### **Center-Fired Burner Case Study**

# **Custom Gas Gun**

**Enabling 100:1 Turndown** 

Recent production changes at a major tire manufacturer required maximum boiler operating flexibility and a unique combustion solution as a result. Understanding that boiler cycling is not only highly inefficient, detrimental to equipment longevity, and disruptive to production, an extremely high turndown ratio was required for the plant's 100 MMBtu/hr natural-gas boiler. In order to safely extend the existing burner's thermal turndown from 10:1 down to 100:1 required an auxiliary center fired gas gun lance burner capable of seamless stability between 1 and 10 MMBtu/hr.



FABER

Burner Company

#### **Faber Was Asked For A Solution**

Faber didn't just supply a part; we engineered a strategic retrofit. Analyzing the competitor's burner front, our team designed a custom center fired burner specifically to replace the existing fuel-oil gun. By engineering the burner to match the competitor's exact mounting dimensions, we created a "drop-in" solution. Once Faber's submittal drawings were approved, Faber's manufacturing team fabricated and shipped the custom center fired burner in just a few weeks to meet the customer's timeline. Upon receipt of the Faber supplied equipment it was quickly installed, with no need for modifications, and successfully commissioned.



#### Surprised? You Shouldn't Be!

This project is a good example of the Faber Advantage. We combine deep technical expertise with the agility to deliver custom combustion solutions when time is of the essence. If you are experiencing problems or unique challenges with your burner equipment and want to work with responsive professionals, please give us a call.

### How Can We Help You?

When you contact Faber, you will be working directly with people who will answer your questions, offer solutions, and provide results.













#### **Package Burners**

The finest and most comprehensive combustion systems available for boilers, high temperature hot water generators, process furnaces and more.



#### **Forefront Burners**

Heavy-duty and user-friendly industrial gas burners for a vast array of applications that require heating capacities from 500,000 to 8,000,000 Btu/hr.



#### **Specialty Burners**

Specialty burners to meet applicationspecific fuel-burning needs. Some examples include start-up burners, air heating, biogas guns, and waste gas guns.



#### **LXE Burners**

Modular industrial burners with unparalleled flexibility and performance. Heat inputs range from 10 to 60 MMBtu/hr.



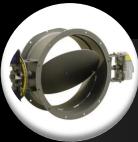
#### **Igniters and Pilots**

Gas, Oil or High Energy Spark. Faber Burner Company has a complete line of igniters that provide safe and reliable light off. 20,000 Btu/hr to 20 MMBtu/hr.



#### Oil Guns

Atomizers with capacities from 2.1 to 200 MMBtu/hr. Firing conventional and alternative liquid fuels with either steam, air. or mechanical atomization.



#### **Dampers**

Faber offers industrial dampers for high-temperature air or flue gas: Single & Multi-Blade. Standard sizes are always in stock.



#### **Control Systems**

Faber supplies user-friendly comprehensive strategies for the optimal control of combustion equipment. From basic to custom-engineered state-of-the-art systems.



#### **Pipe Rack Assemblies**

Faber's engineered piping systems are designed to safely and accurately control the pressure and flow of any liquid or gas including conventional and alternative fuels, steam, and air.



#### **Spare Burner Parts**

We support what we build. Faber maintains one of the most extensive inventories in the combustion industry. Thousand of items are ready for immediate shipment.

# Providing Combustion Solutions Since 1926

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