EUvis™
Furnace monitoring and flame analysis

An unbalanced combustion process caused by flame displacements, low burn-out rates and deposits has a significant influence on boiler efficiency. High temperature corrosion and thermal stresses can lead to boiler tube ruptures. In addition, slagging and fouling reduce the heat exchanger efficiency, disturb the local heat balance and require expensive on-load cleaning.

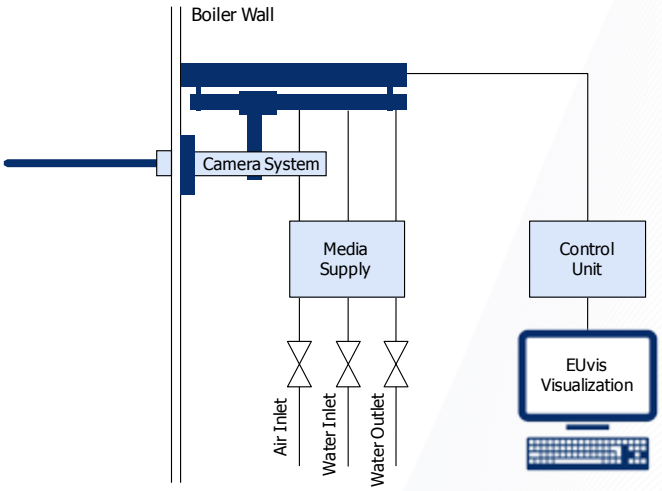
EUvis is a specially designed monitoring system for online analysis of combustion processes inside furnaces. It helps to keep close track of the process and operating conditions, and identifies problem areas early in advance. The powerful software tool helps to automatically analyze and evaluate process information - such as flame position and deposit thickness - using edge detection algorithms.

Video-based Monitoring

- Flame analysis and burn-out grate monitoring
- Continuous supervision of critical areas e.g. boiler walls, ash hopper and heat exchangers
- Water-cooled camera housing with pneumatic retraction unit
- Various front optics with purging air adapter
- Digital image acquisition and processing
- Applicable to all types of fuel

Benefits

- Real-time supervision of combustion quality
- Adjustment of burner operation and flame appearance
- Direct identification of deposits and/or damages
- Flame positioning and stabilization
- Immediate reaction to critical situations for increased plant safety
- Evaluation and controlling of the soot blowing effectiveness
- Avoiding of tube damages

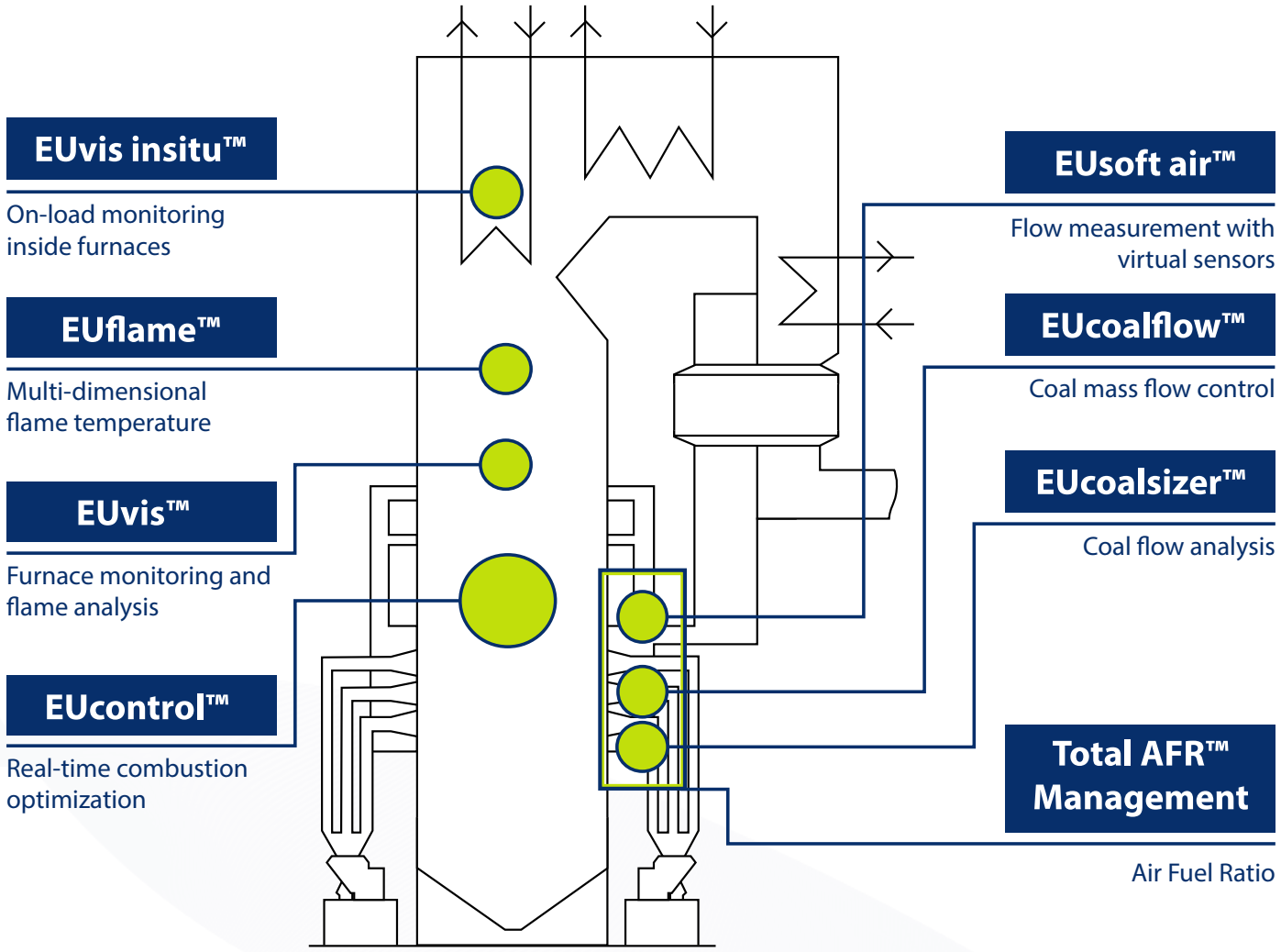


EUvis system set-up

www.eutech-scientific.de

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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