

B&W will design an FPS igniter system to meet your needs for start-up reliability, discriminative flame detection and lower opacity. A typical FPS gas igniter system in a coal-fired boiler is illustrated above with in-line valving.

MECHANICAL DESIGN FEATURES

1. Gas Nozzle Assembly

Stainless steel gas spud with multi-port tip, provides a large stable flame for main fuel light-off.

2. PAI Spark Probe

High temperature extension with removable spark plug

3. Flame Detection Rod

Integral flame detection for igniter; high temperature extension with removable flame rod

4. Stationary Guide Tube

Stationary guide tube with stainless steel end mounts easily into the burner

5. Eddy Plate

Provides proper mixing of the combustion air and fuel for reliable ignition and flame stability

6. Seal/Aspirating Air Connection

(pressure-fired units only) Seal air chamber allows removal of the spark and flame rods

7. Combustion/Cooling Air Inlet Supplies combustion/cooling air to the igniter

8. Spark and Flame Rod Connections

Flexible conduit connections allow removal of the flame and spark rods without electrical disconnects

B&W's system approach increases reliability, reduces opacity and maintenance

- Flexible application of PLC logic to meet your burner management system requirements
- Comprehensive analysis for customized control to meet your individual design and operational requirements
- Increased reliability
- · Improved mixing of fuel and air to reduce opacity
- Elimination of moving parts allowing a near maintenance-free igniter
- Integral flame rod detector which senses only the igniter in any burner/boiler configuration

Control Features

- Programmable logic control (PLC) based
- · Pre-wired, factory tested
- Pre-assembled valve rack allows simple pipe-in / pipe-out design
- A151 B31.1 power piping code
- · Fail-safe closed valving
- Power requirement: 115 VAC, 50/60 Hz, 10 amps
- Factory Mutual approved with Sunspot flame detector
- Remote or local operation
- NEMA 4 control cabinet

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- Oil-only igniter
- Dual fuel oil and gas igniter
- · Replacement for corner-fired horn igniters
- Flame scanners
- Boiler/burner control systems



For more specific information on our igniter systems, please contact us at:

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