Competence in Solids

GLOBAL TECHNOLOGY SYSTEMS

SWR engineering

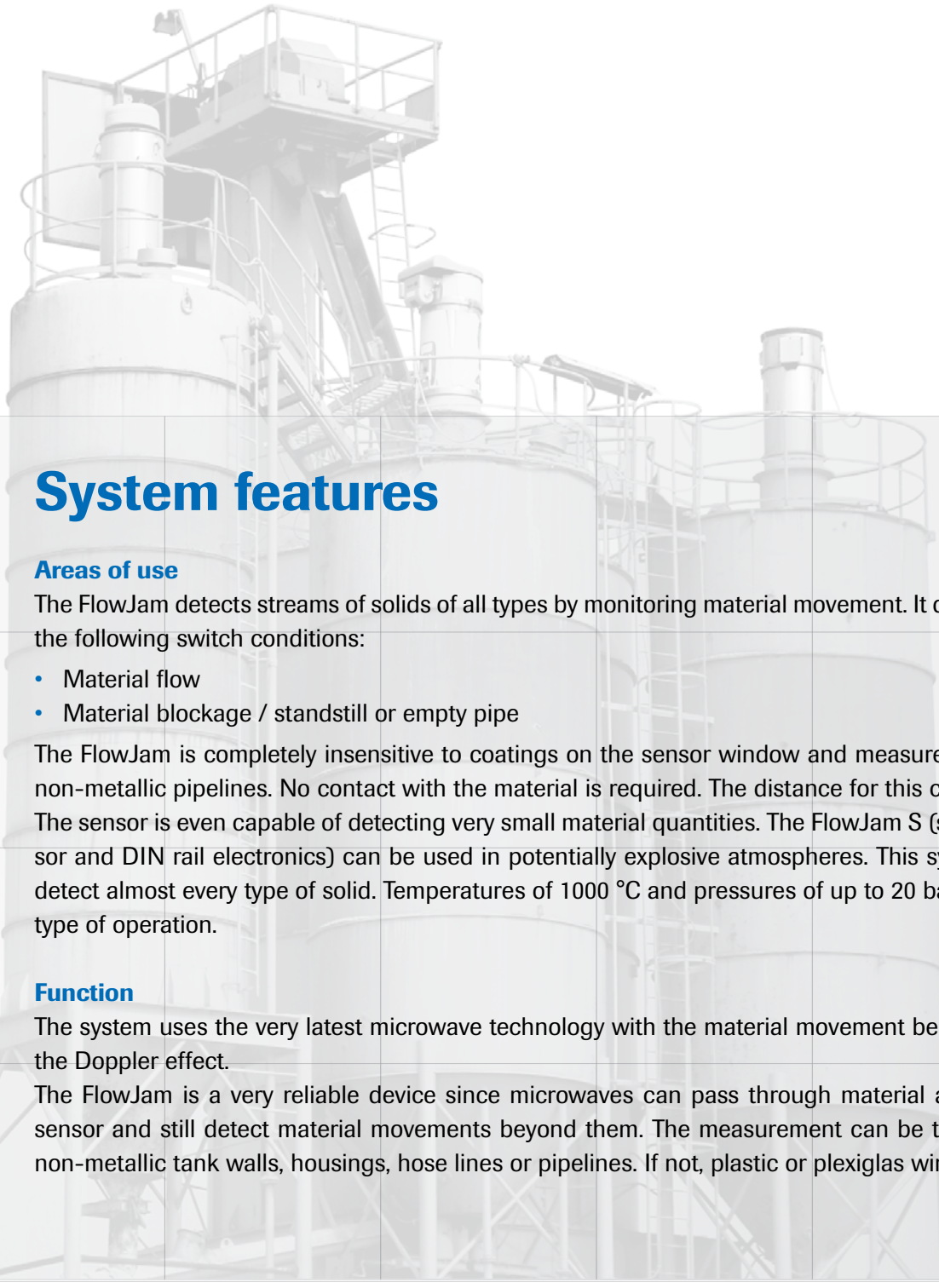
Flow monitoring for bulk goods

"Supplying intelligent measuring systems for industry since 1994"

Development
Production
Sales
Commissioning
After-Sales

FlowJam Application overview

SWR engineering Messtechnik GmbH



System features

Areas of use

The FlowJam detects streams of solids of all types by monitoring material movement. It distinguishes between the following switch conditions:

