

# ENHANCED JET FLAT FLAME BURNER

## GLSF Series



BURNERS | FLARES | THERMAL OXIDIZERS | VAPOR CONTROL | RENTALS | AFTERMARKET



*GLSF Enhanced Jet Burner, Vertically Mounted*



*GLSF Enhanced Jet Burner, Horizontally Mounted*

### Description

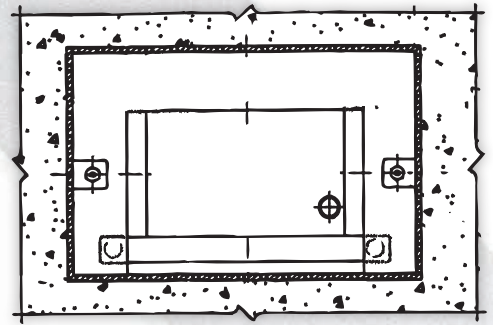
The ZEECO® GLSF Enhanced Jet burner is an ultra-low emissions flat flame burner.

### Technology

The above pictures display GLSF flat flame burners in operation in an ethylene cracking furnace. The design allows for flat flame burners to achieve a superior heat flux profile without flame rollover. A major advantage is that the heat flux profile can be changed as required for the specific application with different tip drilling configurations without adversely affecting NOx emissions. This design operates in more than 100 ethylene cracking facilities. Since the heat flux profile can be adjusted for different requirements, the design is also a perfect match for coker, cabin heater, steam super-heater, hydro-cracker and reformer applications.

## Design Features

- No flame rollover makes this design superior to competing technologies for ethylene cracking applications
- Great heat flux profile that can be modified for the particular type of application
- Stable flame over a wide range of conditions
- High turndown of 8:1 or greater for most cases
- No stabilization metal used in the burner throat
- Low maintenance cost since gas tip mass is small and exposed into firebox less than 1" (25mm)
- Compact design makes this burner a great choice for retrofit applications
- Reasonable cost and great value
- Combustion air is controlled by gear driven dampers for precise control
- Bearings are used for the combustion air dampers for smooth, precise operation
- Configurations available: plenum mounted or individual windbox
- Mounting configurations: Horizontal and Vertical
- 316 Stainless Steel (Type HK) gas tips



GLSF Enhanced Jet Flat Flame Burner

## Design Information

Burner Model .....	GLSF Enhanced Jet Burner
Fuels .....	Gas Only
Description .....	Flat Flame Ultra-Low Emissions
NOx Reduction Method .....	Internal Flue Gas Recirculation by FREE-JET Mixing
Predicted NOx Emissions Range (Natural Draft) .....	30 to 45 ppmv
Predicted NOx Emissions Range (600° F Air Preheat) .....	50 to 80 ppmv
Combustion Air Induction .....	Natural, Forced, Induced, & Balanced Draft
Mounting Options .....	Up-fired and Side-fired
Natural Draft Heat Release Range .....	1 to 14 MMBtu/hr [0.293 to 4.102 MW]
Forced Draft Heat Release Range .....	1 to 14 MMBtu/hr [0.293 to 4.102 MW]
Turndown .....	8:1
Typical Excess Air Range .....	10 to 25%



## The Zeeco Difference

By concentrating on what we do best, Zeeco has grown into a worldwide leader in combustion and environmental solutions. We are a privately held company whose ownership stays highly involved in daily operations, with upper management comprised of the world's leading combustion experts.

When you call Zeeco, we answer. When you make a request, you get a quick, efficient response. We are lean and efficient, able to make decisions quickly, without bureaucracy and red tape. Our sales, engineering, and purchasing groups work hand-in-hand to deliver highly competitive quotes and heroic turnaround times. We stand ready and willing to travel anywhere in the world to discuss upcoming projects firsthand, and to ensure that every existing project runs seamlessly.

**Zeeco Headquarters**  
22151 East 91st Street  
Broken Arrow, OK 74014

Learn more at [zeeco.com](http://zeeco.com)

✉ [sales@zeeco.com](mailto:sales@zeeco.com)

☎ +1 (918) 258 8551



REGISTERED  
ISO 9001: 2015

Certification applies to  
Zeeco Headquarters.



Visit [zeeco.com/contact](http://zeeco.com/contact)  
for additional Global Location  
contact information

**GO**  
**ZEECO**

Choose to work with our dedicated, flexible, and innovative team, and you won't be disappointed. Call or email us today to request a quote or to learn more about our proprietary combustion systems.