

***"Supplying  
intelligent  
measuring systems  
for industry  
since 1994"***

Production

Sales

Commissio

## Commissioning

After-Sales

[illegible]

# System features

## Areas of use

The SolidFlow has been specially developed for measuring quantities of solids in pipelines.

The sensor is used for the online measurement

- of powder, granulate, dust, etc.
- with particle sizes between 1 nm and 10 mm
- which are transported pneumatically
- or in free fall after mechanical transport units
- from a few kilograms to approx. 20 t/h

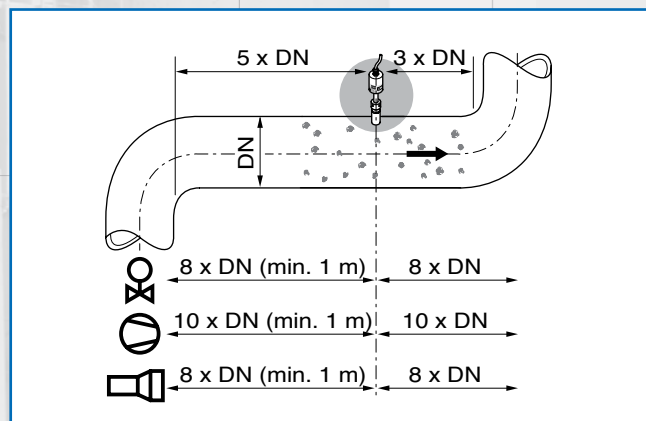
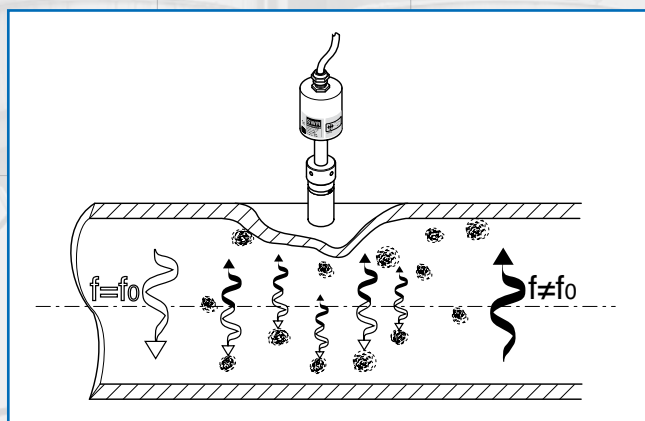
The SolidFlow is suitable for use in potentially explosive atmosphere zones 20 and 1 and can be installed on any metallic pipe. The non-contact measurement using modern microwave technology is easy to retrofit and suffers absolutely zero wear.

