

FREE-JET NEXT GENERATION ULTRA-LOW NO_x BURNER

COMBUSTION AND ENVIRONMENTAL SOLUTIONS. PURE AND SIMPLE.®

GLSF Series



Description

The ZEECO® GLSF Free-Jet burner is a Next Generation Ultra-Low Emissions Round Flame Burner.

Technology

The above picture shows GLSF Free-Jet round flame burner in operation. The design uses the free-jet method of mixing the fuel gas ejected from the gas tips with the surrounding inert products of combustion which dramatically lowers thermal NO_x production. In addition to superior NO_x reduction performance, the design offers a great turndown, typically 10:1 or more and each tip only has one large firing port.











BURNERS

FLARES

INCINERATORS

COMBUSTION AND ENVIRONMENTAL SOLUTIONS. PURE AND SIMPLE.®

Free-Jet Next Gen Ultra-Low NO_x Burner

Design Features

- · Stable flame over a wide range of conditions
- · High turndown of 10:1 or greater for most cases
- · No stabilization metal used in the burner throat
- Tips have only a single firing port and do not require a small ignition port
- Low maintenance cost since tip mass is small and exposed into firebox less than 1" (25 mm)
- Low maintenance cost since the tips do not have small ignition ports which are prone to plug
- · Compact design makes this burner a great choice for retrofit applications
- Low probability of flame interaction since the burners are smaller and gas is not swirled
- · Superior heat flux profile
- · 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
- · 304 stainless steel fuel gas risers
- · 310 stainless steel (type HK) gas tips



Design Information

Burner Model:	GLSF Free-Jet Burner
Fuels:	
Description:	Round Flame Next Generation Ultra-Low Emissions
NO _x Reduction Method:	Internal Flue Gas Recirculation by Free-Jet Mixing
Predicted NO _x Emissions Range (Natural Draft):	6 to 20 ppmv
Predicted NO _x Emissions Range (600° F Air Preheat):	10 to 25 ppmv
Combustion Air Induction:	Natural, Forced, Induced & Balanced Draft
Mounting Options:	Up-fired and Side-fired
Natural Draft Heat Release Range:	1 to 20 MMBtu/hr [0.293 to 5.86 MW]
Forced Draft Heat Release Range:	1 to 50 MMBtu/hr [0.293 to 14.65 MW]
Turndown:	
Typical Excess Air Range:	10 to 25%

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



CERTIFICATION APPLIES TO ZEECO HEADQUARTERS ONLY.

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