

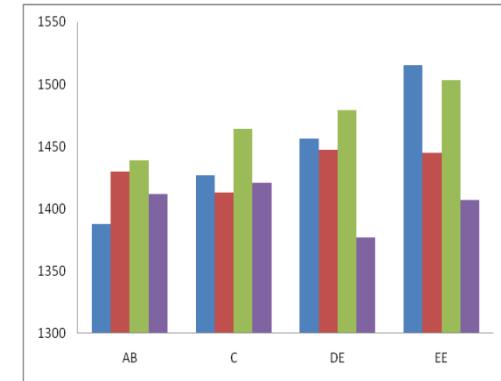
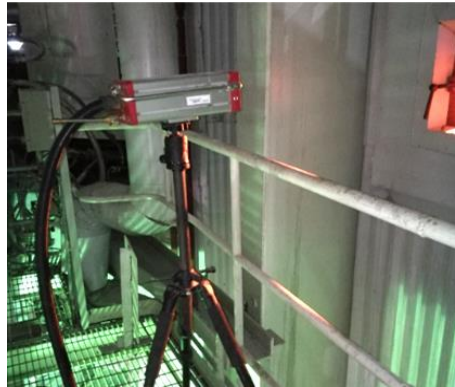
High Accuracy Temperature Profiling on Tangential Boiler

Kangbashi Power Station, China

350MW Tangential Coal-Fired Boiler

Boiler supplied by Shanghai Boiler Works (China)

16 Observation Ports were used to view inside the furnace



Challenges

- Off-centered firing problems
- Severe slagging during normal operations on sections of the water wall
- No method for accurately measuring temperature distribution in the furnace

Procedures

- Field testing engineers evaluated site conditions and 16 view ports were selected for measurement on Nov. 23st 2016.
- TempVision 1000 Portable Temperature Measurement System was utilized to capture flame profiles via each of the selected view ports

Results

- Results identified major differences between EE1 and EE4, as much as, 108°C that severely affected the furnace temperature distribution
- Plant operators now have a tool to troubleshoot combustion and temperature distribution problems, as well as, a method to check their corrective actions