

An Ideal Solution for Monitoring Pollution

Continuous Emission Monitoring





Continuous Emission Monitoring

We realize our social and ecological responsibility and with every new development, we emphasise our regard for the environment and the people who are a part of it.

Keeping this in mind we bring you, Continuous Emission Monitoring Systems from Forbes Marshall and Codel International, UK, a Forbes Marshall group company, who specialise in the design and manufacture of high technology instrumentation for combustion processes and stack emission monitoring.

We are part of many successful power, iron and steel, cement, chemical, pharma, pulp and paper industries. Our machines and test facilities are in line with national / international norms. This makes us the most preferred supplier to all the well known industries. With a widespread network at over 30 locations globally, we are easily accessible for prompt and efficient sales and service support.

FMGCEM40XX

In-situ Multi Gas Analyzer



World class, rugged, reliable accurate, Insitu gas analyser which works 365 days a year

IR based multi gas analyzer for CO, SO₂, NO_x, HCL, CH₄ measurement

No sampling / conditioning of gases, fast response

Works on gas diffusion technique, no filter choking

Built-in CO₂, H₂O, temperature and pressure measurement for online normalisation

CO measurement at APH inlet or economiser outlet for boiler combustion efficiency monitoring

Suitable for above dew point to 400°C gas temperatures

Online calibration using audit gases

Negligible maintenance, power consumption only 400W

FMGCEM40E

Closed Coupled Hot Wet Extractive Multi Gas Analyser



IR based multi gas analyser for the measurement of CO, $\mathrm{SO_2}$, $\mathrm{NO_x}$, HCL, $\mathrm{CH_4}$ gases

Built-in measurement of O₂, CO₂, H₂O, temperature, pressure for online normalisation

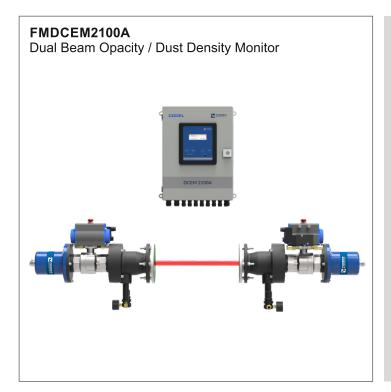
Closed coupled hot wet extractive gas analyser, no conditioning of sampled gases required

Field mounted - no A/C rooms/ shelters required

Suitable for wet processes

Online calibration using audit gases

Negligible maintenance, low power consumption



Unique dual beam transmissometer

Automatic lens contamination correction

Automatic zero and span check

Dynamic misalignment check

Built-in fail safe shutter

Suitable for above dew point to 600°C gas temperatures

Local / remote control unit

Data in % opacity, mg/m³ and mg/Nm³

Online keypad correction for temperature, pressure, $\rm H_2O$ and $\rm CO_2$ / $\rm O_2$

Low maintenance, high availability

VCEM 5100

Insitu Non-contact Gas Flow Monitor



Provides non-contact measurement of flue gas velocity using a time-delay correlation of the flue gas infrared energy sensed by two detectors spaced at a known distance apart

IR detectors, no transmitter

Non contact measurement

Suitable for above dew point to 1100°C gas temperatures

No moving parts high reliability, low maintenance

Continuous real time measurement

Measures gas velocity in m/sec

Measures gas flow in m³/sec

Integral auto low and high span value check





EnergyTech 301 dust monitor uses the well proven tribo electric sensor technology to directly measure particulate concentration by sensing the frictional charge created when particles collide with conductor, i.e metal probe.

Accurate DC Tribo frictional electrification method

Automatic zero and span checking

Direct O/P available in mg/m³ or kg/hr

Suitable for upto 5 meters stack diameter

RS 485 modbus output

In-situ probe 1" single port entry

Easy installation, negligible maintenance

DCEM3100

Hot Wet Extractive Dust Monitor for Condensing Gases



Field mounted

Scattered light dust monitor

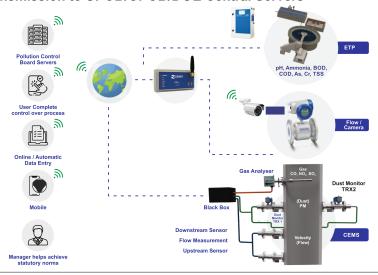
Powerful blower to eject the dusty, corrosive, wet gases from duct/stack

Suitable for the range of 0-15mg/m3 to 500mg/m3 of dust

Sampling probe - suitable for condensing gases as well as for temp upto 180°C application

Auto and manual zero/span calibration check

On line Emission Data Transmission to SPCB/CPCB/DOE Central Servers



Enhanced CEMS Uptime Services

Benefits



Uptime

Increase the instrument uptime



Benchmarks

Highlights critical emission upsurges



Krohne Marshall

Forbes Marshall Arca

Codel International

Forbes Vyncke

Health

Continuous monitoring by experts on health of the instruments generating easy to follow preventive actions



Proactive Support

Suggestions and recommendations on proactive maintenance



Forbes Marshall Pvt. Ltd.

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Forbes Marshall Steam Systems