

PiT Navigator for Coal Fired Boilers

YOUR CHALLENGE:

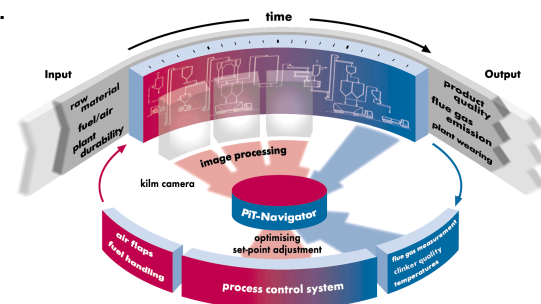
1. Combustion process optimization
2. Emission reduction
3. Varying coal qualities
4. Increase up time and boiler dynamic
5. Reduce slagging & fouling

Powitec's SOLUTION: A combination of optical sensors for flame analysis and acoustical sensors for mill analysis with self learning and adaptive software optimizes the fuel-/air-ratio and -allocation. All process and flue gas data is permanently correlated with the optical and acoustical information in a software using innovative neural nets and the overall process is continuously controlled to its optimum.

**Combustion optimization
through intelligent control & innovative sensors**

RESULTS:

1. **Reduced coal consumption up to 1%**
2. Reduced slagging and fouling of burner mouth and finned walls
3. **Increased boiler efficiency of up to 0.5%**
4. Reduced CO₂ emissions
5. Reduced CO and NO_x up to 30%
6. Reduced unburned carbon in ash 1% abs.
7. **Increased availability**
8. Increased coal band
9. **30% better load dynamics**



AMORTIZATION: < 2 years

- REFERENCES:**
- Evonik New Energies, Power Plant Fenne
 - Vattenfall Europe, Power Plant Tiefstack (Units 1 & 2)
 - Seocheon Thermal Power Plant (KEPCo, South Korea) (Unit 1 & 2)
 - E.ON, Power Plant Scholven (Unit C)

And more than 100 references in the cement and waste to energy industry

CONTACT:

Powitec Intelligent Technologies GmbH
Im Teelbruch 134b, 45219 Essen, Germany
www.powitec.de, info@powitec.de

Alexander Hanf - a.hanf@powitec.de
Tel: +49.2054.937 62-34 Mobile: +49.178.39 888 34