## Function

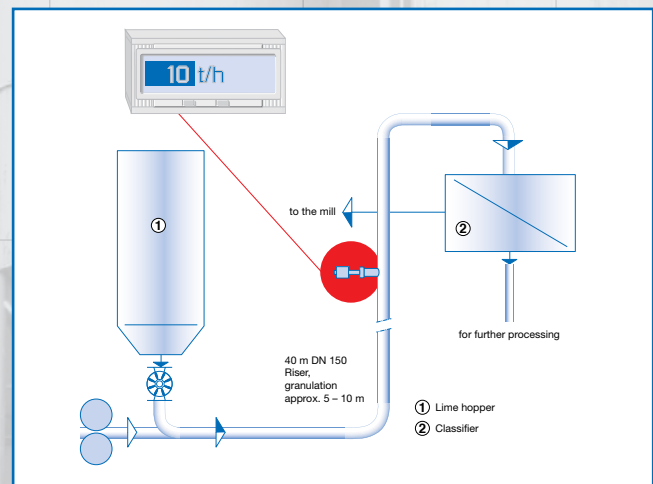
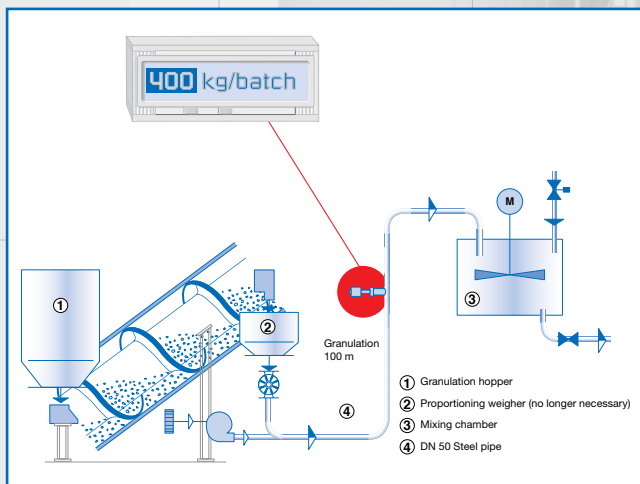
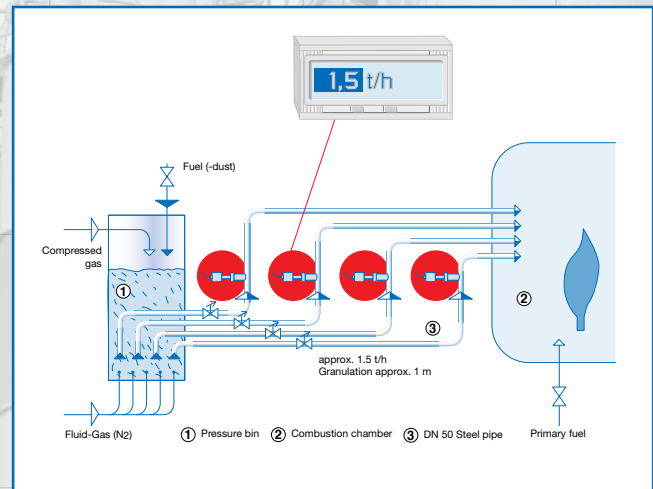
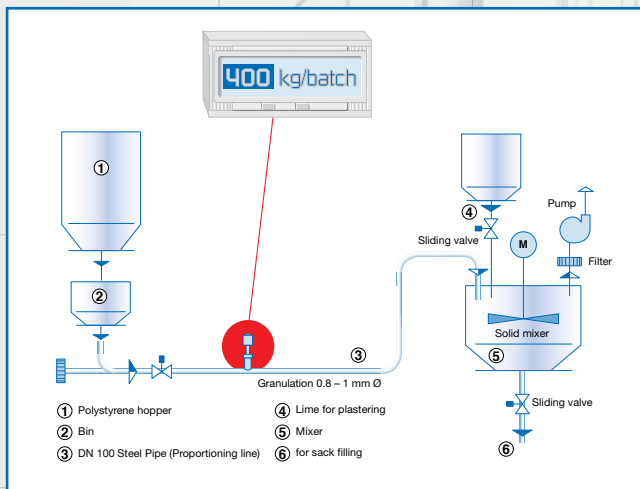
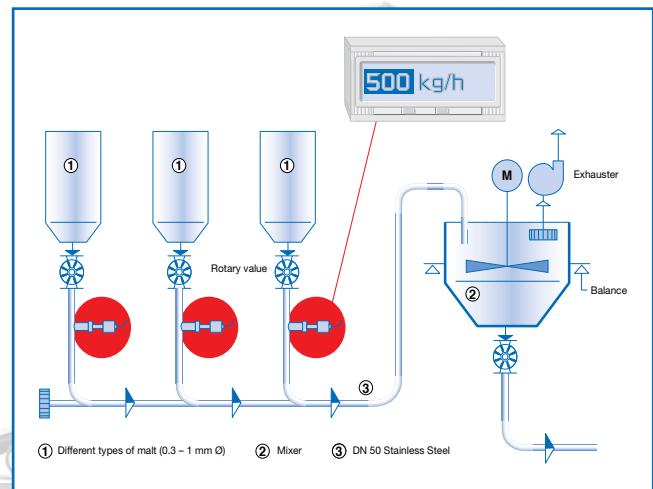
The sensor must be used in metallic pipelines. The special integration of microwave technology creates the measurement field together with the metallic pipeline.

