

PROCESS

Flow measurement to control the exhaust gas cleaning in waste incineration

APPLICATION

In a waste incineration plant exhaust gases are produced during the incineration process that have to be cleaned. For this purpose, hearth furnace coke is blown into large bag filters, which are intended to clean the flue gas in order to bind pollutants on the surface of the hearth furnace coke particles. The flue gas has a temperature of up to 600 °C at the filter. As hearth furnace coke is a combustible material it can cause deflagration and in the worst case a fire. It is important to inject the optimum dosing quantity. Too little hearth furnace coke would result in pollutants not being completely bound. Too high dosing quantity would be unnecessary material consumption with avoidable costs.

PROCESS DATA

Customer:	Waste incineration plant
Material:	Hearth furnace coke
Installation:	Pneumatic conveying line, exhaust air cleaning
Function:	Control and dosing of the hearth furnace coke quantity for exhaust air cleaning

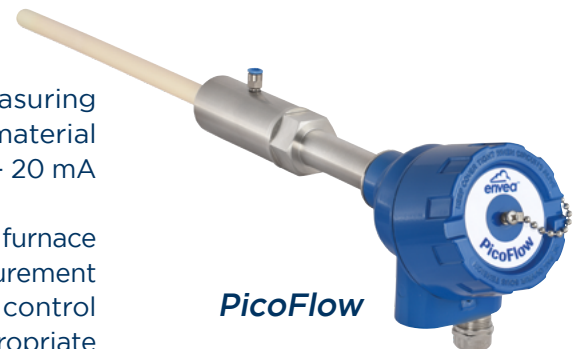


SOLUTION

The PicoFlow is specially developed for measuring powder flow in transport lines with very low material concentrations. The measurement provides a 4 - 20 mA signal which can be calibrated to g/h or kg/h.

In the application described, the dosing of hearth furnace coke is to be measured. The use of the flow measurement gives the plant operator the opportunity to control and regulate the flue gas cleaning with the appropriate quantity dosage of hearth furnace coke. Overdosed material consumption can be prevented, which results in potential savings in material costs.

In addition, the PicoFlow enables better proof of compliance with limit values to environmental authorities.



PicoFlow

CUSTOMER BENEFITS

- Control of hearth furnace coke dosing: cost saving (material costs) and avoidance of fire
- Careful cleaning of pollutants
- Proof of compliance with limit values to environmental authorities

Monitoring for Powder, Dust & Gas