

## Power Generation

### Application Specifications:

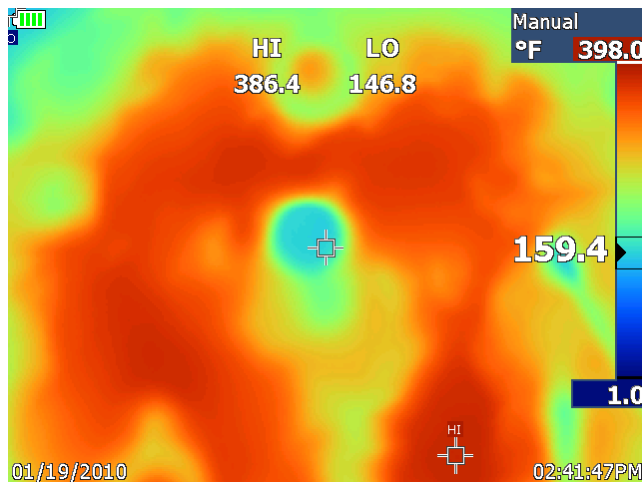
Location:	Arizona	Boiler Capacity:	46 MMBTU / hour
Date:	November 2009	Fuel Type:	Natural Gas
Boiler Manufacturer:	Erie City Iron Works	Substrate:	Castable Refractory / Carbon Steel Tubes
Boiler Type:	Water Wall		

### Emisshield® Benefits:

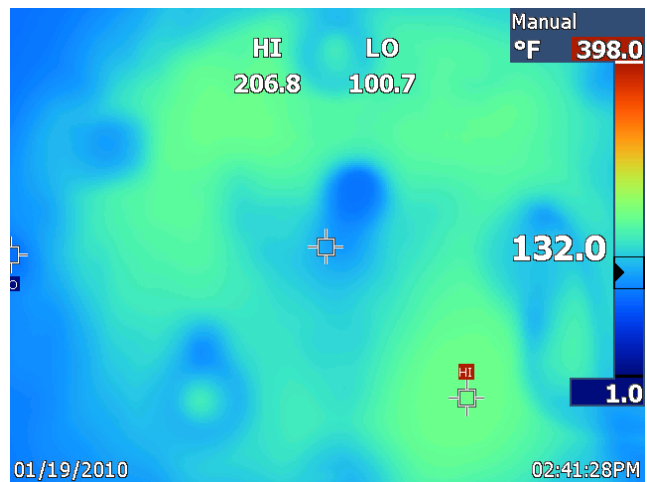
- Ability to lower excess air to boiler
- Lower boiler shell temperature
- Improvement in boiler efficiency in the range of 4% to 5%.
- Increased Performance (higher steam output)

### Thermographs of boiler shells

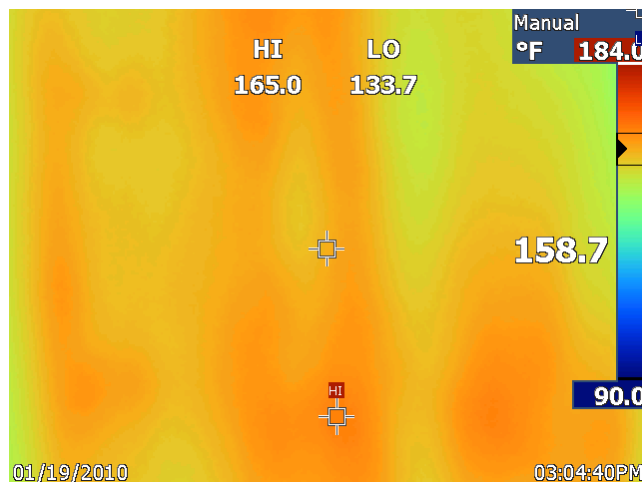
Burner Wall, Boiler #2 - uncoated



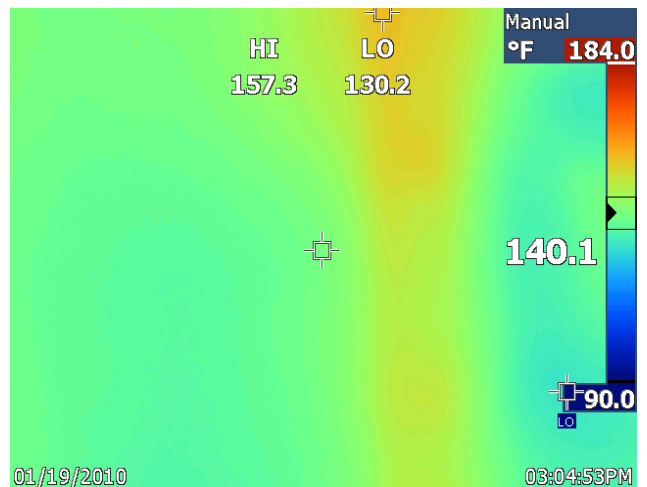
Burner Wall, Boiler #1 with Emisshield®



Sidewall, Boiler #2 - uncoated



Sidewall, Boiler #1, with Emisshield®



## Application Information

The carbon steel tubes were lightly grit blasted and cleaned with a liquid cleaning system followed by the Emisshield® application. Cleaning was not required for the castable refractory prior to application.

**Side Wall before application**



**Burner Wall before application**



**Target Wall before application**



**Application of Emisshield®**



**Target Wall and Tubes with Emisshield®**



**Burner Wall with Emisshield®**