The microwave radiation in the pipeline is reflected by the solid particles and received by the sensor. The received signals are evaluated in terms of their frequency and amplitude.

The sensor works like a particle counter counting the quantity of flowing particles per unit of time. The frequency-selected evaluation system ensures that only moving particles are measured and deposits are suppressed. The sensor is calibrated when installed by entering the reference quantity and pressing a button.



# Possible installations for your process





## Quantity measurement of iron (II) sulfate

- Customer:** Cement plant (Germany)
- Product:** Iron (II) sulfate
- Installation location:** Free fall in DN 150 line
- Volume:** approx. 1.5 t/h
- Customer benefits:** SolidFlow measurements ensure that iron (II) sulfate is supplied to the cement within certain limits.

## Volume measurement of lime

- Customer:** Cement plant (Finland)
- Product:** Lime
- Installation location:** Free fall downstream of a rotary valve in a DN 250 pipeline (double measurement point)
- Volume:** approx. 20 t/h
- Customer benefits:** There are four supply points above the main transport section. A different material is fed into the system through each of these supply points. The supply quantity is regulated by the rotary valve speed. This in turn receives its signals from the SolidFlow measurement system. A constant mixing ratio is therefore ensured.







## Quantity measurement of activated charcoal

<b>Customer:</b>	Waste incineration plant (Holland)
<b>Product:</b>	Activated carbon
<b>Installation location:</b>	Carbon blow-in system in pneumatic line
<b>Volume:</b>	approx. 800 kg ... 1500 kg/h
<b>Customer benefits:</b>	Record the actual product flow on both production lines.

## Volume measurement of lime hydrate

<b>Customer:</b>	Waste incineration plant (Germany)
<b>Product:</b>	Lime hydrate
<b>Installation location:</b>	Pneumatic riser line / DN 80
<b>Volume:</b>	approx. 5 ... 11 kg/h
<b>Customer benefits:</b>	The high or low metering of adsorbent material is prevented by the SolidFlow measurement.





## Volume measurement of spice powder

**Customer:** Potato crisp manufacturer (Germany)

**Product:** Spice powder

**Installation location:** Free fall after screw conveyor / DN 50

**Volume:** approx. 25 kg/h

**Customer benefits:** The spice powder is no longer metered volumetrically on the basis of the speed of the screw conveyor and now instead uses the continuous quantity measurements of SolidFlow. Errors caused by volumetric metering can thus be eliminated.

## Volume measurement of tanning agent

**Customer:** Chemical plant (Netherlands)

**Product:** Tanning agent

**Installation location:** Double measurement point in DN 250-pipeline (pneumatic transport system)

**Volume:** approx. 500 kg/h

**Customer benefits:** The SolidFlow measurement system determines the discharge quantity from the drier.







## Volume measurement of coffee powder

- Customer:** Coffee manufacturer (Greece)
- Product:** Coffee powder
- Installation location:** Free fall in DN 200 line
- Volume:** approx. 15 t/h
- Customer benefits:** Record the actual product flow on both production lines.

## Volume measurement of wood particles

- Customer:** Particle board plant (Germany)
- Product:** Wood particles
- Installation location:** DN 100 pipeline (pneumatic transport system)
- Volume:** approx. 900 kg/h
- Customer benefits:** Continuous measurement of the conveyor material stream for controlling production.



To

**SWR engineering Messtechnik GmbH**Gutedelstraße 31  
79418 Schliengen (Germany)

Phone +49 7635 827248-0

Fax +49 7635 827248-48

info@swr-engineering.com

www.swr-engineering.com

# Fax response

**+49 7635 827248-48**

From

Company name

Contact

Phone

Street

Fax

Postcode, town

Email

**Yes,**  
I am interested in  
**SolidFlow**

☐ Please send me more information☐ Please call me on  
\_\_\_\_\_☐ I would like a visit from SWR.  
We would like to arrange an appointment.**SolidFlow** Application overview