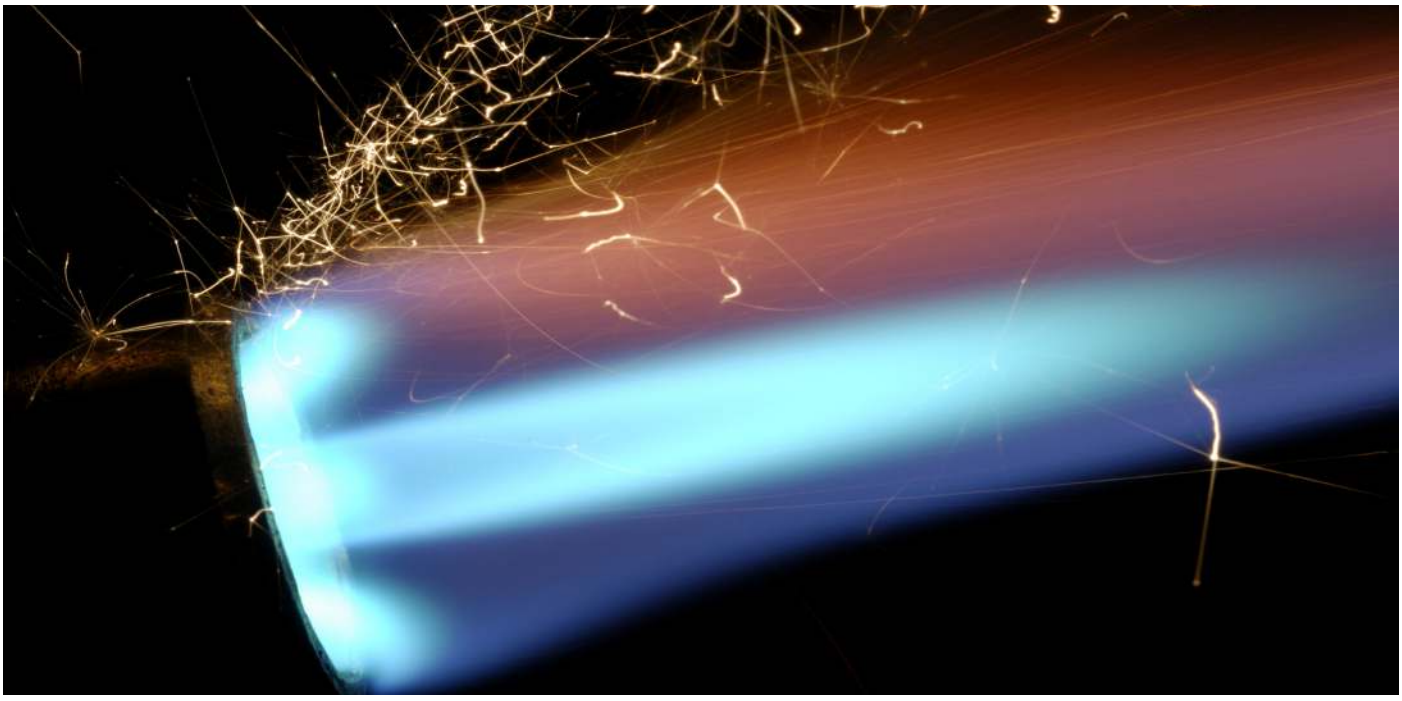
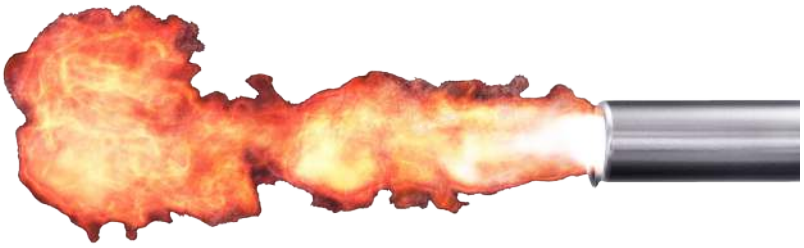
Pilot Torches and Gas Fired Igniters

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** and highly skilled technicians, 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, **specfically designed to satisfy their operational requirements and specifications**.



