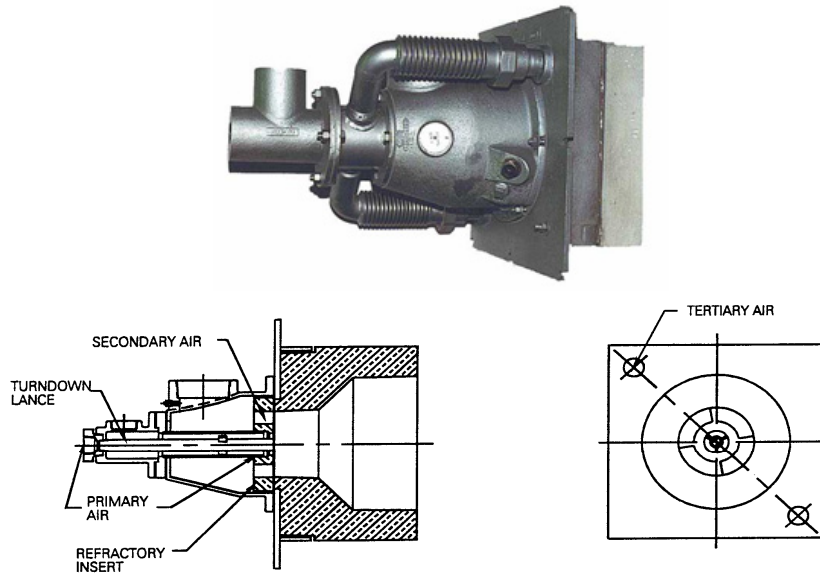


## 1440 SERIES SMALL CAPACITY ULTRA<sup>2</sup> LOW NO<sub>x</sub><sup>TM</sup> AIR STAGED BURNERS



The 1440 Burner Series combines Bloom's renowned low NO<sub>x</sub> baffle with air staging. NO<sub>x</sub> levels previously unachievable without exhaust gas recirculation have been accomplished with this breakthrough design.

The standard 1440 Series burners are available in 2" through 4" air connection sizes with a nominal capacity range of 0.28 MM Btu/hr through 1.25MM Btu/hr. The design principles of this burner allow it to be custom designed for applications requiring higher burner inputs.

The unique design of this burner combines two recognized principles for reducing NO<sub>x</sub> emissions. One is recirculation of furnace gases into the flame. The other is air staging.

Bloom's low NO<sub>x</sub> baffle design combined with other geometric factors optimizes the mixing of furnace gases with the burning air/fuel mixture. This reduces flame temperature and controls the chemical environment of the flame which depresses NO<sub>x</sub> formation. The air staging features control the rate and location of the air mixing with the fuel. Staging the air mixing increases control over flame temperature and the chemical environment of the flame. The Bloom low NO<sub>x</sub> baffle combined with air staging results in NO<sub>x</sub> levels of under 0.1 pound per million Btu burned even at high furnace and air preheat temperatures.

The burners are ideal for anneal and pickle lines, other heat treating furnaces, forge furnaces, tundish and ladle preheating or drying stations, roller hearth furnaces and many other similar applications where minimum NO<sub>x</sub> emissions are required.

**CAUTION:** The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations