

About Us

ICI is committed to the design, manufacture, and supply of Igniter Probes for challenging applications throughout the industrial marketplace.

Our patented technology is unique, and we are continuously striving to improve our products through extensive Research & Development and on-going design enhancements, therefore supplying you with unrivaled and innovative solutions.

“Ignite the Credibility of Your System Today!”



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Frederick Cowan Products
by ICI



**PERFORMANCE
DESIGNED
IGNITER SOLUTIONS**
frederickcowan.com

INTRO

Fredrick Cowan Products have been servicing the industrial market for over 50 years with many of our patented designs and innovative products. We manufacture a wide range of IGNITION PROBES that are capable of meeting challenging applications including:

- 2400 Volt PowerArc Igniters
- 10 KV CoronaArc® High Temperature Igniters
- High-Pressure Turbine Electrodes.
- 3/8" or 1/2" diameter probes available in virtually any length.
- Power Packs available in 4 or 12 Joule models.
- Flame Detection Circuits.
- Retract Assemblies.

CORONA ARC POWER PACKS

There are 3 models of CoronaArc® Power Packs ranging from 4-12 Joules and multiple pulse rates.

- The 4 Joule Unit is designed for ignition of gas and light fuel oil.
- The 12 Joule Unit is designed for heavier fuel oil applications.
- The 12 Joule "Rapid Fire" Unit (right) produces 12-15 pulses per second at 12 Joules and is designed for the most challenging Heavy Fuel Oil applications. The combination of the rapid rate of arcing and the high efficiency of each arc can sustain a difficult burner by keeping it partially lit until it can completely light itself.



APPLICATIONS

Fuel Igniter

Even on the most intense Fuel Igniters (such as used on Coal Burners), the CoronaArc Ignition electrode can be placed in direct contact with the fuel because the net temperature is still less than the probe's 2,000 Oil Igniters, the "Spark" of the CoronaArc will reliably light them.

Main Burner

The CoronaArc probe can be permanently placed in a high temperature, radiant heat zone and obtain reliable ignition. This is because there is fuel swirling in front of the diffuser that is separate from the main fuel pattern and is in a stagnation zone that facilitates flame propagation. The CoronaArc Ignition Tip survives because it is not in direct contact with the main fuel spray. It sees the same radiant heat as the diffuser and it endures without needing retraction because it is made of similar materials.

I-1140HD

I-1140

I-1140Z

I-1140HDZ

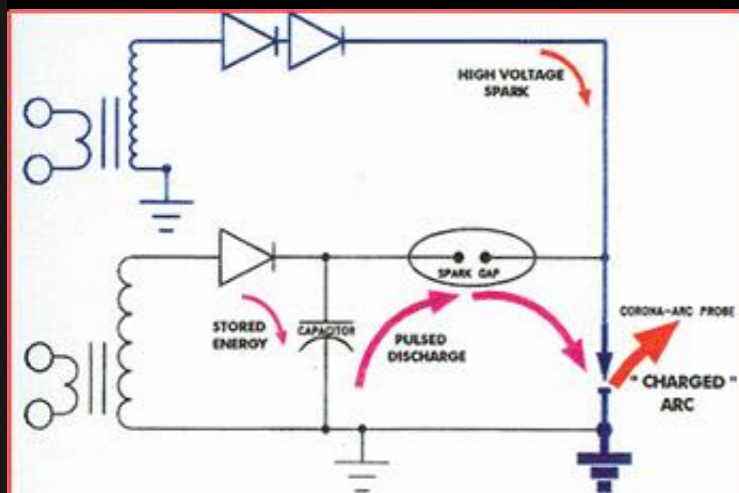
I-2694 Corona

I-1568

I-1568HD

INNOVATIONS

The CoronaArc circuit, for burners and fuel oil and gas igniters, focuses on the Firing End of the Igniter. This innovative product eliminates the need for a semiconductor material within the circuit by adding a second, rectified high voltage circuit to create a continuous High Voltage DC Spark at the Firing End of the Igniter Electrode. The existence of this spark current at the Surface of the Igniter Electrode becomes the means by which the Spark Gap is referenced to ground potential and concurrently directs the pathway by which the stored energy of the capacitor discharges a High Current Arc.



FREDERICK COWAN BENEFITS

- Continuous High Temperature Exposure
- Increased Power
- Greater Reliability
- Unrivalled Design
- Completely Customizable
- Lower Maintenance Costs & Operational Downtime

