Ignition devices

Lighting up Innovation
Proven leader in the industrial ignition industry, Tesi manufactures a unique range of high energy, high voltage and portable ignition systems assuring ignition in any conditions, supplying major petrochemical players worldwide.

Tesi is a globally renowned company and a proven leader in the ignition industry. We design and manufacture best in class ignition systems for gas, oil, coal and multi-fuel burners, supplying major petrochemical, chemical and energy players at a worldwide level with state of the art devices. Relying on more than 30 years of expertise, Tesi offers a unique range of new generation ignition systems, electrodes and spark plugs. Our mission is to provide our customers with the most suitable solutions, specially designed to satisfy their real requirements and specifications.

Tesi product range includes:

**High Energy Ignition Systems**

HE Ignition systems can replace traditional air/gas pilot torches, providing the most reliable and cost-effective fuel ignition whether gas, light oil, diesel or heavy oil is used. They are not affected by humidity or liquids (100% waterproof) or by dirty deposits left onto electrodes by the burning process. HE devices are maintenance free, offer lower ignition costs and high adaptability in all kind of burners, even replacing old traditional ignition devices.

**High Energy power units**

A wide range of ignition devices to provide the best performances required by all kind of industrial burners available on the market. (XEC-BH, XEC-TH, XEC-CH)

**High Energy rods and ignition tips**

Tesi developed a wide range of ignition rods, articulated in three main standard diameters: 12/14/17 mm. We offer a variety of configurations, including the length of the igniter, and various accessories developed to enable retraction of igniters through pneumatic devices.

**High Energy modules for flares**

To ease the ignition of flare burners, Tesi developed ignition units able to provide spark energy (3/18 Joules) at very long distances (up to 500 mt) and completely waterproof.

**High Energy retractable igniters for tilting burners**

Designed to ignite diesel and HFO directly, they are provided with a retraction system protecting tips from dirt and flames once sparking is finished and a flexible rod to follow the main burners’ angle. They show electrical requirements in order to deliver energy up to 24 Joules and can replace traditional air/gas pilot torches, providing the most reliable and cost-effective fuel ignition whether gas, light oil, diesel or heavy oil is used.

**NEW:**

**High Energy SOLID STATE igniters for heavy duty tilting burners**

The SOLID STATE spark gap circuit allows up to 15 min of ongoing sparking. It assures constant performance throughout the entire lifetime and at least 6-times longer durability than a standard gas spark gap. Being a stand alone device, it does not require a separate power supply but only the connection to the capacitor and to the tip and can retrofit existing circuits.
Portable and Mobile Ignition Systems

Tesi portable ignition units are designed to ignite burners without an individual pilot torch or electrode assembly. They are the best solution also to solve existing igniters failures or in case of emergency, since they don’t need to be linked to the main power supply. These systems provide High Energy sparks (3/4 sparks per second at 18 Joule per spark) suitable to ignite all kind of fuels even in tough applications. They come fitted with an internal rechargeable battery and built-in automatic charger.

Pilot burners

Tesi ignition devices include a wide range of pilot burners, available with built-in High Energy or High Voltage ignition rod, flame monitor device by optical or ionization rod: gas, oil or dual fuel pilot burners and gas turbine igniters.

Ignition Testing kit

To perform a complete set of tests to check the correct functioning of retraction devices and accessories, spark rods and high energy cables. The testing kit consist of a control panel and a test box connected to the control panel in which the sparking components can be tested:

- spark tip test,
- ignition box test,
- retraction unit test
- armoured cable test.

High Voltage Ignition Systems

Suitable to ignite mainly gas fuels and for explosion-proof areas, they are the cheapest ignition solution available.

Connection cables and Accessories

- ARMoured CONNECTION cables
- HIGH TEMPERATURE CONNECTION cables
- ARMoured CONNECTION cables FOR EXPLOSION PROOF AREAS
- angled spark tips
- ball joints
- insertion switches
- mounting flanges
- optional 90° handles
- rubber handles and stop flanges
- positioning sensors
- custom ceramic insulators
- explosion proof executions
- gas and oil pilot torches
- manual retractor device
- ATEX remote lance push button
- safe area remote push button