Our equipment has been installed on more than 550 utility boilers that generate more than 50,000 MW of electricity.

• We have supplied igniters on more than 200 utility boilers.
• We have supplied gas- or oil-fired burners on more than 50 utility boilers.
• We have supplied gas- or oil-firing fuel conversions on more than 300 utility boilers.

Raising The Standard For Lowering Emissions

Our Divided Flow Low-emission (DFL) burner and Dynaswirl-LN™ burner are industry standards, optimizing system efficiency and emissions performance with low-maintenance requirements. Both burners are proven to achieve low NOx, CO, particulate and opacity emissions, easily keeping your facility in compliance with environmental regulations.

The simple design and heavy-duty construction of both the DFL and Dynaswirl-LN burner provide reliable, low-maintenance performance. Each is easy to maintain, resulting in less downtime and reduced fuel and operating costs.

Get More From Your Burners

Our low-emission utility boiler burners deliver the kind of hard-working performance and superior reliability that make them a preferred choice for demanding utility applications. Each burner is feature-filled and offers a variety of potential benefits.

• Up to 50% NOx reduction over conventional burners; and up to 90% reduction when combined with FGR, over-fire air (OFA) or burners out of service (BOOS)
• Operable with stack O2 levels of 0.5% or less
• Extremely stable combustion minimizes boiler vibration
• Can be used with FGR and steam injection to reduce emissions even further
• Stable flames with FGR rates as high as 45%
• High turndowns of 8:1 on oil and up to 20:1 on gas
• Low-NOx, CO, VOC and particulate matter (PM) emissions
• Simultaneous gas / oil firing capabilities
• No moving parts during operation for reliable service
• Air sleeve damper for taking burners out of service
• Optional removable gas injectors
• Easily retrofits into existing plant

Our burners provide reliable, low-maintenance performance with reduced fuel and operating costs. That's smart. That's JZHC.
Delivering Flexibility With Oil And Gas

Our burners offer the flexibility of simultaneous gas and oil firing. This gives you the options of firing oil and gas in the same burner, or gas in some and oil in others based on your specific needs. Our burners allow you to switch fuels at various loads without affecting the boiler operation. You can also achieve high-turndown ratios even with options such as running with over-fire air or with high FGR rates.

Oil Burner: Controlling Precise Flame Geometry
The steam or mechanical atomizers on our low-emission utility boiler burners achieve precisely controlled flame geometry that creates substantial NOx reductions over conventional oil-fired burners. The low-energy-consuming steam atomizer provides a turndown ratio as high as 8:1, with less than 7% steam-to-fuel oil ratio. This atomizer eliminates the need for a more complex constant differential system and operates at a constant pressure.

Gas Burner: Setting New Standards In Staging
Our burners effectively control NOx by staging fuel and air. Using both a multi-poker injector and center-fired gas burner, fuel-rich and fuel-lean zones are created within the flame envelope. The ratio of center-fired gas to poker gas, together with poker orientation and location, is carefully optimized for each application.

Additional Solutions and Support
We know a burner may not solve all your challenges. That’s why we offer a comprehensive line of burner packages, safety systems and auxiliary products – the most advanced and dependable available. From cost-effective predesigned control systems with operator interface and custom-engineered burner management control systems to ancillary components including burner ignition systems, burner flame detection systems, fuel valve trains and more, our proven solutions work hand-in-hand with your combustion equipment. You can also rely on our experience and expertise through worldwide support services including:

+ CFD modeling
+ Installation
+ Startup service
+ Operator training
+ Preventive maintenance
+ Complete turnkey service*
+ After sales support

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