

Flame Detection System Revamp on Tiny Oil Guns in a T-fired Boiler

Heshan Power Station, China

1 x 300MW Tangential Coal-Fired Boiler

Boiler supplied by Dongfang Boiler Group Co., Ltd. (China)

4 x Tiny Oil Guns, each monitored by an imaging camera



Before

- OEM Video imaging cameras were mounted near the hot furnace wall to monitor the Tiny Oil Guns
- Cameras required frequent service due to high heat exposure
- Extremely high replacement cost for cameras

After

- Safe Fire's SU-2002 integrated flame detector was installed with a flexible fiber optic to target the flame
- Increased distance between furnace wall and scanner
- UV sensors were used for best sensitivity in light oil applications

Results

- Increased overall flame detector reliability for the Tiny Oil Guns
- Decreased maintenance and plant start-up delays due to flame detector problems
- Significant long-term cost savings