

Flow monitoring of ground coffee

Application

In each packaging line of a well-known German coffee producer, 90 packages of ground coffee are filled per minute. Feeding is arranged through each two hoppers which are connected by screw conveyors with the packaging lines.

If a silo is empty, switching from hopper 1 to hopper 2 was done manually. To assure a smooth process, the interruption of the product flow should be detected more quickly and reliably. The desired solution for automation should be reasonable and at the same time also easy to integrate.

Facts

Product:	Ground coffee
Location:	Outlet of a Y-pipeline in front of a drum screen
Mass flow rate:	app. 2.7 t/h
Installed systems:	2x DYNAguard P (one for each line)
Signal output:	Relay
Pipe diameter:	200 mm
Challenge:	A rotating drum screen nearby

Solution

With the flow switch DYNAguard P a reliable detection of the ground coffee flow was realized. The product flow in the pipeline is detected directly at the inlet of the drum screen, which allows using one sensor to monitor both hoppers.

The device has a limited detection area. So the drum screen has no influence on the measurement.

Adjustment of the sensor to the process is easy, so that the end-user could do this by him-self.

Benefits

- Contactless, reliable product detection
- Easy start-up
- Maintenance and wear free
- Reasonable solution
- Robust technology
- Made in Germany

