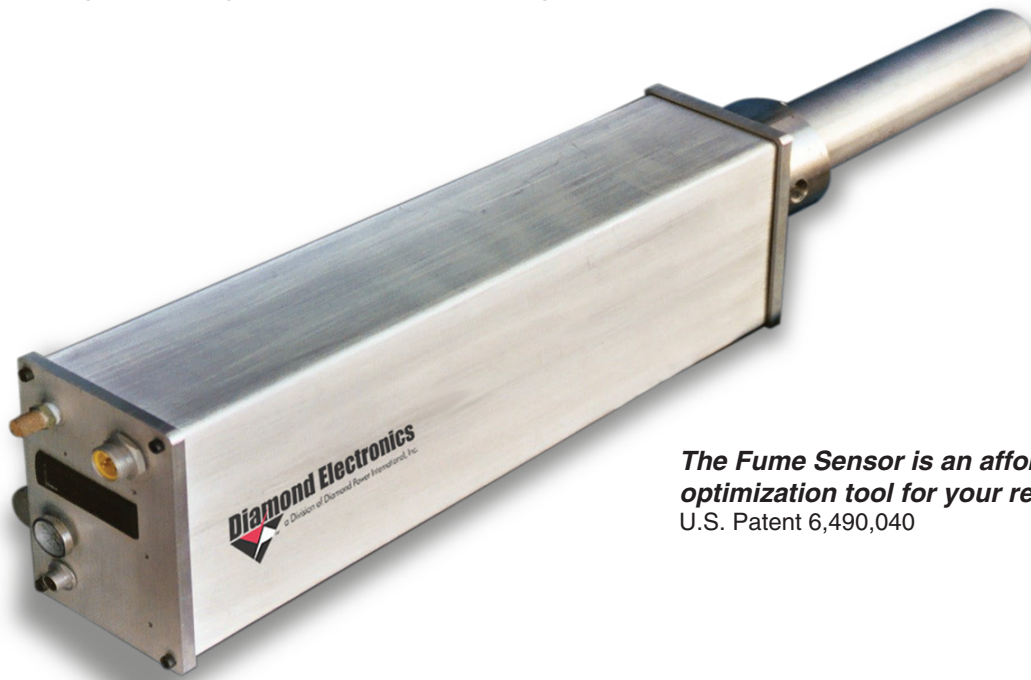


Fume Sensor

for measuring recovery boiler fume loading



The Fume Sensor is an affordable optimization tool for your recovery boiler
U.S. Patent 6,490,040

Optimizing the operation of recovery boilers has become increasingly more important within the pulp and paper industry. While there are an array of diagnostic tools available to gage conditions in the lower furnace, few are available to measure conditions in the convective section (upper furnace). To fill this void, Diamond Power International, Inc., has developed the Fume Sensor, an optical device that provides continuous online measurement of fume loading levels inside a recovery boiler.

Balancing bed temperatures is important to help reduce fuming related problems. The Fume Sensor allows operators to monitor fume loading in the recovery boiler in order to balance bed temperatures and boiler efficiencies. The Fume Sensor's patented design tracks fume quantities in the convection pass, helping to cover more saltcake and assist in the reduction of fume particle emissions – thus improving fume collection efficiency.

Benefits

- Optimized operations from continuous in-situ fume readings
- Reduced particulate emissions – resulting from ability to control fuming levels
- Reduced internal dust recycle or dust deadload

Features

- Fume density read-out display with selectable units of measurement
- Lightweight design provides easy installation and convenient portability
- Factory calibrated settings
- Rugged, reliable construction

Availability

The Fume Sensor is available as an installed or portable device for Kraft recovery boilers firing black liquor. The device is used to measure fume loading from the economizer inlet through the electrostatic precipitator inlet. An automatic retract option is available for purchase.

For more information on the Fume Sensor or other boiler cleaning and performance solutions, contact your Diamond Power account representative or call 1-800-700-2791.

Diamond Electronics
a Division of Diamond Power International, Inc.

Fume Sensor

for measuring recovery boiler fume loading

Specifications

Measurable density range
0 – 33 g/m³

Accuracy
+/-0.33 g/m³

Calibration
Factory set

Data outputs
Analog, self or loop-powered; 4-20 mA,
1500 volt isolation

Density update period
10 sec.

Dynamic response time
10-125 sec.

Diamond Electronics is a Diamond Power International, Inc. division.

Diamond Power International, Inc. is the leading name in the design, manufacture and service of ash-handling and boiler-cleaning systems, knowledge-based control systems, and boiler diagnostic, sensor and imaging technology. Diamond Power, headquartered in Lancaster, Ohio, U.S., has more than 80 field sales, service support, distribution, and manufacturing locations worldwide. For more information, visit www.diamondpower.com.

For over a century: *Trusted for experience. Preferred for performance.*

Diamond Electronics • P.O. Box 415 • Lancaster, OH 43130 • Phone: (800) 700-2791 • Fax: (740) 687-4201

The information contained herein is solely for informational purposes and is not offered, nor should be construed, as a warranty or contractual obligation. Diamond Power reserves the right to make design or material changes without notice.