

DETERMINATOR®

Dust Collector Monitoring System

Remote Monitoring & Control System Improves Dust Collector Performance, Troubleshoots Problems Instantly



The Farr Determinator dust collector interface brings dust and fume control into the 21st century. This highly advanced electronic system remotely oversees up to 100 dust collectors in your plant, continuously monitoring their performance and accurately troubleshooting any problems that might occur.

Imagine being able to sit at your desk and receive an alarm from your computer at the first sign of a malfunction or service alert. You can quickly determine whether a hopper needs to be emptied or filter elements require changeout. With a keystroke, you can adjust the operational pressure drop of a dust collector or alter the emissions point at which a broken bag detector sounds an alarm. The Determinator does all this, and more:

NETWORKS ALL YOUR DUST COLLECTION UNITS—provides simultaneous remote monitoring of up to 100 pulse jet baghouse

or cartridge collectors. No other unit can offer more comprehensive monitoring capabilities!

PROVIDES AUTOMATIC ALARMING of fault conditions at trigger points predetermined by the user, utilizing a time and date stamp to record the event.

IDENTIFIES THE DUST COLLECTOR AFFECTED AND THE NATURE OF THE PROBLEM whenever an alarm sounds. The Determinator's memory system can store records of the last 100 alarms per collector.

AUTOMATICALLY RECORDS DATA on emissions, pressure drop, temperature, compressed air pressure, airflow and other conditions. The Determinator stores hourly averages of all these conditions for two weeks. Daily averages are stored for one year. This provides a complete downloadable performance history of your system.

REDUCES OPERATING COST through precise control of the cleaning mechanism in your collectors. The Determinator ensures that each cleaning system pulses only when required—thereby reducing compressed air usage and extending bag or cartridge life.

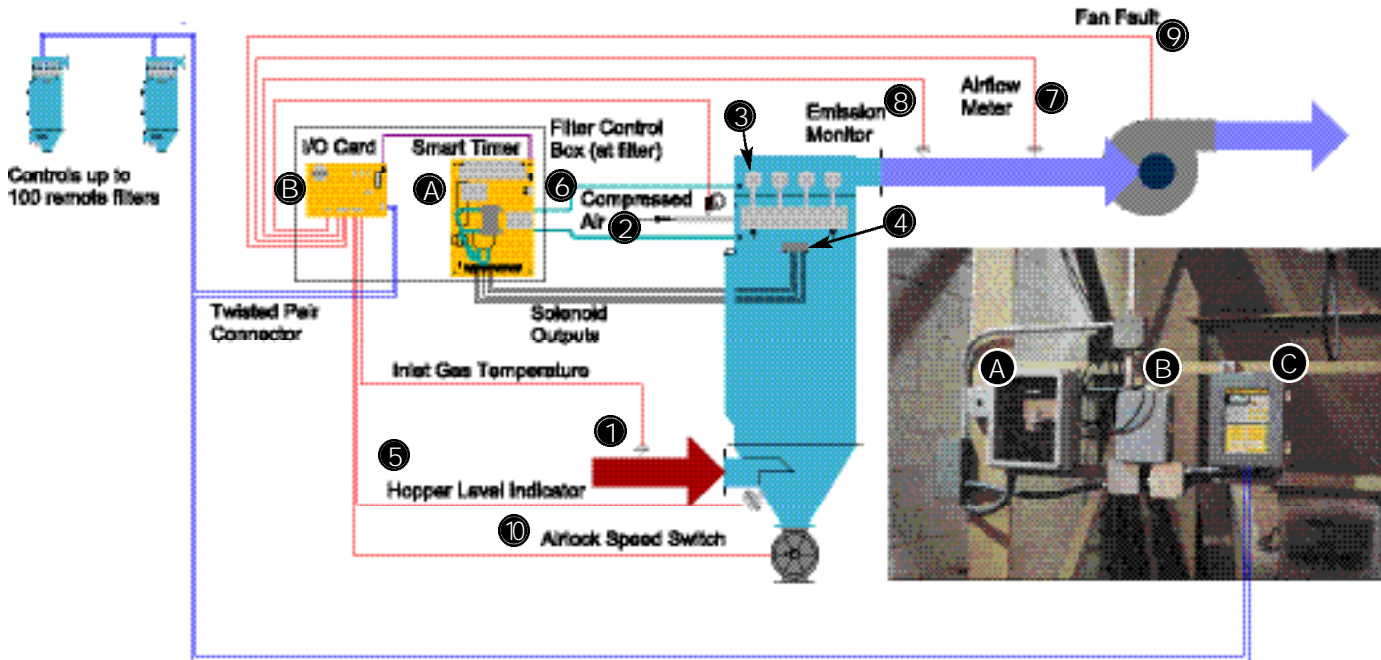
ALSO REDUCES EMISSIONS through controlled pulsing and early broken bag detection.

EASILY CONNECTS TO PCs via RS232 serial port hook-up.


FARR APC
Air Pollution Control

Farr APC	Product Sheet
Determinator®-B-1000-25	
SAFE AIR FOR A SAFE WORK ENVIRONMENT	

Specifications



DETERMINATOR CORE COMPONENTS

- (A) Timer board — 10 or 20 solenoids.
- (B) I/O card for connectivity to network.
- (C) Display interface for up to 100 I/O cards and timers.

- (1) Type K thermocouple: -50° F to 1,000 °F.
- (2) Compressed air pressure transducer: 0→120 psig (4-20 ma signal) senses bad diaphragms and loss of compressed air.
- (3) Diaphragm for pulsing bags or cartridges.
- (4) Timer controls solenoids which activate diaphragm. Determinator can detect a bad solenoid and tell you its location.
- (5) Hopper level detector: Detects high hopper level.
- (6) Pressure drop across filters (ΔP) 0 → 15 in. wg; Determinator has built-in pressure drop transducer.
- (7) Airflow meter: Pitot tube 0→2 in. VP — Enter duct diameter into Determinator and airflow in cfm is displayed. (4-20 ma signal)
- (8) Emissions detector: Triboelectric sensor or real time mass monitor is sensitive down to 0.05 mg/m³. (4-20 ma signal)
- (9) Fan fault is triggered by fan motor starter overload.
- (10) Rotary valve/auger zero speed switch.



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