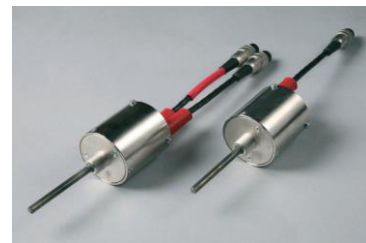

Combustion Control Systems

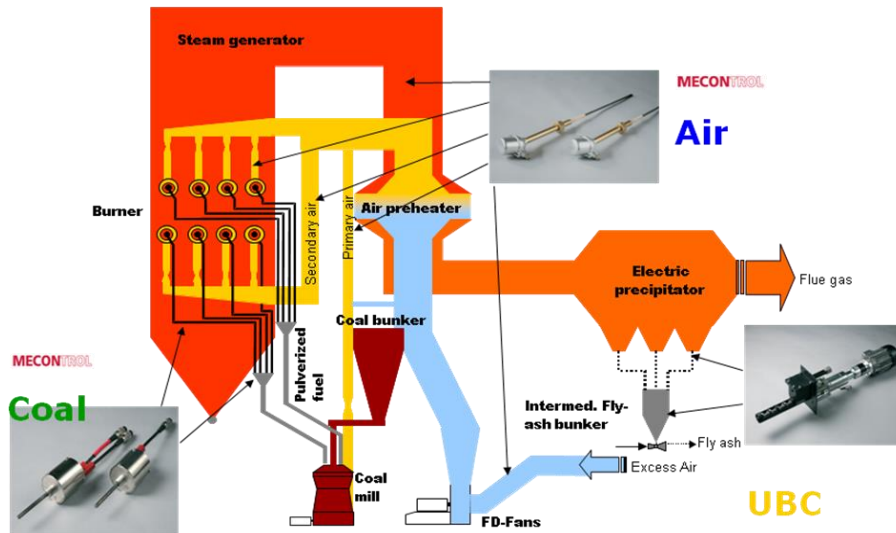
The Promecon systems allow significant optimization of the thermal processes such as coal fired boilers, smelter processes, cement kilns and others. Using innovative technologies emissions are reduced, efficiency and availability of plants are entranced.

The Promecon optimization system is utilizing several innovative sensor products:

- Cross correlation based combustion air flow sensors working reliably in harshest conditions for up to 40m/s flow speed and up to 1100°C temperature.
 - No calibration needed
 - No drift, no cleaning
 - Not affected by high dust
- SIL2 available coal mass flow/velocity/particle size measurement
 - Long life ceramic sensors
 - 50-10 000 g/m³ concentration
 - 0-100 t/hr mass flow
 - 10-60 m/s velocity
 - 30-60 um particle size
 - Different probe length, ATEX
- Fast responding temperature sensor on mill classifiers without abrasion.
- Online unburned carbon measurement.
This is the World most sold fly ash analyzer.
 - Lab accuracy in process
 - 0-20% carbon in fly ash
 - 2-10 minutes measuring cycle



System Application for Boiler Optimization



- PROMECON is a total solution provider for Boiler optimization.
- Patented, unique online measurement systems for PF/ Biomass, PA, SA, OFA, particle size distribution, carbon in fly ash and other parameters.
- Evaluation of pulverizer, coal pipes, air ducts, boiler, APH.
- Improved control concepts for increased load gradient, low load operation, multifuel burning etc.
- Our references are our (PROMECON) references. Installed basis > 2000 sensors.
- All designed and made in Germany.
- Tuning through measurement and control (APC).
- We handle complete projects, CFD, modification of ductwork, trimming dampers, optimization.
- Typical projects: Plant assessment, Efficiency testing, Boiler optimization, Advanced process control.
- Field of projects: Pulverizer, coal/air distribution, combustion, fluegas.