



# Multichannel Dust Emission Monitor

The wide use of **Triboflow**<sup>®</sup> Broken Bag Detectors and Continuous Emission Monitors demonstrates the effectiveness of triboelectric technology as a reliable, maintenance free method for monitoring all types of dust collection systems.

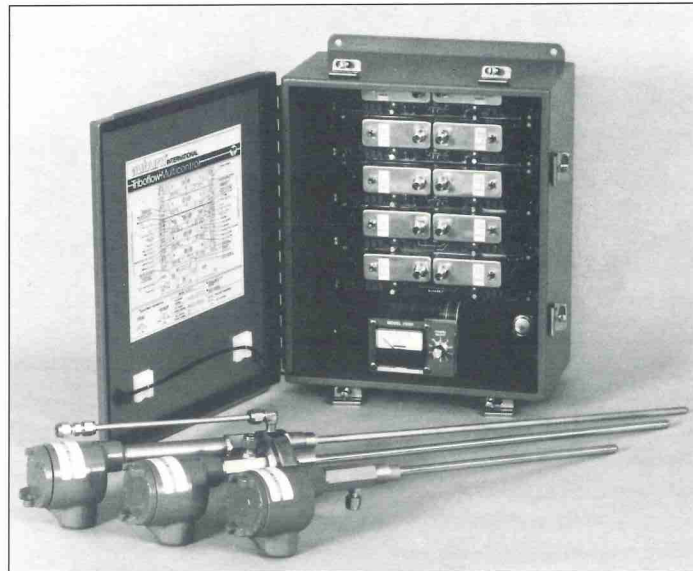
The Model 2500 is the multichannel version of the **Triboflow** Model 2602 Continuous Emission Monitor. The multichannel version permits the use of six, eight or ten sensors with one electronics thus substantially reducing the price per sensing point.

Placing a sensor at each compartment outlet of a multicompartment baghouse enables quick isolation of broken bags. The standard 4-20mA analog output for each channel provides an excellent means for comparing emission levels from each compartment. This allows maintenance programs to be conducted in a timely efficient manner.

The inherently simple principle of operation (the triboelectric effect) makes **Triboflow** an extremely sensitive and reliable device. As particulate emissions occur, particles collide with the probe and a charge transfer occurs. The continuous flow of particles produces a current which is proportional to the particulate flow rate. Any slight change in the particulate emission rate is indicated by the meter and the 4-20mA or 0-10V analog output.

## **Triboflow** Advantages

- No moving parts
1,000,000 to 1 sensitivity range (Adjustable for each channel)
- No lenses to align or clean
Detects concentrations as low as .0005 gr/dscf
- Virtually maintenance free
Detects micron size particles and larger
- Monitors dust collector performance



### **SENSOR:**

- Number of Sensor Points: 6, 8, or 10
- Temperature Range: - 40 to 300°F-Teflon Insulation (Standard)  
- 40 to 1000°F-Ceramic Insulation (Optional)
- Pressure Range: 30 psi (Standard) 2,000 psi (Optional)
- Wetted Metal Parts: 316 Stainless Steel (Standard)  
Tungsten Carbide or Inconel (Optional)
- Insertion Length: 1/2 inch (Standard)  
3, 6, 12 or 18 inch (Additional)  
Other (Special)
- Hazardous Rating: Designed Intrinsically Safe for Class I, II, III in Division 1 & 2, Groups A, B, C, D, E, F, G.
- Enclosure: NEMA 4X (Standard);

### **ELECTRONICS:**

- Outputs: (each channel)  
4-20 mA, 600 OHMS loop max, non isolated  
0-10V (Optional)
- Temperature Range: - 10 to 120°F (Operating)  
- 40 to 160°F (Storage)
- Humidity Range: 0 to 95% Relative Non-Condensing
- Power: 105 to 130 VAC 60Hz (Standard)  
210 to 260 VAC 60Hz (Optional)  
15 Watts Maximum Load
- Response Time: (Maximum Input Change) .5 to 30 Seconds, Adjustable
- Enclosure: NEMA 4 (Standard)  
NEMA 4X or 7/9 (Optional)

### **CONNECTIONS:**

- Process/Sensor: 1/2 inch NPT Male Fitting or Quick Release Clamp
- Sensor/Electronics: Special Low Noise Coax Cable 300 feet Max.
- Cable Temperature Range: - 60 to 400°F (Standard)  
Cable above 400°F - Contact Factory

### **INSTALLATION:**

Weld a half-coupling or the quick release ferrule over a hole in the side of the pipe or duct. Screw in or clamp the sensor in place. (Please refer to manual for details.)

\*PATENTED