Gas Detection System
THM gas turbines

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

The gas detection system monitors the gas concentration within the enclosure in order to detect possible gas leakages and to prevent the formation of potentially explosive atmospheres which might endanger the safety of the operating personnel and the equipment. As the reliable monitoring of the gas concentration is of vital importance MAN PrimeServ provides a state-of-technology gas detection system based on the proven Unipoint/Sensepoint series of Honeywell Analytics for the modernization of existing THM gas turbine units.

The gas detection system continuously monitors the gas concentration inside the enclosure by means of high-temperature catalytic gas detectors arranged in the area of the fuel gas supply and the rear area of the enclosure. The associated evaluation units can be mounted in the existing control cabinet and are directly linked to the programmable logic controller and the safety-directed control of the unit control system.

In case of a gas concentration exceeding the defined alarm level is detected a pre-alarm is released and the enclosure fans are activated to remove the gas from the enclosure. If the gas concentration exceeds the defined trip level the gas turbine unit is tripped via the programmable logic control as well as via the safety-directed control to interrupt the fuel gas supply into the enclosure immediately.
Gas Detection System
THM gas turbines

Benefits
The gas detection system facilitates a long-term reliable monitoring of the gas concentra-
tion within 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
  support
- Monitoring of gas concentration integrated into existing unit control system
- Processing of trip signals via programmable logic controller and safety-directed control
- Low maintenance requirements due to lifetime of gas detectors up to 5 years
- Design adjustable to specific requirements and regulations

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.