



A UTC Fire & Security Company

# High Energy Spark Igniter

*Forney's High Energy Spark Igniter (HESI) provides a highly reliable, non-fouling source of ignition for oil or gas igniters or small burners.*



## Features & Benefits

- **NON-FOULING SPARK TIP**  
The surface gap spark tip emits a self-cleaning, highly reliable, 12 joule spark even in the presence of moisture, oil and carbon deposits.
- **REMOVABLE SPARK TIP**  
The spark tip completely detaches from the spark rod through a threaded connection. Replacement of the spark tip is quick and easy.
- **APPLICATION FLEXIBILITY**  
Standard, flexible and retractable HESI models are available to fit a variety of igniter or burner types.
- **COST EFFECTIVE SOLUTION**  
Proven technologies at an affordable price. Pre-packaged, pre-engineered product minimizes cost and lead time.
- **SAFE OPERATION**  
Heavy duty, UL approved flexible cable connects the power unit to the spark rod assembly ensuring operator safety.

## Product Overview

The High Energy Spark Igniter (HESI) is a Class 3 Igniter used for direct spark ignition of oil or gas igniters or small burners. Forney's HESI provides a highly reliable source of ignition for a wide range of industry igniters utilizing a 12 joule source of energy delivered to the spark tip (3 sparks per second) which easily ignites the fuel.

The High Energy Spark Igniter consists of three major components: a power unit, spark rod assembly and cable assembly.

The power unit is packaged in a NEMA-4 or 4X enclosure suitable for wall mounting at the burner front. The power unit develops 12 joules of energy delivered to the spark tip through the use of heavy duty electrical components. It has a 50% duty cycle at temperatures up to 135°F ambient. The spark gap tube is visible through a window in the front cover providing local indication that the power unit is functioning properly.

The spark rod is available in the standard rigid design or in a flexible configuration for use in a tilting tangential burner application. The spark rod features a self-cleaning surface-gap spark tip that is easily replaceable via a threaded connection. Both rigid and flexible spark rods can be provided with an optional retraction assembly to allow the spark tip to be inserted and retracted from the firing position.

The cable assembly consists of heavy duty 12-gauge, 3,000-volt wire sheathed in a ½ inch flexible conduit terminated with quick release, military-grade connectors.

Standard designs are available for both Class I Div 2 and Class I Div 1 area applications.

# High Energy Spark Igniter

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## Specifications

Igniter Class:	Class 3 Special
Approval:	Factory Mutual and CE
Input Voltage:	120 to 240 VAC, 50/60 Hz
Input Power:	120 VAC @ 1.5 A (2-A fuse); 240 VAC @ 0.75A (1-A fuse)
Output Voltage:	2000 VDC
Output Energy:	12 joules per spark
Spark Rate:	3 per second (approximately)
Spark Rod Diameter:	5/8 inches
Spark Tip Type:	Surface gap
Spark Tip Material:	Stainless steel with a silicon carbide insulator
Maximum Recommended Tip Temperature:	1000°F
Power Unit Temperature Ratings:	0°F to 135°F (-18°C to 57°C)
Power Unit Enclosure:	NEMA-4 or 4X approved cabinet
Power Cable Lengths:	6', 12', 15' (15' is standard)
Duty Cycle:	50% at temperature rating

