

# Overheat and Fire Detection in Dust Collectors/Baghouses

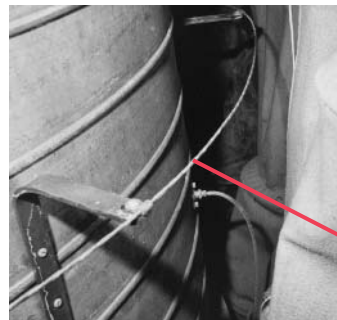
Protectowire Linear Heat Detector is a highly effective method of detecting fire in dust collectors/baghouses and overheating of associated motors.

Linear Heat Detection is used as a primary system within collectors or as a backup for ember detection, which is installed in a collector's inlet manifold. Any hot particles which may escape ember detection will activate the Linear Heat Detector positioned above the inside base and around the top of the collector (see illustration reverse side).

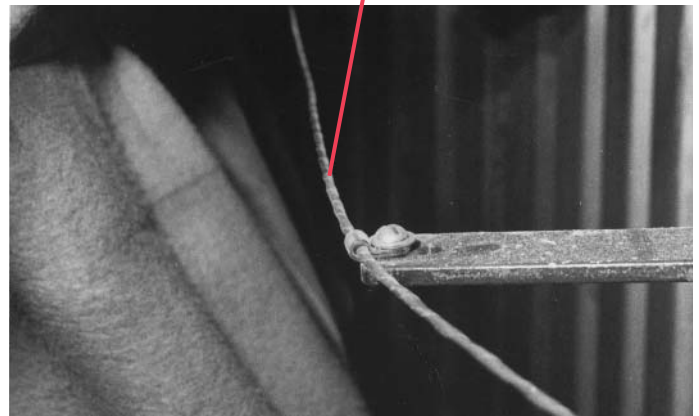
The Linear Heat Detector can also be wrapped around the frame of the blower motors for early detection of an overheating condition.

The Protectowire system controls provide relay contacts to actuate local audible alarms, remote annunciators and master boxes for direct lines to the fire department. Remote interconnect provides for blower shutdowns and diversion of air flow from the filters to open atmosphere. Wet or dry extinguishing systems such as Halon, CO<sub>2</sub> or water deluge may be activated.

Protectowire Linear Heat Detector, Type EPC or EPR, resists the harsh environment within collectors.



Protectowire  
Linear Heat Detector



*Photos taken at: International Paper Co.  
Longview, Washington, U.S.A.*

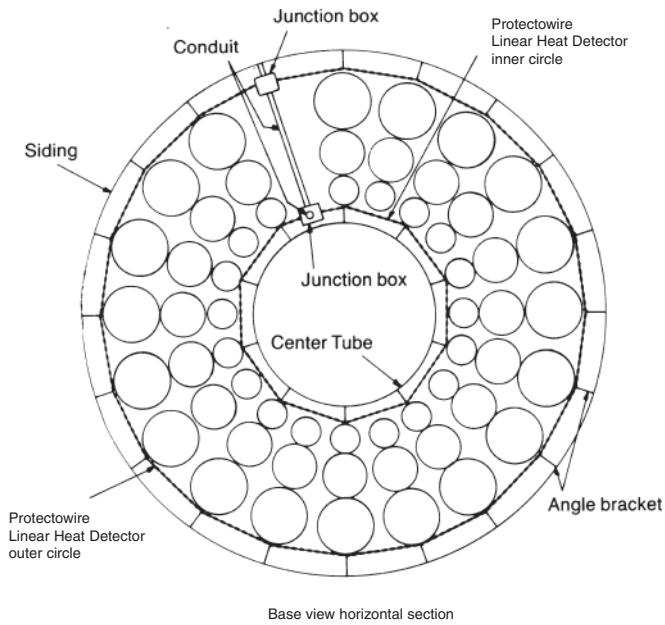


Figure 1

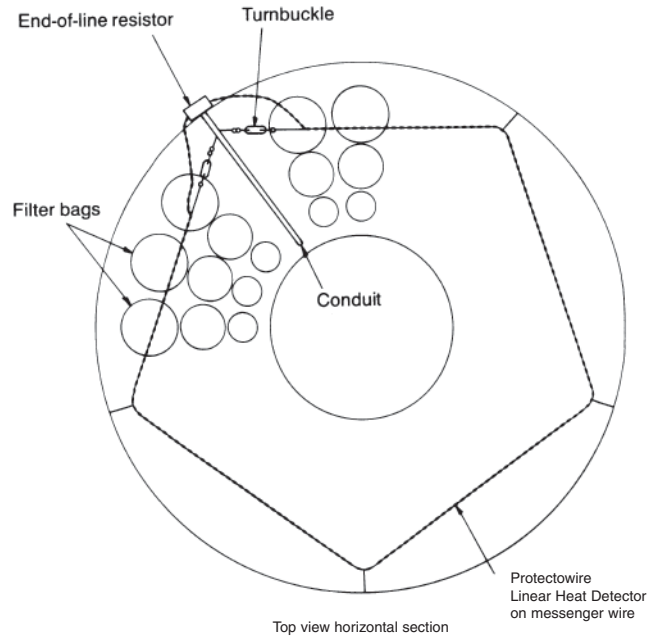


Figure 2

Figure 1 illustrates Protectowire Linear Heat Detector, supported by angle brackets, installed 30" above the inside base of a dust collector. From the base junction box the Detector is circled around the interior of the outer siding then run in conduit to the center tube where the Detector is circled as shown. The Detector is then run in conduit to the top of the collector where it is supported on messenger wire in the pattern shown in Figure 2.

The Linear Heat Detector may also be installed around the blower motor frames for early detection of an overheating condition.

Protectowire Linear Heat Detector is a component of a complete family of fire detection systems manufactured by The Protectowire Company.