

# EUflame™

## Flame temperature monitoring system

The flame temperature and its distribution are fundamental properties of the combustion process influencing coal devolatilization, pollutant formation, heat transfer, unburned carbon (LoI) as well as slagging and fouling. Moreover, an unrecognized imbalance of the flame ball position may impose excessive stress on boiler parts leading to premature system failure. Reliable information on the temperature and its distribution are therefore paramount for an optimal boiler operation.

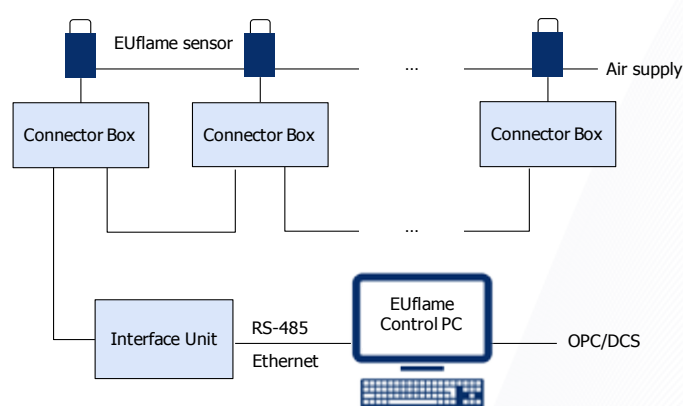
EUflame is an optical sensor based system specially designed for the application in fossil-fired steam generators to measure the furnace exit gas temperature (FEGT).

### Multi-dimensional Temperature Profiling

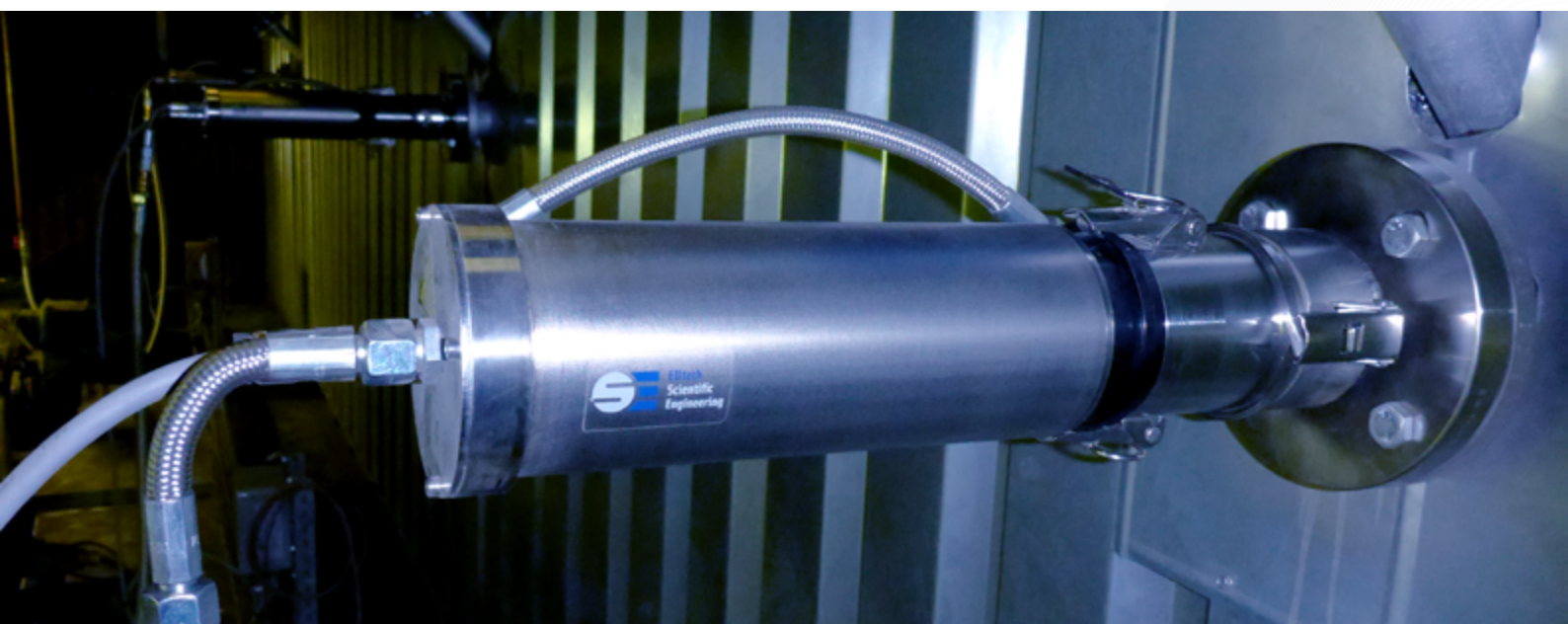
- Precise measurement of FEGT distributions
- Essential pre-requisite for robust and optimal SNCR operation
- Combustion and flame monitoring
- Flame ball centering
- Applicable to hard coal, lignite, biomass, gas etc.
- Two-dimensional temperature profile mapping
- Available as stationary and mobile system
- Monitoring of oil-fired start-up

