TemPro™ II

Diamond Power Sweden AB offers a comprehensive temperature measurement system for recovery boiler bed or superheater tube monitoring. Designed to meet specific boiler operator needs, the TemPro™ II system gains accurate real-time temperature readings for boiler efficiency readings and emissions control. Temperature readings are logged for trend analyses and to compare various operational features and conditions within the boiler.

The TemPro II system is robust, measuring temperatures ranging from 482°-1649°C and a wider field of view than any other system available. Up to 15 regions can be monitored by the system, and a built-in LCD screen on the camera housing offers the option for local or remote viewing. Temperature information is retrieved through the PC.

BENEFITS

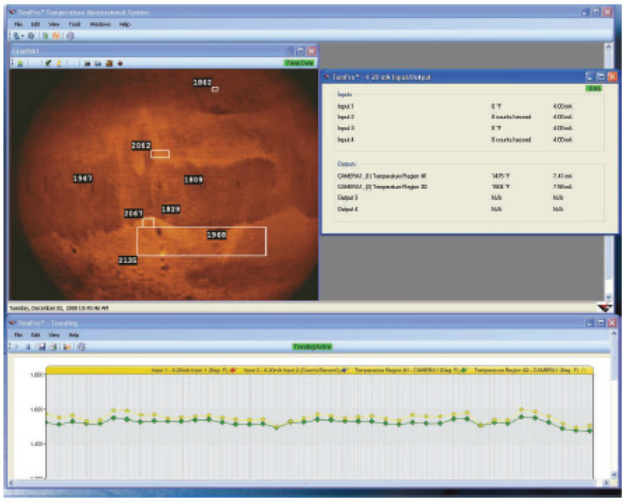
Monitor firing conditions - in up to 15 regions of your boiler with accurate real-time temperature readings and local or remote viewing.

Export data - in the form of CSV output to Excel or bitmap screen capture shots. Additionally, the system can easily integrate into your boiler's DCS control system. Use the data to test boiler efficiency and monitor emissions control.

Reliable and accurate - boiler imaging and temperature measurement technology, withstanding the harshest boilerside environments while offering the industry's largest field of view.

FEATURES

- Measures boiler temperatures ranging from 482°-1649°C
- Monitors up to 15 regions
- +/- 3% degree of accuracy
- 105° diagonal field-of-view
- Remote or local monitoring with LCD screen on camera housing
- NEMA 12 housing to withstand harsh boilerside environments
- Easily integrates into existing DCS
- CSV output to log readings and perform trend analyses
- Capture screen shots at the click of a button or automatically at user-defined intervals
- Real-time graphical trending
- Bed formation tracking
- Sequential switching of cameras
- Optional 4-20 mA I/O
- Accepts up to 4 TemPro AT II cameras per computer



State-of-the-art technology for monitoring recovery bed or utility profiles and firing conditions

TemPro™ II

SPECIFICATIONS

Air Requirements	Camera Assembly:	414 kPa @ .005 m³/s Instrument or filtered plant air.
	Optical Probe:	241 kPa @ .021 m³/s Based on instrument or filtered plant air at 32.2° C to 37.7° C ambient
Air Connections	Filtered Air System:	2.54 cm NPT pipe
Camera Assembly	Available In Lengths	60.9 cm, 91.4 cm, 121.9 cm or 152.4 cm
	Optical Probe Outer Diameter:	3.81cm material 316L SST
	Weight: (Including Lenstube)	60.96 cm Unit: 19 kg 91.44 cm Unit: 21 kg 121.9 cm Unit: 22 kg 152.4 cm Unit: 23 kg
Retract Control Unit	Material:	NEMA 4X Fiberglass. Weight: 5.4 kg (Optional NEMA-4 Painted Steel)
Operating Temperatures	Camera Assembly Ambient:	+66°C
	Maximum Internal Furnace Temperature:	+1648°C
Retract Assembly	Activated by Low-Pressure Switch on Air Supply	
Power Requirements	Camera Housing:	95 to 240 Vac, 47 to 63 Hz, 1.0A max.
		102-130Vac, 50/60 Hz.
Data Requirements	Cat5E or 6 Ethernet 328 ft (100 m) max standard. Optional dual LC fiber optic multimode, 50/125 micron, 1640 ft (500 m) max	

POW-DS-0015. JULY 2019