Quicklime mass flow measurement Replacement of baffle plates in lime plant



Application

In a lime plant in Poland there was a request to measure the amount of extracted lime in free fall after an air slide, integrating the flow of two installation points.

Our customer had previously used impact plates, however this solution was not optimal and it always led to problems with mechanical components such as caking on the baffle, mechanical wear, dust, etc.

As a result, there were frequent downtimes of the plant due to maintenance work.



Process data

Customer:	Lime plant (Poland)
Material:	Quicklime
Quantity:	50 t/h
Installation:	Free fall after air slide
Process temperature:	80 °C
Function:	Mass flow measurement of quicklime

Solution

The MaxxFlow HTC sensor was specially designed to replace baffle plates in the process. It is used to measure the volume of bulk materials after mechanical conveyor systems.

In the application described above, the sensor offers numerous advantages for our customers compared to the baffle plate:

In addition to low height, characteristics like maintenance, wear-free measurement and an easy calibration make the MaxxFlow HTC an effective mass flow measurement device for large volumes of bulk materials.

Due to the non-contact measuring method (no moving parts) there are no built-in components in the flow, wear by abrasive materials is thus uncritical. The sensor can be used in a large variety of installation places: in round pipes or ducts, regardless of the cable routing and due to the ceramic inner tube even in harsh processes.

In addition, the MaxxFlow HTC is pressure resistant up to 10 bar, temperature resistant up to 120 °C and 100 % dust proof.

Customer benefits

- no obstructions for the flow, low installation height
- wear-free, no problems with mechanical components
- no downtimes due to maintenance work

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