



# STAGED AIR LOW-EMISSIONS COMBINATION BURNER

## AK Series



*AK Staged Air Low-Emissions Combination Burner  
Operating on Gas Only*



*AK Staged Air Low-Emissions Combination Burner  
Operating on Oil Only*

### **Low-NOx. High performance.**

Zeeco's AK staged-air, low-emissions burner features a round flame and is designed to fire on oil, gas, or a combination of oil and gas. This versatility, along with a stable flame over a wide range of conditions and high turndown of 5:1 or greater, makes Zeeco's AK series one of the best-selling process burners in the industry.

### **Why choose Zeeco?**

Zeeco leads today's global market in the design of combustion and environmental systems. Our engineers offer the experience, knowledge and tools to properly size and design any burner, flare, or incinerator, anywhere. For more than 35 years, Zeeco has designed, manufactured, and delivered production systems across the globe. Our philosophy of providing customers with superior quality, on-time shipments and competitive pricing is the cornerstone of our success. Let us put our experience to work for you. Call or email us today to learn more about the full line of ZEECO® products and services.



BURNERS



FLARES



INCINERATORS

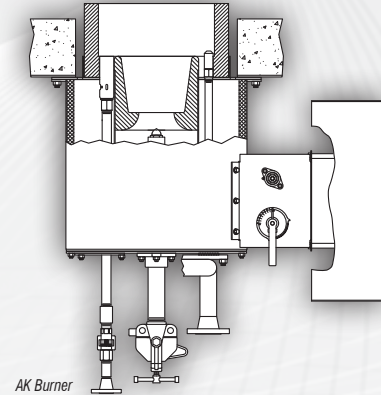


PARTS & SERVICE

# Staged Air Low-Emissions Burner

## Design Features

- Stable flame over a wide range of conditions
- High turndown of 5:1 or greater for most cases
- No stabilization metal used in the burner throat
- Low maintenance cost since tip mass is small and exposed into firebox less than 1" (25 mm)
- Reasonable cost and great value
- Combustion air dampers are controlled by gears for precise control
- Bearings are used for the combustion air damper shafts for smooth, precise operation
- Plenum mounted or individual windbox configurations
- Horizontal and vertical mounting configurations
- 310 Stainless Steel (type HK) gas tips



## Design Information

Burner Model: .....AK Combination Oil & Gas Staged Air Burner  
 Fuels: .....Combination Oil & Gas  
 Description: .....Round Flame Low Emissions Combination  
 NO<sub>x</sub> Reduction Method: .....Staged Air  
 Predicted NO<sub>x</sub> Emissions Range (Natural Draft) with Gas Fired: .....50 to 95 ppmv  
 Predicted NO<sub>x</sub> Emissions Range (600°F/316°C Air Preheat) with Gas Fired: .....80 to 160 ppmv  
 Predicted NO<sub>x</sub> Emissions Range (Natural Draft) with No. 2 Oil Fired: .....80 to 120 ppmv  
 Predicted NO<sub>x</sub> Emissions Range (600°F/316°C Air Preheat) with No. 2 Oil Fired: .....120 to 180 ppmv  
 Predicted NO<sub>x</sub> Emissions Range (Natural Draft) with No. 6 Oil Fired: .....160 to 220 ppmv  
 Predicted NO<sub>x</sub> Emissions Range (600°F/316°C Air Preheat) with No. 6 Oil Fired: .....215 to 280 ppmv  
 Combustion Air Induction: .....Natural, Forced, Induced & Balanced Draft  
 Mounting Options: .....Upfired and Sidedfired  
 Natural Draft Heat Release Range: .....1 to 20 MMBtu/hr [0.293 to 5.860 MW]  
 Forced Draft Heat Release Range: .....1 to 50 MMBtu/hr [0.293 to 14.65 MW]  
 Turndown: .....5:1 Gas & 3:1 Oil  
 Typical Excess Air Range: .....10 to 25%

ZEECO® combustion and environmental solutions are designed and manufactured to comply with applicable local and international standards as defined by our customers.



CERTIFICATION APPLIES TO ZEECO HEADQUARTERS ONLY.

### Zeeco Corporate Headquarters

22151 East 91st Street  
 Broken Arrow, Oklahoma 74014 USA

Phone: +1 918 258 8551

Fax: +1 918 251 5519

Email: sales@zeeco.com

**Zeeco.com**

ZEECO® is a registered trademark of Zeeco, Inc. in the U.S.

• ZEECO office, affiliate, sales, representative, or third party representative/licensee offices.

© COPYRIGHT 2015 - ZEECO, INC. ALL RIGHTS RESERVED

