connection with the Endress+Hauser SmartBlue app to see the status of the device at any time. The current frequency and the frequency on delivery can also be displayed. The Liquiphant records the last eight frequencies. Thus, it is possible to identify when the device is no longer working safely. With this information, replacement and maintenance can be planned in advance.



Bleaching earth is visible through the window

The advantage for the customer

“Thanks to Heartbeat Technology, we know exactly what state the sensor is in and whether it is working properly,” says Edwin Loos. This significantly reduces uncertainties and the time required for maintenance as the sensor no longer has to be removed. “This saves up to one hour per week or 48 hours per year per measuring point. We use the new Liquiphant at three measuring points”, Edwin Loos explains.

About SRC

Special Refining Company (SRC) was founded in 1996 and is dedicated to toll refining for vegetable oils and fats for the food industry. To be ready for the challenges in food safety today and in the future, SRC has built a new modern refinery. This new refinery is designed with the latest technology and gives SRC's clients certainty in yield, quality and food safety.

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