Proven Igniter Solutions from John Zink Hamworthy Combustion.

For more than a century, the Coen® and Hamworthy Combustion® brands have stood for the most advanced science and technology in oil and gas combustion. Today, Coen and Hamworthy Combustion are part of John Zink Hamworthy Combustion, where we combine our technological expertise, vast resources and industry experience to provide the world's most advanced selection of innovative combustion solutions. These solutions include proven igniter systems for virtually any combustion application, all designed to deliver effective, efficient performance while meeting your requirements for reliable burner light-off, boiler warm-up and low opacity.
Our FyrBolt™ gas and oil igniters deliver reliable burner light-off and excellent flame stability with minimal maintenance. FyrBolt igniters have no moving parts to wear out and are equipped with fixed-position, high-energy or high-tension spark systems.

FyrBolt comes in several sizes and capacities to meet your ignition needs. FyrBolt igniters provide a large ignition flame that will reliably ignite your main fuel and the flame is easily detected with our optical flame scanners or flame ionization rod.

**FyrBolt at a Glance**

+ Capacity range: 0.35 to 35 MMBtu/hr (0.1 to 10 MW)
+ NFPA Class 1, 2 or 3 operation
+ Non-retractable, low maintenance
+ High-energy or high-tension sparks system
+ Reliable light-off and flame monitoring
+ Designed to minimize airflow obstructions in the burner
FyrStorm™ oil and gas ignition and warm-up systems provide superior combustion performance, easy installation and low maintenance. The igniters may be installed as complete assemblies for new burners, or as retrofit components for upgrading existing igniter equipment. Designed to produce a clean burning flame, opacity with the FyrStorm smokeless oil igniter is typically less than 10% even on a cold boiler startup.

The igniter assembly is designed to minimize airflow obstructions in the burner and can be located either in the air annulus zone or the center of the burner. The igniter can be used for routine light-off of main burners and as a boiler warm-up gun. It is often configured as a Class 1 igniter, with the additional functions of stabilizing the main burner flame and extending the turndown range of the main burner.

Retractable or Fixed Options
FyrStorm igniters are available as either a retractable design, which provides longer life for the firing-end components, or as non-retractable igniters, which have fewer moving parts.

Flexible Components Option
FyrStorm igniters are available with flexible components to permit operation in tangentially fired boilers by fitting into the existing tilting buckets without modification.

FyrStorm at a Glance
+ Capacity range: 10 to 200 MMBtu/hr (3 to 60 MW)
+ Wide turndown ratio
+ Fires a variety of gas and liquid fuels
+ Direct electric spark ignition of heavy oil
+ Minimal cooling air when out of service
+ Easy maintenance
+ Bearings with graphite packing eliminate binding
+ Adjustable insertion depth
+ Flame detection by flame rod or optical scanner
FyrBall™ gas or oil igniter systems are cost-effective, high-performance upgrades to the original oil-fired sidewall igniter equipment on tangentially fired boilers. Using our proprietary smokeless technology, FyrBall igniter systems can help you overcome problems such as high opacity, soot and carbon buildup in the horn and fouled flame rods.

FyrBall produces the optimum fuel injection pattern to match the aerodynamics of the igniter horn, delivering a clean flame that burns all of the fuel and minimizes the production of soot. Additional benefits include improved reliability of the flame detection and spark equipment, reduced opacity and reduction of unburned fuel carryover into the backpass of the furnace.

FyrBall at a Glance

- Capacity range: 2 to 20 MMBtu/hr (.05 to 6 MW)
- NFPA Class 1, 2 or 3 operation
- Reliable light-off
- Low opacity, typically less than 10% at startup

+ Reduced igniter maintenance
+ High-energy electric ignition system
+ Flame detection by flame rod or optical scanners
Today’s industrial enterprises are challenged to expand capacity while meeting ever-increasing safety, efficiency and performance standards. Through our Coen and Hamworthy Combustion brand products, John Zink Hamworthy Combustion is world-renowned for reliability, efficiency and innovation in combustion system applications and installations. We have been an innovative force in combustion systems – delivering technological expertise, design excellence, practical application and quality research and development with proven performance. Today, we continue the advancement of combustion equipment and technology to meet existing and emerging challenges in markets around the globe.

Contact us today to learn more about innovative igniter systems and ancillary products to improve the safety and performance of your operation.