



Vasthi Continuous Emission Monitor for Dust /Particulate







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A real time continuous indicative dust monitors with logging & alarm capability. It consists of a single probe for installation in silo or duct & a control Unit / logger. This type-approved measuring devices with measuring probe for very low to medium dust concentrations. It is ideal for thick-walled or double-walled ducts because of the one-sided installation.

The measurement is based on the principle of Tribo-Electric charge transfer. The electrical charge carried by dust particles is captured by a highly sensitive Tribo-Electric probe, amplified and then transmitted to the control unit. As the current generated by the charge is proportional to the concentration of particles present, an indicative signal of dust presence results.

Alarm Monitoring Unit:

The unit is most commonly cmployed as a real time indicator of filter bag failure. The large LCD display gives an instantaneous read-out of emissions in the form of digital read-out. The green(Normal operations)-Yellow (warning)-Red (Alarm)"Triffic light" display in the control unit/logger provides an easily visible alert for the operator, even if he is not closely monitoring the unit. The yellow wartning lihgt is set operate when emission reach 75% of the level at which the red alarm is triggered, to allow early reaction (which can of course help avoid non-compliance with emission limits or catastrophic failure).

Control Unit

The control unit is main powered, and incorporates alphanumeric dispplay.

- Dust level at which the red LED light alarm is trigged.
- The emissions level at which the audible and visual alarm is triggered.
- 4- 20 mA continuous output
- Optional RS232 or 485
- Data lagging

At glance

- One side installation
- For very low to medium dust concentrations
- Automatic check of zero and reference point
- Continuous monitoring
- For small to medium duct diameters
- High sensitivity
- Quick & easy single point installation with no moving parts
- Low maintaenace costs
- Minmum detection limit leass then 1mg/m3

Applications

This can be used in many situations where the actual or potential presence of particulates creates an indicative monitoring requirement for example.

- Power Thermal Power Stations
- Steel & Non ferrous metal processing units.
- Cement plants
- Chemical ,Fertilizer, Petrochemical, Pharma
- Boilers & incinerators Paper Plants etc..





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Technical Specifications

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Measuring Principle	Tribo – Electric charge transfer
Measuring Range	Dust content
Remark	Other measuring range on request
Process temperature	-25 to 400 Deg. C, maximum temp depends on Type
Process gas humidity	Non- condensing
Duct Diameter	>0.25m
Ambient temperature	-15 to 50 Deg. C
Ambient Humidity	0 95%relative humidity: non condensing.
Enclosure rating	IP-67
Analogue output	4-20mA, 750 ohms load impedance
Power Supply	24VDC
Optional Interfaces	RS-232 or RS-485
Device type	Measuring Probe
System components	Measuring Probe plus Transmitter & Monitoring Unit

Note: scope of delivery depends on application & customer specifications.



VASTHI INSTRUMENTS

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