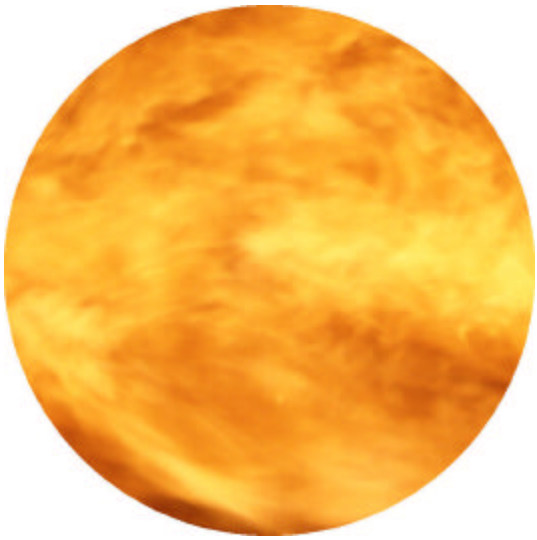
BFI Automation

technology for your future



System 3000 / 4000

Fore sure
high availability

The Flame Monitoring System

__Fail-safe design, selfchecking

__Solid state electronic

__German TÜV approved, DIN DVGW, DIN-CERTCO registered

__Indicates flame instability which permits an early warning of flame-outs

__Monitoring of nearly each combustion with oil, gas and coal

__Special sensors for gasturbines, refinerys and chemical industry

__Analog and digital outputsignals

__Explosion proofed housings and LWL-technique

Safety and Availability

The flame monitoring system 3000 / 4000 was developed in view of safety progress and optimal availability of combustion plants. Its objective is to safety and reliably monitor furnace systems. The system can differentiate between various burners in almost every furnace and its therefore able to monitor selectively. Due to the continous, fully- electronic self-checking system, all instruments are authorised in accordance to the DIN DVGW decree (German Industrial Standards) and the TÜV examination for continious opertion (Technical Surveillance Association). Furthemore, the requirements for TRD 411-414 (technical directions for steam boilers) have been fulfilled. The abrasion-free sensory technology makes the 3000 / 4000 flame monitoring system almost maintenance-free and allows operation of the furnace to be long-lasting and reliable.

Flame Controller

The 3000 / 4000 flame monitoring system is based on the controllers, 3001, 3001D and 4001 in 19" insertion technology, in accordance with DIN 41494.
They contain all control and guidance logic and provide the signals for external processing. The clearly set out and high-contrast front displays make it easier to read the information. Fixing and mounting racks, related accessories and on-site control cases and cabinets are also supplied.

Flame detecting devices

For steam generators especially with low No_x reqirements, the detecting devices are available, among others, for the following fuels:

__Ligth crude oil / heavy oil
__natural, blast furnace and coke oven gases
__pulverised lignite and pulversied hard coal

Flame scanner heads are in use especially for requirements in the chemical industry and oil refineries, e.g. on:

__H2S-plants (Claus porcess)
__burning of residues
(alkaline solutions, waste gases, residues)
__excess gas burners
__gas turbines

Technology:

__Spectral range: 250...7000nm
(depending on each model
__system of protection (enclosures) IP 65
__cable lengths ovver 1,000m without additional drive
__all detecting devices also flame / explosion-proof
__extensive accessories

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