

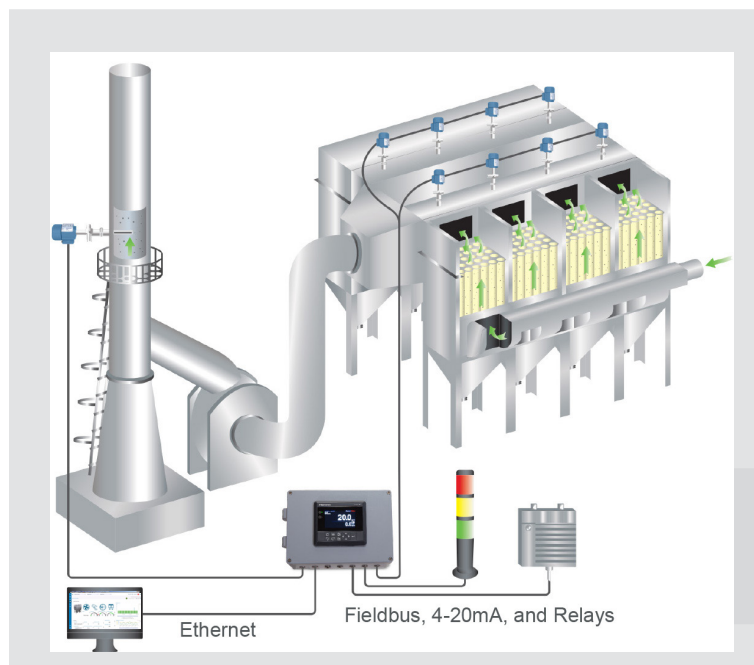


A forward-thinking strategy aimed at minimizing downtime and ensuring ongoing compliance amidst evolving regulatory standards:

*“Needed a reliable BLDS system, easy to install and use, to monitor multiple emission points in each of their foundries.”*

## Challenge

A prominent foundry group headquartered in Indiana, operating across multiple facilities statewide, sought a dependable Bag Leak Detection System (BLDS). They desired a solution that was not only easy to install and operate but also capable of monitoring numerous emission points within each foundry. Their primary objective was to detect any upticks in dust emissions before surpassing environmental thresholds outlined in their plant operating permits. This proactive approach aimed not only to avoid fines or shutdowns but also to facilitate preemptive maintenance of their baghouses, ensuring ongoing compliance and minimizing unexpected downtime.



## Solution

The company has adopted the BLDS, MACT compliant PM 100 PRO multi-channel particulate monitor across all its locations. Utilizing Auburn FilterSense’s innovative non-contact charge transfer sensor technology, DynaCHARGE™, this instrument enables the monitoring of multiple filters (up to 16) from a central controller. Its easy-to-fit, rugged sensors require minimal maintenance and eliminate the need for ancillary services such as purging air, resulting in a cost-effective solution. Unaffected by probe contamination and featuring a unique layered probe for damp applications like sand knockout plants, the PM 100 PRO offers a robust solution for monitoring low dust levels associated with fabric filters.

This customer paired the PM 100 PRO with Auburn FilterSense’s cloud-based industrial IoT **Insight** software package. Insight enables remote access to all measurement points across multiple locations through cellular connectivity, with both historical and live trending data. User level report generation allows for environmental and maintenance staff to receive instant notifications for alarm events, EPA or shift reports.

**Plant QEHS Director said this about his monitoring solution,** *“Having to prove compliance with the use of [Auburn] FilterSense BLDS and remote monitoring has dramatically reduced potential downtime and unexpected out of compliance events. By implementing the FilterSense solution, we have minimized the impact on operation of our plants. Remote monitoring and automatic alarm notification and EPA report generation alleviated what had been keeping me awake at night, being out of compliance and not knowing about it”.*

**A generic setup highlighting the PM 100 PRO -**

*As particles flow over a sensing probe, charge is induced into the probe creating small currents in the picoamp (pA) range. The signal is processed into an output proportional to mass.*

# Application Note

DynaCHARGE™ PM 100 PRO

## Benefits

***“Streamlined commissioning and convenient self-diagnostics added further value over the competition”***

The PM 100 PRO is a top-tier solution for industrial bag leak detection systems (BLDS), offering robust protection against hazardous particulates and quickly identifying process leaks across various production stages.

Integrated with Insight Remote Monitoring Software, it enables continuous monitoring of particulate emissions, allowing users to address potential dust emission issues proactively. Its advanced sensors eliminate the need for manual inspections and remain unaffected by dust, moisture, and heat, ensuring consistent performance. Automatic EPA self-checks and compliance with US EPA MACT and other international guidelines provide regulatory peace of mind, while adherence to NAMUR 107 standards ensures reliability and accuracy in diagnostics. Certified fieldbus protocols ensure seamless integration and operation within existing systems, enhancing efficiency and usability.

In summary, the PM 100 PRO is an innovative solution that upholds operational integrity and environmental responsibility in industrial environments.

## Custom Configurations

The PM 100 PRO's modular design, combined with its diverse sensor configurations, empowers tailored system designs for each customer, ensuring optimal benefits.



## INSIGHT

***“The PM 100 PRO, coupled with Insight software, delivers seamless monitoring and actionable insights for enhanced operational efficiency”***

A digital solution for resource optimization, increased productivity, and cost reduction while helping ensure compliance and safety.



- HMI/SCADA
- Event Handling
- Analytics
- Reporting
- Enterprise-grade Access Control and Security



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**Auburn FilterSense**

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