Application Report
Flow Sensors

Ground-air purification station

Description of the application:

When ground is contaminated with volatile substances like solvents and others this machinery is used to clean the ground by sucking of the ground-air and purifying the air.
Stacks are drilled in the earth from where the air is guided by tubes to an extraction system. Blowers suck off the air and conduct it to the purifier, which may be an active carbon filter or a catalyst.
These plants are operated for many years until the contamination is reduced to an acceptable value.

Purification plants consist of different components, where each one is suited to extract certain contaminants. Air flow sensors are not only used in the ground-air suck off tubes, but may also be found in :

- Air Intake of Catalysts
- Air Intake of Strippers

Function of the Sensor:

Metering the volume of sucked off air. The flow rate is continuously adopted to the contamination quota of the ground-air. The registered ground-air volume together with the contamination analysis is a scale for the purification work done.

Sensor type used:

SCHMIDT® SS 20.502
0..20 m/s 90, 160 mm
0..10 V

Location of the Sensor:

In the extraction channel in front of the blower.

Branch:

Environmental / Plant construction

Reason to choose a SCHMIDT Sensor:

- ☑ Sensor resistant against pollutants in the air
- ☑ High operating life since no moving parts.
- ☑ Precise measurement with high repeatability
- ☑ Linear output signal
- ☑ Simple and cost efficient install

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