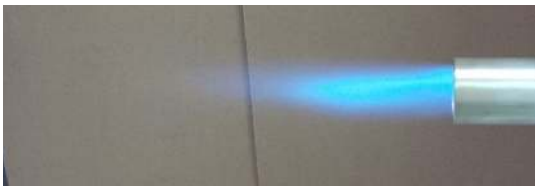
Pilot Torches and Gas Fired Igniters

Tesi produces a wide range of pilot torches and gas fired igniters.
Standard models can be personalized to match the Customer's technical specifications both for new installations and revampings.
High reliability and low maintenance, compact design and flexibility, easy and fast maintenance are main points of our products, together with large range of performances and capacity allow to find the right solution for every applications.

- **Compact design and flexibility:** dimensions and shape can be customized to match Client's request
- **Easy and fast maintenance:** ignition and flame ionization devices can be easily disassembled without pulling ut the complete pilot
- **High Voltage Electrode or High Energy Igniter** offering most reliable and cost-effective ignition, not affected by humidity, water and dirt
- **Inflated or self aspirated air** configuration

CE All Tesi products are CE marked

Model TP15



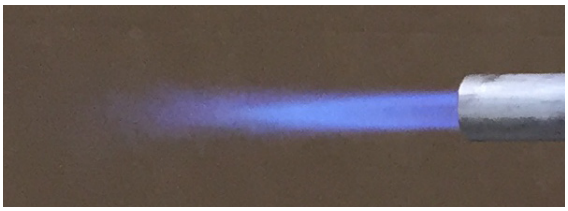
TP15 - Technical Data

CONFIGURATION	Self Aspirated air (venturi)		Inflated air	
INSTRUMENTATION	High Voltage monoelectrode		High Voltage monoelectrode	
FUNCTION	Ignition	Ignition + Ionization	Ignition	Ignition + Ionization
CODE REFERENCE	TP15/L*/V		TP15/L*	
DIAMETER	15 mm			
HEAT RELEASE	2 ÷ 7 kW	**GAS VOLUME FLOW**	0,21 ÷ 0,73 m³/h @ 20 mbar	
FLAME LENGTH	up to 100 mm			

* Length [mm] on demand

Data subject to changes without notice

Model TP25



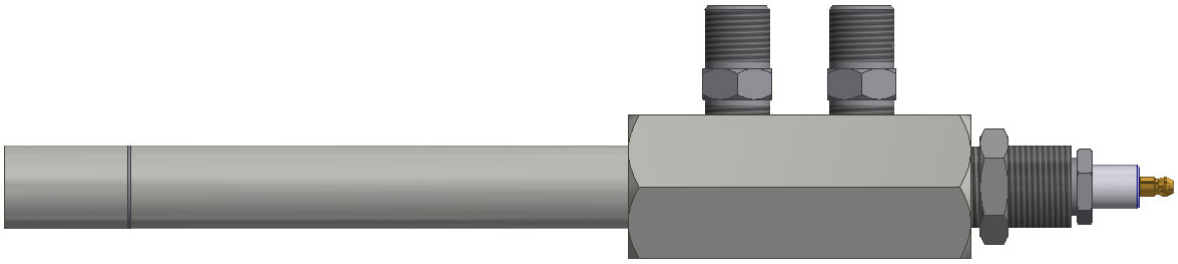
TP25 - Technical Data

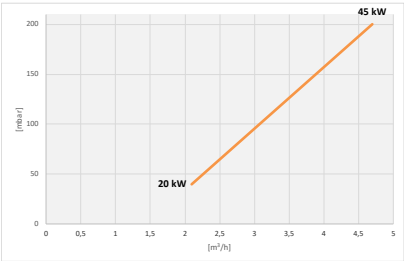
CONFIGURATION	Self Aspirated air (venturi)		Inflated air	
INSTRUMENTATION	High Voltage monoelectrode		High Voltage monoelectrode	
FUNCTION	Ignition	Ignition + Ionization	Ignition	Ignition + Ionization
CODE REFERENCE	TP25/L*/V		TP25/L*	
DIAMETER	25 mm			
HEAT RELEASE	4 ÷ 15 kW	**GAS VOLUME FLOW**	0,42 ÷ 1,56 m³/h @ 50 mbar	
FLAME LENGTH	up to 300 mm			

