



Level



Pressure



Flow



Temperature

Liquid  
Analysis

Registration

Systems  
Components

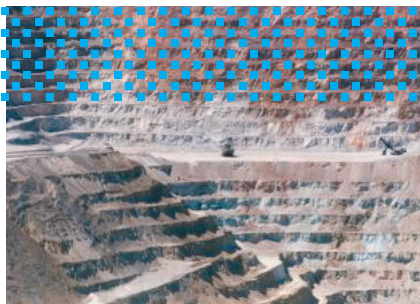
Services



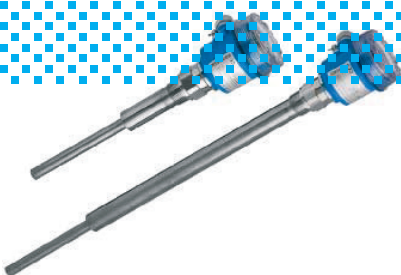
Solutions

# FTM20 Discharge Control of Silica Filter Dust-Chemical

Soliphant T detects high level in filter dust collector



Silica sand is mined in quarries



Soliphant T FTM20 / FTM21



Silica flour is used in paint manufacturing

**The Soliphant T FTM20 “mono-rod” sensor outperforms a capacitance switch for detecting high level in a silica flour dust collector.**

## Company profile

Specialist for facade insulation systems, facade and interior coatings, curtain-type combined facade systems, acoustic systems, concrete protection and floor coverings

## Application

Prior to the Soliphant, a Minicap FTC260 was installed in the dust collector. The capacitance probe worked without any problems. In order to test the new FTM20 in an environment with changing bulk density, the Soliphant T was placed temporarily in the collector bin.

The Soliphant controls the discharging of the filter collection bin, the high level alarm triggers a pneumatic pump.

Material:	Lumped dry silica flour
Bulk density:	25 to 44 lb/ft <sup>3</sup> (400 to 700 g/l)
Temperature:	ambient
Pressure:	ambient

## Application challenges

The material is lumpy and tends to build up. Strong external vibrations due to the pneumatic system

## Instrument description

FTM20 single rod, threaded process connection, DPDT relay and polyester housing. The Soliphant T is a robust level limit switch for silos with fine-grained or coarse non-fluidized bulk solids.

A piezoelectric drive excites the probe rod to its resonance frequency. If a bulk solid covers the vibrating rod, the vibrating amplitude changes, which causes a switch point. The electronics compare the actual amplitude with a target value and indicates whether the rod is vibrating freely or whether it is covered by material.

## Measurement results

The FTM20 works without any problems despite strong air pressure bursts.

For more information, contact  
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Mounting location of the Soliphant T



Inside vessel view of the mono-rod sensor

ISO 9001:2000 Certified

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