

## Leak Locator System

### Continuous Performance Output for Logging/Recording, Advance Incident Warning, Remote Leak Location

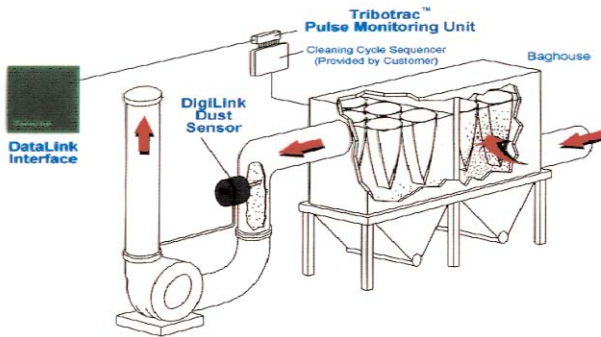
Used with any Auburn analog particulate emissions monitor the TRIBO.trac Leak Locator System continuously monitors dust collector emissions exhaust air ducts. It provides both early warning and high emission (reportable incident) alarm outputs and pinpoints the the leak location (row or compartment).

Designed for monitoring baghouses and cartridge collectors the TRIBO.trac System simplifies both dust collector maintenance and compliance issues relating to federal and state Clean Air Act (MACT) Regulations.

### Reduces Maintenance and Filter Replacement Costs

With the TRIBO.trac System, a single maintenance technician can monitor the emissions remotely, eliminating messy leak powder tests and time-consuming manual inspections, and minimizing personnel health risks associated with manual inspections. The TRIBO.trac System dramatically reduces search times necessary to locate torn or leaking bags eliminating costly and unnecessary total bag replacement by rapidly determining the severity and location of the problem.

### Minimizes Process Interruptions and Downtime

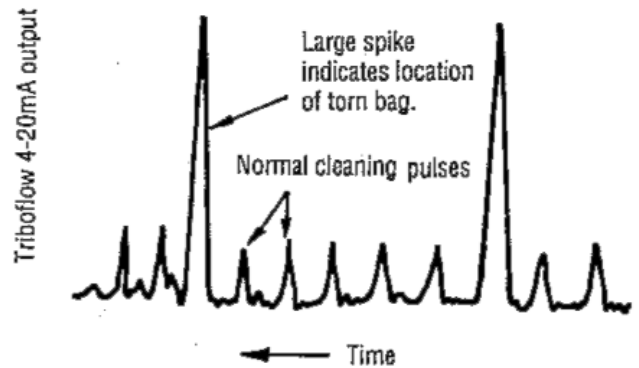


TRIBO.trac used with TRIBO.link System

Once the TRIBO.trac System has located early stage filter failure maintenance personnel can shut down only the particular zone affected. Early leak detection also minimizes the damage which could occur to other bags when abrasive dust impinges upon nearby bags to the point where adjoining bags are damaged, creating a cascading and catastrophic event.

By comparing the emissions level signals (see figure below) to a signal from the cleaning cycle solenoid sequencer, the TRIBO.trac System provides a simple means to evaluate the condition of each row or zone by displaying the location of the most recently cleaned zone and simultaneously presenting real-time emissions levels in a readily understandable 0-100% format.

### Early Warning and Reportable Incident Alarms



Dust Collector Cleaning Cycle Emissions

### TRIBO.series™ Products and Services

TRIBO.series dust detectors incorporate triboelectric technology, developed exclusively by Auburn, now updated and improved to address more challenging dust collector maintenance and performance requirements appearing in, virtually, every materials manufacturing industry.

Call for more information or go to [www.auburnsys.com](http://www.auburnsys.com)

*Today's standard for bag leak detection...*

*... from simple physics to useful technology*

### Charleston, South Carolina aluminum reduction facility perform head-to-head comparison against an optical sensor

#### Slow Leak Detection Meant Hours of Cleanup

Before installation of the TRIBO.trac System, a broken bag could only be detected when visible levels of particulate exited the stack. Operators were required to individually open each of the collector's 12 compartments to search for the broken bag or bags and clean the area. By the time a few inches-in-diameter tear was detected, the compartment floor was usually covered with several inches or more of dust requiring hours of cleaning. The crew was required to work in confined spaces with special clothing and respirators, interrupting processing operations, and sometimes violating maximum allowable emissions rules.

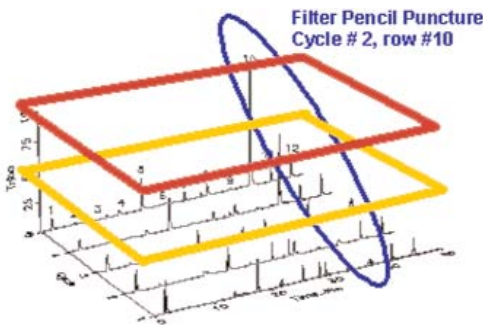
#### A Head-To-Head Test

In order to test performance of the TRIBO.trac System against an optical sensor under actual baghouse conditions, project engineers at the facility punctured a single bag in a selected compartment and recorded the response time of each method.

#### TRIBO.trac Detects Pencil-Sized Hole in Seconds

With the sensitivity set to detect normal cleaning cycles, the TRIBO.trac System tripped the alarm relay when a pencil-sized hole was made in the bag within seconds, while simultaneously identifying the compartment where the leak had occurred.

Bag Leak Detection & Location



#### Optical Sensor Fails to Respond

The optical sensor was unable to detect any increase in emissions levels until the tear was roughly 8" long. A hole of this size would have leaked enough dust to require an enormous amount of manpower to clean up.

#### TRIBO.trac Minimizes Leak Detection Time and Cleanup

The project engineer commented, "Obviously, the TRIBO.trac System will save us hours of manpower both in locating dust collector leaks and cleaning them up. And by detecting and locating leaks quickly, it will help us to maintain Title V compliance".

#### Test Results

|                     | Optical Sensor        | TRIBO.trac System                |
|---------------------|-----------------------|----------------------------------|
| <b>Time To:</b>     |                       |                                  |
| Detect Leak         | 2 Days or more        | 1 Hour or less                   |
| Locate Leak         | 2-3 Man hours         | Less than 1 minute               |
| Clean Up Leak       | 8-10 Man hours        | Less than 1 man hour (Estimated) |
| <b>Size Of:</b>     |                       |                                  |
| Hole Detected       | 8"                    | 1/4"                             |
| Dust Cleanup        | 60 cubic feet or more | 2.5 cubic feet or less           |
| <b>Cleanup Tool</b> | Shovels               | Shop Vacuum                      |

*The First....and Still....The Best*

