

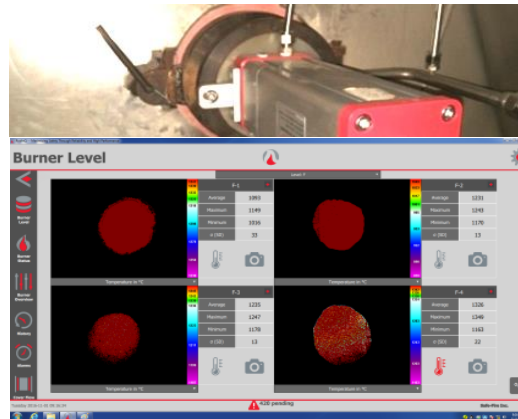
High Accuracy Online Temperature Profiling on a Wall-Fired Boiler

Ningde Power Station, China

4 x 660MW Wall-Fired Coal Boiler, Unit 2

Boiler supplied by Shanghai Boiler Works (China)

30 Oil igniters, 30 Main oil burners. View ports on Level F were modified to mount 4 temperature detectors



Before

- Poor combustion performance
- Severe slagging during normal operation
- Significant temperature fluctuations
- No method available to guide operators to improve combustion performance and temperatures in the furnace

After

- Safe Fire's TempVision 5000 Online Temperature Measurement System, with 4 detectors, was installed to monitor flame profiles on level (F) of Unit 2
- Online monitoring provide operators real-time combustion data from inside the furnace

Results

- Plant operators now have a tool to analyze combustion and temperature related problems as they develop
- TempVision 5000 has improved response times, as well as, a means to measure the effectiveness of the plant's tuning practices