

## MAXFIRE 40 LOW PRESSURE GAS IGNITER

**THE MAXFIRE 40 LOW PRESSURE GAS IGNITER PROVIDES A RELIABLE SOURCE OF ENERGY FOR MAIN FLAME IGNITION, FLAME STABILIZATION, AND LOW GAS PRESSURE APPLICATIONS.** Depending on the burner capacity, the MAXFire can be used in a class 1 , class 2 , or class 3 application. This igniter can be easily installed as a retrofit into most types of burners because of its size, capacity, and reliable operation.

The MAXFire Gas Igniter consists of four major components: a guide tube, a gas transport tube, a spark rod, and a stainless steel diffuser for pilot stabilization. The guide tube houses the spark rod and the gas transport tube, which are easily removed from the guide tube for maintenance purposes by releasing a "V" band retainer. No tools are required. Cooling/combustion airflow is directed down the guide tube to support and maintain the primary combustion zone during operation. The controlled mixture of fuel and air in the primary combustion zone results in a highly reliable, stable igniter flame. While out of service, this airflow cools the igniter and prevents debris from migrating into the end of the guide tube.

The MAXFire Gas Igniter is provided with Forney's HESI spark source. The HESI produces a powerful 12-joule spark approximately three times per second at the primary combustion zone. The HESI spark tip is a nonfouling, surface-gap tip which is replaceable as a unit by a threaded connection. The MAXFire is also available with a High Tension Spark (HTSI) source in place of the HESI. Optional equipment for the MAXFire Gas Igniter includes mounting hardware, hoses, valves, and optical flame detector.



IGNITERS

- **LOW GAS PRESSURE APPLICATIONS**

Provides 6 mmBtu/hr at 1.5 psig (0.103 bar) gas pressure

- **APPLICATION FLEXIBILITY**

The protected primary combustion zone ensures reliable operation.

- **RELIABLE IGNITION**

99% ignition rate in most applications.

- **COOLING/COMBUSTION AIR**

Low cooling/combustion air requirements.

- **LOW MAINTENANCE REQUIREMENTS**

No moving parts, a self-cleaning spark tip and no tools required to perform periodic inspection.

- **DURABILITY**

Heavy duty material and no moving parts to wear out.

- **COMPATIBILITY**

Fits most existing mount tubes minimizing retrofit installation costs.

- **SPARK SOURCE OPTIONS**

The highly reliable, nonfouling HESI comes standard. HTSI provides high performance at an economical price.



Re-powering your world



# MAXFIRE 40 LOW PRESSURE GAS IGNITER

## MAXFIRE SPECIFICATIONS

Fuel: Natural gas  
 Fuel Pressure: 1.5 psig (0.103 bar)  
 Maximum Length: 10 feet (304.8 cm)  
 Guide Tube Material: Carbon steel with 12 inches stainless steel at furnace end

MAXFire MODEL	CAPACITY MBTU/HR	GUIDE TUBE OD	COOLING AIR REQUIREMENT (ABOVE WINDBOX)	TIP TYPE
40	6.0	4.0 inches 101.6 mm	60 scfm @ 6 inches wc 1.7 m <sup>3</sup> /min @ 14.9 mbar	Straight nozzle

For other sizes and capacities consult the factory.

## HESI SPECIFICATIONS

Input Voltage: 120 to 240 VAC 50/60 HZ  
 Output Voltage: 2000 VDC  
 Output Energy: 12 joules per spark  
 Spark Rate: 3 per second (approx.)  
 Duty Cycle: 50% at - 18 to 57°C (0 to 135°F)

## HTSI SPECIFICATIONS

Amperage: 20 mA  
 Input Voltage: 120 to 240 VAC 50/60 HZ  
 Output Voltage: 6000 VDC  
 Input Current: 1.5 A (2-A fuse); 240 VAC @ 0.75A (1-A fuse)  
 Duty Cycle: 100% at temperature rating