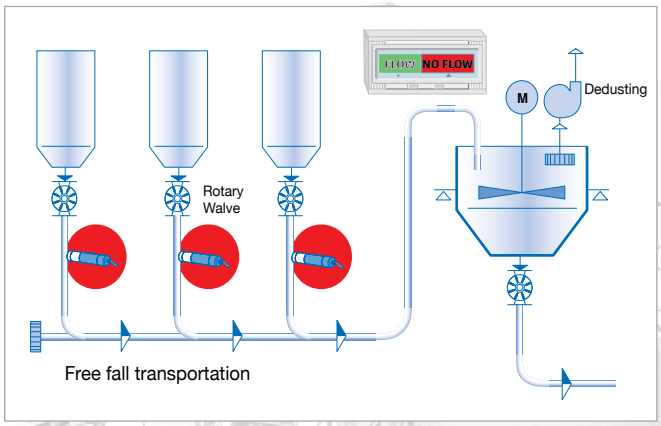
- Material flow
- Material blockage / standstill or empty pipe

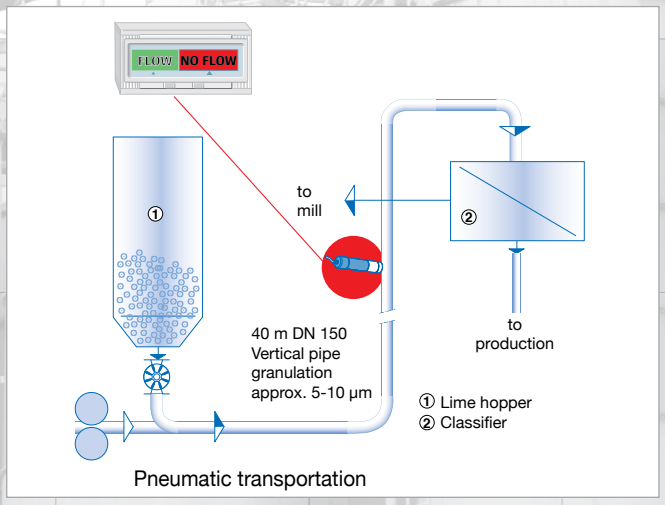
The FlowJam is completely insensitive to coatings on the sensor window and measures straight through all non-metallic pipelines. No contact with the material is required. The distance for this can be up to 2 metres. The sensor is even capable of detecting very small material quantities. The FlowJam S (separate version, sensor and DIN rail electronics) can be used in potentially explosive atmospheres. This system can be used to detect almost every type of solid. Temperatures of 1000 °C and pressures of up to 20 bar are common in this type of operation.

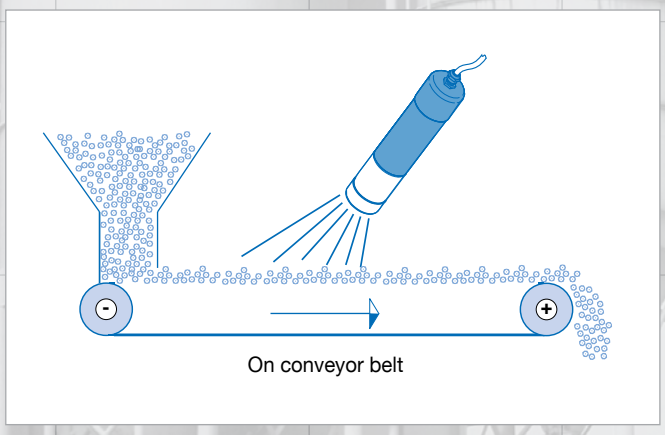
Function

The system uses the very latest microwave technology with the material movement being detected by using the Doppler effect.

The FlowJam is a very reliable device since microwaves can pass through material accumulations on the sensor and still detect material movements beyond them. The measurement can be taken from outside all non-metallic tank walls, housings, hose lines or pipelines. If not, plastic or plexiglas windows can be used.







The **FlowJam** essentially enables you to monitor all material streams of powder, dust or granulate in any transport situation.
You receive an immediate alarm signal if the movement stops.
Adjusting the delay time enables you to adjust the alarm system to suit the characteristics of the process.

The sensor can be installed at any point in your process.

