INP Reference

MVA Prague – Waste Incineration System

LOCATION: Prague, Czech Republic

SYSTEM/TECHNOLOGY: Siemens S7, link-up via Modbus to Emerson Delta V control system

SERVICES: Commissioning, Project management, Documentation, Basic-engineering and pre-engineering, Detail engineering, Installation supervision

INDUSTRY BRANCH/TYPE OF PLANT: Power Generation, Waste incineration systems

CLIENT: Prazske Sluzby a.s.

PROJECT SIZE: EUR 600,000

POINTS OF CONTACT



Jürgen Wilkening
Prokurist - Business Development Manager
INP Deutschland GmbH
Werkstraße 5
67354 Römerberg
Deutschland
Tel. +49 6232 6869-0
juergen.wilkening@inp-e.com
www.inp-e.com

TASK

- Increase in the load from 25 Mg/h to 35 Mg/h
- Increase in the waste throughput by 18 %
- Significant increase in availability
- Compliance with the emissions values of Federal Pollution Control (BlmSch)
- Low operating times of the backup burners
- Low steam fluctuations in relation to a setpoint specification

DESCRIPTION OF DELIVERIES AND ACTIVITIES OF "INP FUZZY CONTROL" COMBUSTION POWER CONTROLS ON 4 LINES (ROLL STAND FIRING)

- Process engineering concept on the basis of current process data and auditing of the plant operators
- Process optimization by modelling and simulation
- Improvement in highly-sensitive process sequences
- Specifications for modified operating concepts
- Use of fuel for energy production (210,000 tonnes/year domestic waste)
- Increase in performance
- Open and transparent control concept on the basis of multi-variable characteristic map controlg
- Stabilization of the steam output and oxygen content in the flue gas
- Optimization of thermal combustion processes
- Saving operating substances (reduction agent)
- Use and reduction in emission limit values

TARGETS/KEY FIGURES OF THE "INP FUZZY CONTROL" COMBUSTION POWER CONTROLS

INP Reference

- Significantly lower fluctuation ranges were achieved under all load cases
- Largely constant oxygen content in the flue gas
- Significant reduction in CO peaks
- Smoothly running combustion process
- Reduction in strain on the involved and down-circuit units
- Reduction in the message sequence procedure
- Non-homogeneous waste batches are evened out