### Benefits

- Online combustion optimization
- Improving handling of differing coal qualities
- Efficiency and availability improvement
- Reduction of thermal material stress
- Optimizing effectiveness of on-load cleaning
- Emission reduction
- Shortening of start-up time

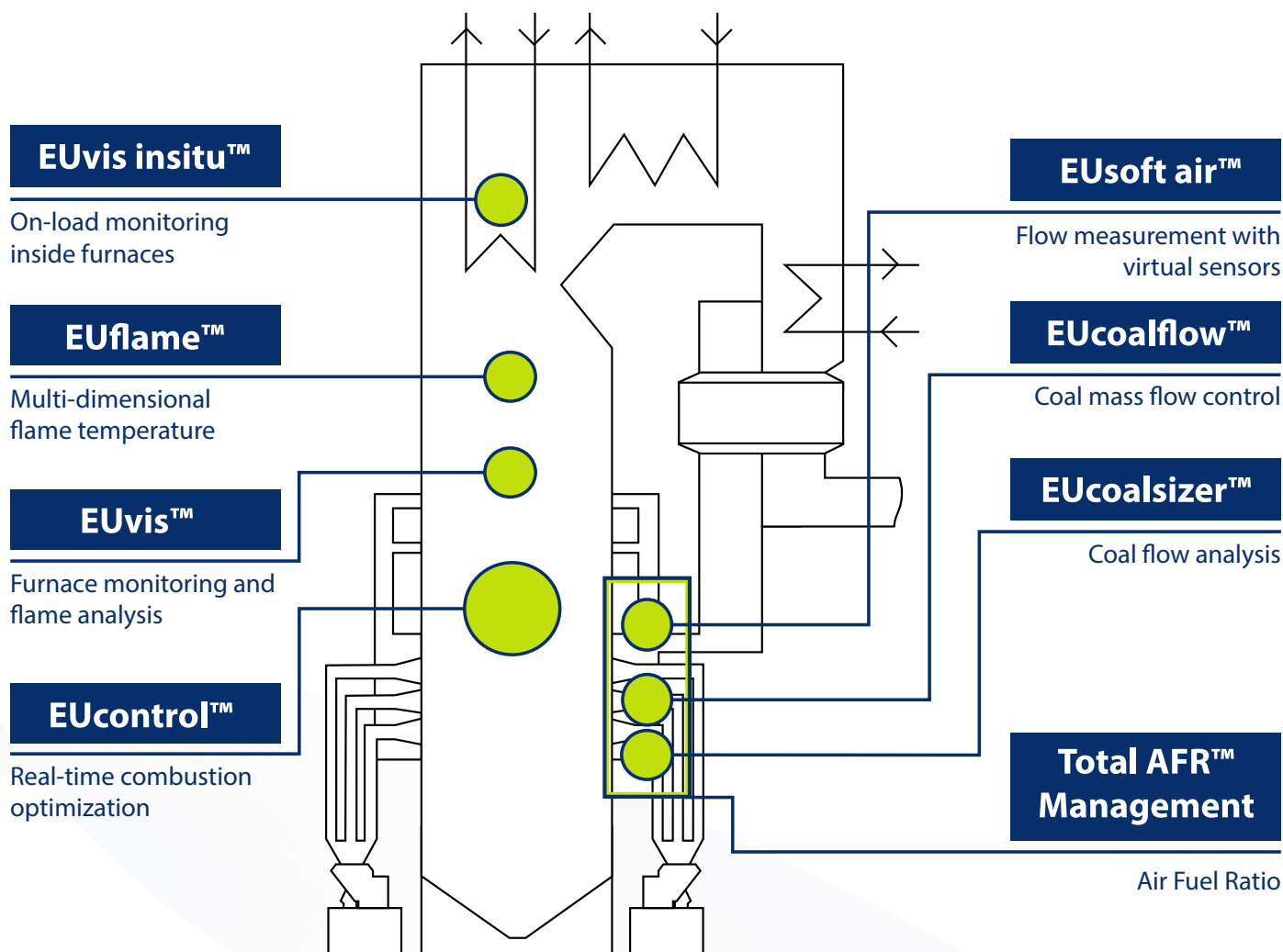


EUflame system set-up



## EUtech Scientific Engineering GmbH

EUtech Scientific Engineering was founded in 1999. The company has established itself nationally and internationally as a successful engineering company in the areas of test stand engineering, simulation, automation and measuring technology. In addition to engineering services in all development phases, we offer turnkey test stands, software-based development tools and measurement systems for the power generation industry. With our innovative model based approach we optimize operations and increase the efficiency of power plants by stepping through the three phases: Measurement - Control - Optimization.



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