Application report
mass flow meter MF3000 for solids

Mass flow measurement of coal dust injection
at Knauf Gipswerke Iphofen (Germany)

Market:
Coal dust firing systems

Application description:
At coal dust firing systems the exact dosage of dust injection is very important for the process control. A simple controlling of dosage system does not satisfy the requirements. Disturbances like different density of dust in a dosage supply can cause variable flow quantities to the burner. This variable flow quantities worse the burning and therewith the burner efficiency.

Only with an exact and continuous measurement of dust flow the dosage can be controlled and adjusted to a preset value.

With the Mütec flow meter MF 3000 an exact and continuous measurement of dust is possible at the feeding pipe to the burner.

The measurement values are captured and evaluated in real time and can forwarded to other systems such as visualization or controlling of dosage by regular interfaces.

Benefits by the measurement:
- Exact and continuous measurement of dust flow
- Visualization of actual dust flow
- Exact dosage of dust
- Optimization of coal dust firing system

The world wide operating company KNAUF in Iphofen (Germany) uses dust firing systems for rotating kilns. For the optimal operating of the firing systems an exact dosage of coal dust is necessary.

To measure the flow of coal dust the Mütec flow measuring system MF 3000 is successfull installed in the conveyor pipe for coal dust supply.

The sensor measures the flow rate with an accuracy of ±2%. The measured values are forwarded to the process control system via 4-20mA output for visualization or controlling of the dosage system.

Benefits MF3000:
- Contact less on-line mass flow measurement for all bulk material also for dusts like coal dust, wood dust, rape straw dust, grain straw dust
- Installed flush to inner wall pipe. No fittings in the pipe or in the material flow
- Easy and fast installation by simple welding flange even in existing plants
- Adjustable measuring range from low kg/h to several t/h
- Robust, compact and service free sensor
- Analog and digital interfaces