



Plasma Arc Ignition System (PAI)

The Fossil Power Systems Inc. (FPS) Plasma Arc Ignition System (PAI) provides a high output pulsed spark (3 sparks/sec) for the forceful ignition of fuel oil.

Each powerful spark pulse creates a shock at the spark plug tip, which disperses any material that has collected on the tip of the spark plug. This continuous cleaning of the spark tip reduces the need for manual cleaning, which is characteristic of continuous voltage ignition systems.

COMMON APPLICATIONS

- Retrofit on CE Horn ignitors
- Retrofit on existing FPS oil ignitors
- Standard on new FPS oil horn ignitors

The PAI consists of an enclosure designed for flat surface mounting, either installed in an existing control box or independently at the boiler front.

In retrofit applications, a high temperature extension rod is supplied with the hardware required to adapt to the existing mounting arrangement.

The spark cable connects the ignition power pack to the spark rod. The spark cable consists of a brass braided flex conduit housing and a high voltage wire, which is pre-terminated with a spring-loaded wire terminator. This allows for easy connection in the field.

The junction box end of the cable is a 1/2 inch male NPT fitting equipped with a grounding locknut for termination.

The spark plug is threaded for easy installation onto existing CE extension rods or FPS high temperature extension rods.



PAI SHOWN WITH HIGH TEMPERATURE EXTENSION ROD

Controlling
the **power**
of **steam**



SPECIFICATIONS

SPARK PLUG TYPE

- Self cleaning surface gap

SPARK PLUG MATERIAL

- Stainless Steel outer casing with a direct sintered semi-conductor insulator and Inconel electrode

SPARK RATE

- 3 Pulses per second (3 Hz)

OUTPUT ENERGY

- 8 Joules per pulse (12 Joules per pulse optional)

OUTPUT VOLTAGE

- 2000 VDC

POWER INPUT VOLTAGE

- 120/240 Vac 50/60 Hz

INPUT POWER VAC

- 100 VA

SPARK CABLE LENGTH

- 6 feet (2 meters) Standard
- Custom lengths available

AMBIENT OPERATING TEMPERATURE

- 0°F to 158°F
(-17°C to 70°C)

POWER UNIT ENCLOSURE

- NEMA 4

DISTRIBUTED BY:



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