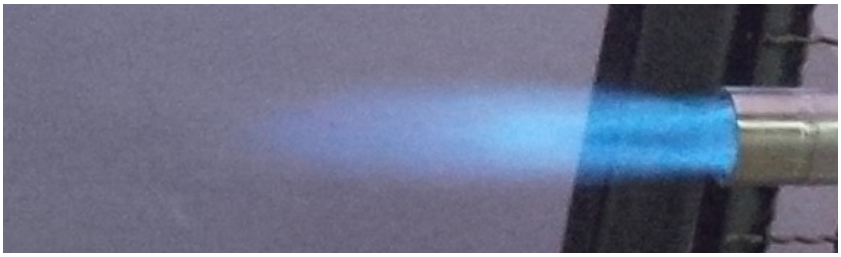
* Length [mm] on demand

Data subject to changes without notice

Model TP32







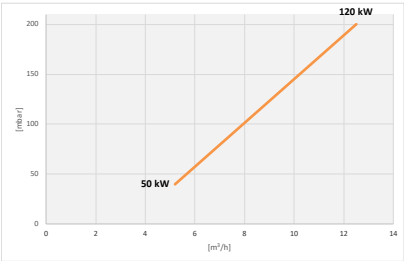
TP32 - Technical Data

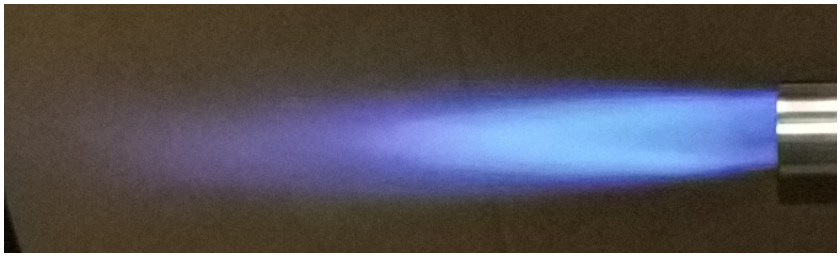
CONFIGURATION	Self Aspirated air (venturi)		Inflated air	
INSTRUMENTATION	High Voltage monoelectrode		High Voltage monoelectrode	
FUNCTION	Ignition	Ignition + Ionization	Ignition	Ignition + Ionization
INSTRUMENTATION	High Energy igniter Ø12 - Ø14 mm		High Energy igniter Ø12 - Ø14 mm	
FUNCTION	Ignition		Ignition	
CODE REFERENCE	TP32/L*/V		TP32/L*	
DIAMETER	26,7 ÷ 33,4 mm			
HEAT RELEASE	20 ÷ 45 kW			
FLAME LENGTH	up to 500 mm			

* Length [mm] on demand

Data subject to changes without notice

Model TP38





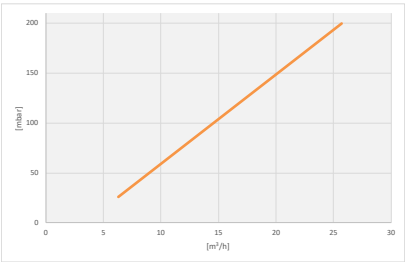
TP38 - Technical Data

CONFIGURATION	Self Aspirated air (venturi)		Inflated air	
INSTRUMENTATION	High Voltage monoelectrode		High Voltage monoelectrode	
FUNCTION	Ignition	Ignition + Ionization	Ignition	Ignition + Ionization
INSTRUMENTATION	High Energy igniter Ø12 - Ø14 mm		High Energy igniter Ø12 - Ø14 mm	
FUNCTION	Ignition		Ignition	
CODE REFERENCE	TP38/L*/V		TP38/L*	
DIAMETER	33,4 ÷ 48,3 mm			
HEAT RELEASE	50 ÷ 120 kW			
FLAME LENGTH	up to 600 mm			

* Length [mm] on demand

Data subject to changes without notice

Model TP60



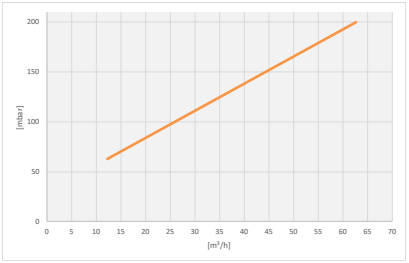
TP60 - Technical Data

CONFIGURATION	Inflated air		
INSTRUMENTATION	High Voltage monoelectrode		High Voltage electrode + Ionization rod
FUNCTION	Ignition	Ignition + Ionization	Ignition + Ionization
INSTRUMENTATION	High Energy igniter up to Ø17 mm		High Energy igniter up to Ø17 mm + Ionization rod
FUNCTION	Ignition		Ignition + Ionization
CODE REFERENCE	TP60/L*		
DIAMETER	60 mm		
HEAT RELEASE	up to 250 kW		
FLAME LENGTH	up to 1200 mm		