- in free fall
- in a pneumatic system
- above a conveyor belt
- in a chute
- etc.

Detection of cement

Benefits: To prevent incorrect mixtures, air conveyors are monitored by the FlowJam to ensure that the material is moving.

Features:
- Material: Cement
- 6 systems installed
- Installation in an air conveyor

Detection of animal feed

Benefits: Monitor the flow of material after a screw conveyor.

Features:
- Material: Animal feed
- 4 systems installed
- Measurement in free fall

Detection of fuel

Benefits: If a blockage occurs, the pipeline can be blown free immediately. This ensures a uniform fuel supply to the blast furnace.

Features:
- Material: Secondary fuel
- 32 systems installed
- Installation in pneumatic pipes with a pressure adapter

Detection of fuel

Benefits: If a blockage is signalled the pipeline can be blown free immediately. This ensures a uniform fuel supply to the blast furnace.

Features:
- Material: Coal
- 16 systems installed
- Monitoring blast furnace lances

Detection of abrasives

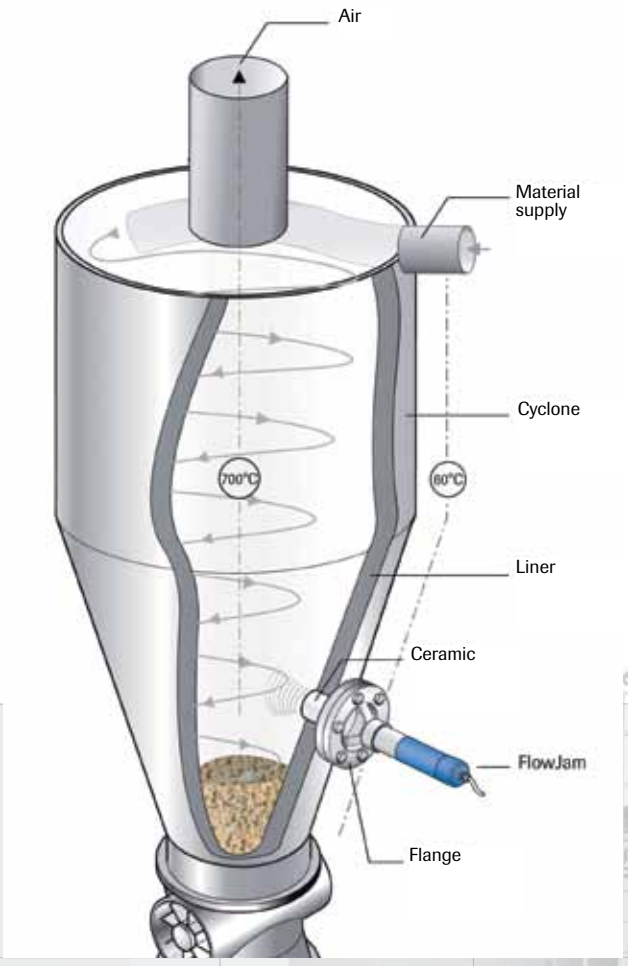
Benefits: The FlowJam can reliably monitor whether the abrasive is flowing in the lines. The device detects the material through the hose line.

Features:
- Material: Metal spherical abrasives
- 2 systems installed
- Pneumatic transport system

Detection of food

Benefits: Monitoring the material flow, to ensure no loss of quality.

Features:
- Material: Dust from sliced sugar beet drying systems
- 6 systems installed
- Free fall in DN 300 pipeline down stream of cyclone



Detection Cyclone monitoring system

Benefits If the cyclone becomes filled with material due to a blockage and this then hardens, it takes a great deal of cleaning work to rectify the situation.

Features:

- Material: Raw meal
- 4 systems installed
- High temperature up to 300 °C
- AL_2O_3 ceramic

GTS, Inc.
PO Box 799, Shalimar, FL 32579 USA
Phone: 850-651-3388 Fax: 850-651-4777
Email: info@onthelevel.com - Website: www.onthelevel.com

To

Fax response

From

Company name

Contact

Phone

Street

Fax

Postcode, town

Email

Yes,

I am interested in the

☐ **FlowJam / FlowJam S**

☐ **Please send me more information**

☐ **Please call me on**

_____

☐ **I would like a visit from SWR.**
We would like to arrange an appointment.