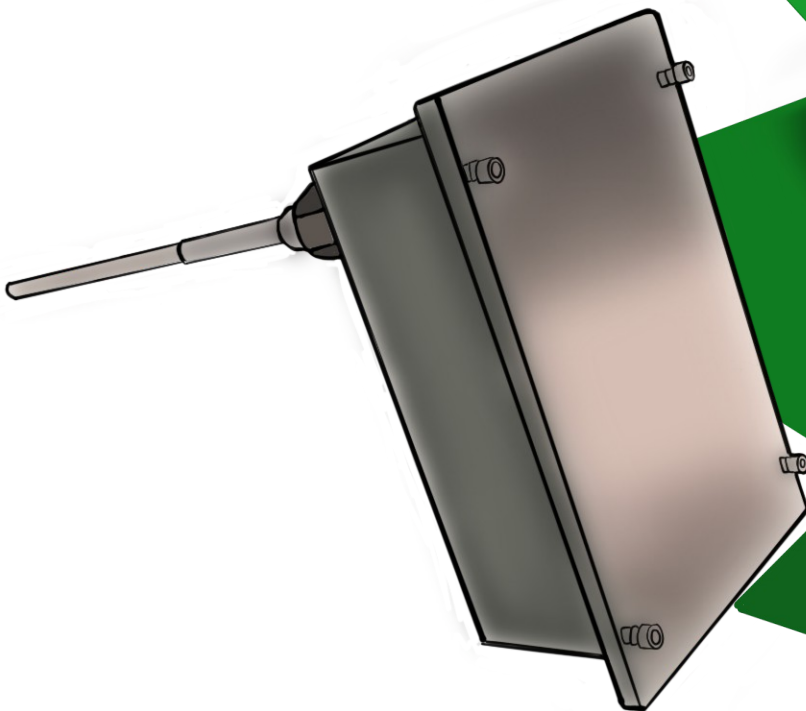




Atlas™ Sensor

Dynamic Induction Dust Monitor

**IF THE QUESTION IS PARTICULATE,
THE ANSWER IS B3 SYSTEMS.**



Baghouse
Leak
Detector

Dust
Monitoring

PM
Monitoring

Automated
QA Checks

Modbus
RTU

Built-in Rolling
Averaging &
Alarming

US EPA MACT Compliant

INTEGRATES DIRECTLY INTO PLANT PLC/DCS

COMPLETELY DIGITAL READINGS VIA MODBUS RTU

PATENTED ROD ISOLATION CHECK

BUILT-IN ROLLING AVERAGE CALCULATIONS

TWO DUST CHANNELS – INSTANT & ROLLING AVERAGE

**HANDLES ALL ALARMING, INCLUDING DELAYS,
FOR BOTH INSTANTANEOUS AND ROLLING AVERAGE DUST**

Atlas™ Sensor

Dynamic Induction Dust Monitor

SENSOR OVERVIEW

B3 Systems' Atlas™ Dust Sensor was designed to provide the most advanced digital communications employed by any sensor on the market. Affordability, increased productivity of your operation and reduced maintenance cost are just a few of the core competencies of the system. B3 Systems' sensor was specifically developed to meet and exceed the requirements of U.S. EPA's MACT Rules and the EPA's Fabric Filter Guidance Document.

INDUSTRIES WE WORK WITH:

Cement, Power, Waste Incineration, Food Industry, Pharmaceutical, Foundries, Chemical Processing, Fertilizers, Tobacco, Animal Food Processing, Metallurgical, Wood Processing

OUR TECHNOLOGY

B3 Systems, Inc. utilizes Dynamic Induction™ (DI) sensing technology. Dynamic Induction monitors the alternating current (AC) generated by the dust particles in an air stream and not the direct current (DC). Dynamic Induction utilizes the most advanced signal processing and filtering to eliminate outside noise and only include the portion of the signal related to the Dust.

Four (4) independent and dynamic ranges within the sensor are provided to create the maximum resolution and accuracy in every sensor and the largest dynamic operating range of any sensor on the market. The Atlas is the only sensor on the market that verifies the status of each input channel.

Aside from using an industrial standard communication protocol, each sensor is capable of calculating a rolling average dust reading along with the alarm status.

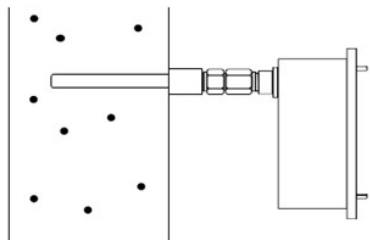


Figure 1.1: Stack View of Sensor Installation

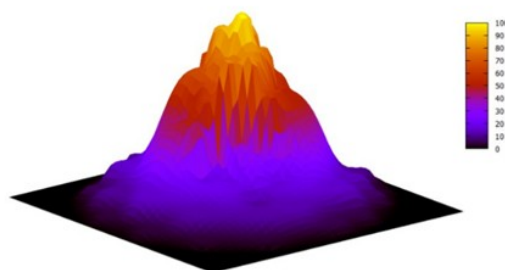


Figure 1.2: Signal Response looking directly at the end of the rod. Data collected from internal Stratification Testing (recorded, 2019).

CUSTOM APPLICATIONS WELCOMED

**ATLAS™ DUST SENSORS ARE DESIGNED TO
WORK IN TANDEM WITH
B3 SYSTEMS' SENTINEL & E-SENTRY
CONTROLLERS**

Represents ability to detect particles ~12" to 18" either side of the rod, providing a larger and more representative monitoring zone than single-point or cross-stack technologies.

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