* Length [mm] on demand

Data subject to changes without notice

Model TP76



TP76 - Technical Data

CONFIGURATION	Inflated air		
INSTRUMENTATION	High Voltage monoelectrode		High Voltage electrode + Ionization rod
FUNCTION	Ignition	Ignition + Ionization	Ignition + Ionization
INSTRUMENTATION	High Energy igniter up to Ø17 mm		High Energy igniter up to Ø17 mm + Ionization rod
FUNCTION	Ignition		Ignition + Ionization
CODE REFERENCE	TP76/L*		
DIAMETER	up to 76 mm		
HEAT RELEASE	up to 600 kW		
FLAME LENGTH	up to 2000 mm		

* Length [mm] on demand

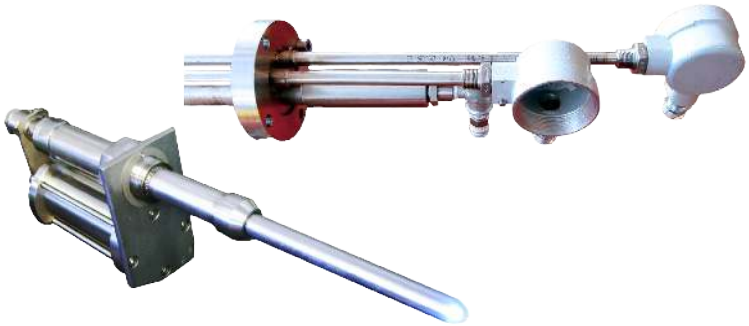
Data subject to changes without notice

High Energy Ignition Spark Rods

Tesi product range includes a broad selection of ignition rods.
The recent and ever increasing demand for **direct ignition of main burners** led Tesi to develop a dedicated range **specifically designed for overexposure to high temperatures**. This range, allowing to replace pilots, leads also to a considerable reduction in the plants manufacturing and operational costs.
In order to satisfy this operational need for direct ignition of main burners, Tesi introduced a selection of special solutions alongside standard devices, that makes them suitable to ignite directly a wide range of fuels including natural gas, fuel gas, diesel, light fuel oil (LFO) and heavy fuel oil (HFO):

- **side or coaxial retractable prenumatic devices** protecting tips from dirt and flames once sparking is finished
- **tilting flexible rods** to follow the main burner's angle
- **guide pipes**

Our key strength is the ability to provide **CUSTOM CONFIGURATIONS.**
Tesi **utmost flexibility** is highly appreciated among our customers, since it allow us to **meet their real requirements**.
Tesi ignition rods range comes in three main standard diameters: 12 / 14 / 17 mm; **length and diameter of the igniter are customizable**, and various accessories are available in order to satisfy any operational need.



Tesi pilot burners range includes: **GAS, OIL, DUAL FUEL PILOT BURNERS.**

Features

High reliability
The powerful sparks ensure reliable ignition in all conditions and environments, removing any risks of failure due to contaminants or humidity.

Low maintenance
Tesi self-cleaning spark tips guarantee a successful ignition while reducing maintenance efforts. The high power of the sparks cleans the surface of the tip during every ignition.
Igniters and flame ionization electrodes can be easily disassembled, without pulling out the entire pilot.

Easy tip replacement
Being HE spark tips screwed onto the end of the rod, they can be replaced quite easily, reconditioning the system very quickly and reducing costly downtime.

Compact design & flexibility
Dimension and shape can be fully customized to match customer requirements.

Higher output capacity
Can be provided on demand.

Accessories

Tesi ignition devices include a wide range of accessories available:

- **Venturi system** to inspirate air
- **Flanges** - All Tesi pilot torches can come fitted with custom flange systems, choosen according to Customers' specifications, requirements and applications
- **Retraction devices** - Tesi can provide side or coaxial retractable pneumatic devices protecting tips from dirt and flames once sparking is finished
- **Scanner amplifier** - Customers can choose to replace the ionization rods only with UV or IR scanner amplifiers available on the market

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