

Fire Detection & Extinguishing System

THM gas turbines



MAN PrimeServ provides a state-of-technology fire detection and extinguishing system for the modernization of existing THM gas turbine units.

The fire detection and extinguishing system shall detect and extinguish fires inside the enclosure automatically in order to protect the operating personnel and the equipment from damages due to fire. As the reliable detection and extinguishing of possible fires is of vital importance MAN PrimeServ provides a state-of-technology fire detection and extinguishing system based on an Esser 8010 digital fire monitor and extinguishing controller and a CO₂ extinguishing unit for the modernization of existing THM gas turbine units:

- Digital fire monitor and extinguishing controller
- Field mounted CO₂ extinguishing unit
- Infrared flame detectors, heat detectors and manual fire call points
- Optical and acoustical alarm devices
- CO₂ nozzles for main and extended flooding

The digital fire monitor and extinguishing controller is directly linked to the programmable logic controller and the safety-directed control of the unit control system. To ensure the correct function of the fire detection and extinguishing system the digital fire monitor and extinguishing controller continuously monitors the condition and function of all subcomponents for malfunctions as detector fault or wire break within detector loop, CO₂ loss signal from weighting devices or locking of extinguishing unit.



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In case of a possible fire is detected the digital fire monitor and extinguishing controller evaluates the signal and either releases a pre-alarm or directly initiates the extinguishing process and tripping of the gas turbine. Thereby, due to an internal voting logic false alarms and release of the extinguishing medium are avoided.

Benefits

The fire detection and extinguishing system facilitates a long-term reliable detection and extinguishing of possible fires inside the enclosure for an optimum protection of the operating personnel and the equipment:

- State-of-technology system based on industrial standard components for long-term service support
- Fire monitoring and extinguishing control grouped together in common system
- Processing of trip signals via programmable logic controller and safety-directed control
- High reliability due to internal voting logic and continuous monitoring of condition and function of subcomponents
- Design adjustable to specific requirements and regulations
- Actual standard system for THM gas turbine units

Comprehensive Modernization

MAN PrimeServ provides comprehensive modernization concepts to modernize your equipment – no matter if you want to optimize reliability, operating costs, environmental sustainability or anything else. Please contact us for further information.

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