

Plant protection in waste incineration plant

Dust monitoring with AirSafe

Application

A waste incineration plant burns waste. A final product of this incineration process is filter dust, which is stored in silos before being evacuated. For the ambient air monitoring of the silos, convey lines and connected rooms, the plant manager looked for a maintenance-free way to detect dust leaks and malfunctions.

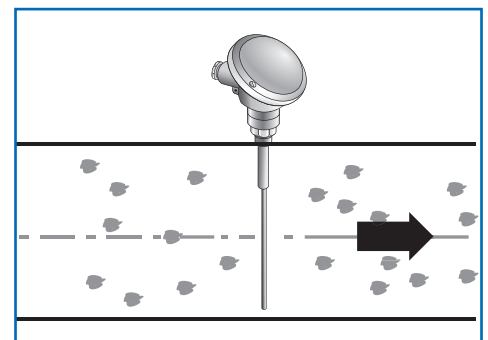
Optical techniques were not considered because of the degree of dust contamination in this part of the plant and the therefore expected cleaning and maintenance effort.

The monitoring device should detect limit values. The overstepping of these limit values should be displayed promptly in the control room.



Process data

Customer:	Waste incineration plant in Asdonkshof (Germany)
Material:	Filter dust
Installation:	Beneath convey lines to storage silos for filter dust
Function:	Monitoring and protection of air particles in remote parts of the plant



Solution

The AirSafe monitors the dust concentration in ambient control and process locations, silo areas, boiler houses and workstations. The device operates on the triboelectric measuring principle and is low maintenance in comparison with optical methods.

In this application, the ambient air of a silo, where filter dust from the incineration process is stored, and its convey lines should be monitored.

Here the AirSafe is used for the monitoring and the protection of production facilities.

In case of a violation of the predetermined limit values the AirSafe gives a signal to the control room.

For explosive atmospheres the ex version (gas Ex zone 1, dust Ex zone 21) can be used.



Customer benefit

- Rapid reaction in case of exceeding limit levels
- Improvement of plant security and prevention of plant damages
- Easy monitoring of remote system components

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