

## Overheat and Fire Detection in Cooling Towers

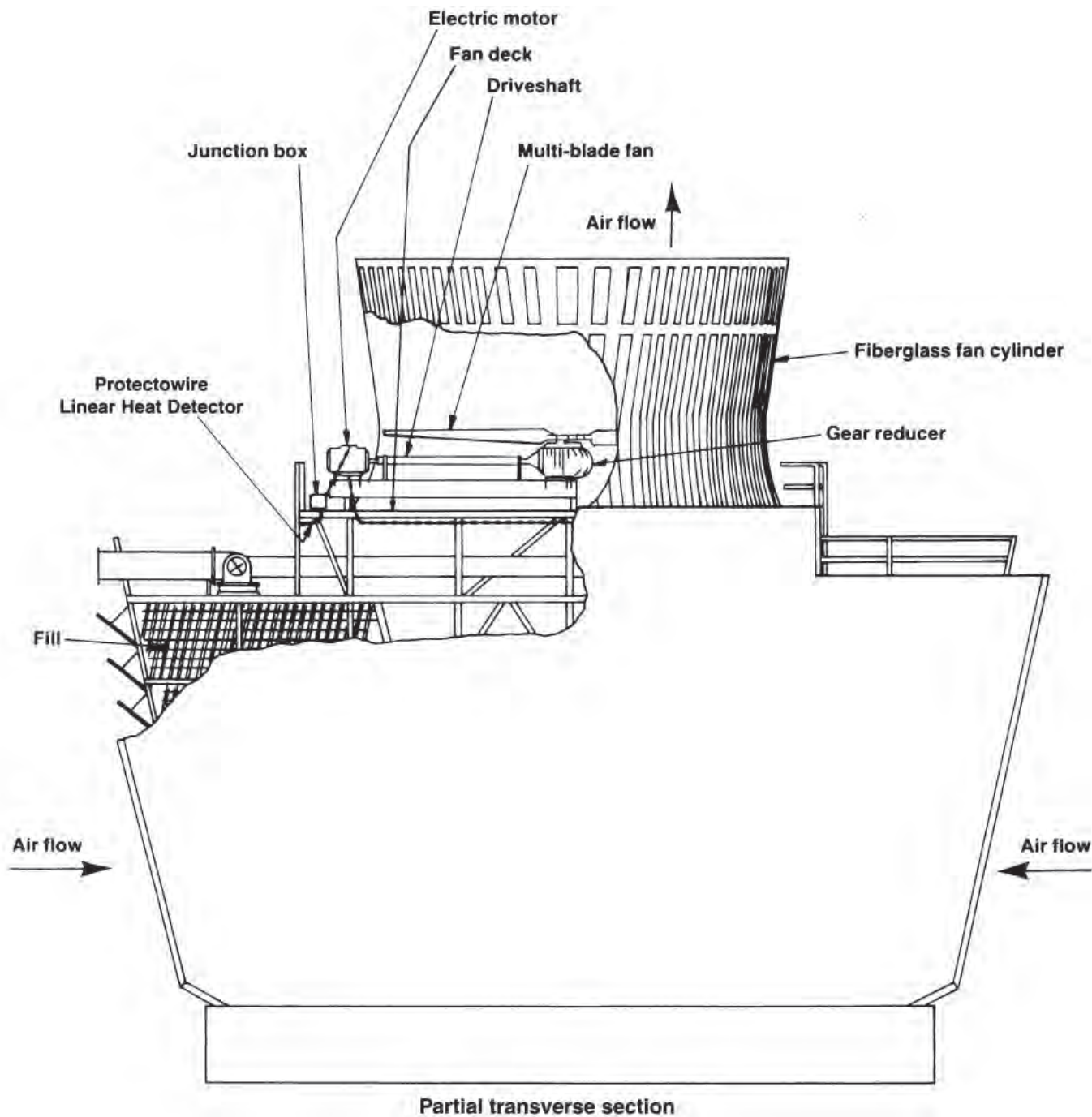
### SPECIAL HAZARD APPLICATION

Protectowire Linear Heat Detectors are a proven, practical method of detecting overheat and fire in cooling towers. Fire is usually caused by overheating of a fan motor. Wooden tower framework and plastic impregnated fiberglass supports and dividers (fill) are an everpresent combustible hazard.

The Linear Heat Detector, when used with a Protectowire system control, provides continuous early warning detection for activating a deluge sprinkler system. The Detector is installed around the fan motor on the fan deck and circles the inside perimeter of the fan cylinder base, just beneath the deck (see illustration reverse side). Sprinklers are positioned with heads pointing in from the tower wall and upward toward the decking.

Protectowire Linear Heat Detector, Type XCR, resists the moisture and the acidic atmosphere common to these towers when the water is chemically treated.





Protectowire Linear Heat Detector is illustrated in a cross-flow cooling tower. Copper wire is run in conduit from the fire alarm control panel to the junction box mounted on the fan deck flooring. From this point the Detector is looped over the fan motor, circled around the inside perimeter of the fan cylinder base just beneath the fan deck and returned to the junction box.

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