



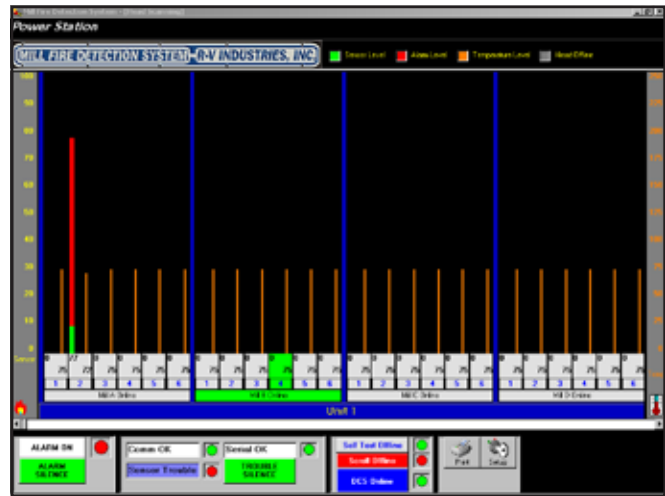
MILL FIRE DETECTION SYSTEM



Control System

The industrial computer contains a sound card and speakers which produce audible alarms when a fire occurs. The alarm can be acknowledged on the touch screen. A key feature of the MFDS is its ability to adjust the alarm threshold system sensitivity.

A visual indication of any fire activity is shown on the screen for each sensor. The screen is customized for each installation on the basis of the number of sensors installed and the plant mill designations.



If at any time the control system is unable to communicate with a particular sensor, a “Comm Trouble” alarm is initiated notifying the user of a problem. Relative sensor head temperatures may be monitored by activating this built-in feature.

Sensor Head Assembly

The assembly consists of a sensor head and communications circuitry. The sensor head houses light detection circuits. Communication circuits are housed in the mill junction box, providing a regulated environment free of vibrations and high temperatures.

Holes are cut and mounting brackets are welded to the mill housing at the appropriate locations. A mounting flange, including dual-quart sight glasses, is bolted to the mounting bracket sealing the mill.

The sensor head is quick-coupled to the mounting flange completing the installation. The normal quantity of sensors recommended ranges from four to seven, depending on the pulverizer type. No cooling is required.



Sensor Head Assembly





MILL FIRE DETECTION SYSTEM



MFDS Benefits

- Provides continuous monitoring for all mills simultaneously
- Detects fires in mill housings, classifiers, hot air ducts and coal drying equipment
- Detects sparks generated by mechanical problems in mill housings
- Individual mills may be shutdown for maintenance while retaining detection for the remainder of the mills
- Minimal installation cost



Demonstration MFDS Model

The MFDS Comparison

	Continuous Monitoring	Instantaneous Detection	Spark Detection	Self Checking	Low Maintenance	Local and Remote Indication
R-V MFDS	Yes	Yes	Yes	Yes	Yes	Yes
CO Monitoring	No	No	No	No	No	No
Thermo-couples	Yes	No	No	No	Yes	No

