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## **OMNITEK HIGH-ENERGY IGNITER FOR FLARES AND BOILERS**

Oil fields, refineries, water treatment plants, waste dumps and other installations have flares to burn off excess gas. These flares are constructed in such a way were a commercially available igniter (spark generator), solid state, electronic or electromechanical, is used to ignite a gas stream traveling up a flare stack. When the gas reaches the top of the stack the igniter is turned on. The igniter generates sparks across an electrode consisting of a positive and negative electrode, which reaches into the gas stream. If everything is working correctly, the sparks ignite the gas and the flare burns. However, there are several scenarios were low-power sparks may not ignite the flare and the gas is released unburned into the atmosphere.

The Omnitek high-energy Igniter assures ignition of the gas in the flare stack, therefore substantially reducing air pollution.

The Igniter is based on a patented capacitor-based ignition wire technology and creates the most powerful spark possible. The ignition wire is engineered with a special built-in capacitor. This revolutionary design allows energy from the ignition coil to accumulate in the capacitor until the voltage at the igniter electrodes reaches the ionization point. At that split second point the entire power of the stored spark is discharged at once, creating a spark 300 times more traditional powerful than ignition sources. This process is repeated for as long as the Igniter is operating.

The Igniter consists of a spark generator, an automotive style ignition coil, a spark electrode (automotive style spark plug) and a patented capacitor-based ignition wire.



The Igniter can be powered using a standard 12 Volt automotive battery, or with the supplied 110 VAC/12VDC power supply.

Spark Igniter Electrode Gap Frequency Coil Output Operating Voltage Current Draw Ignition Wire Length Push-button ON/OFF switch 3/4 inch optimum Fixed (variable option available) Up to 40 kV 12 VDC, or supplied 110AC/12VDC Power Supply 3 A Made to order