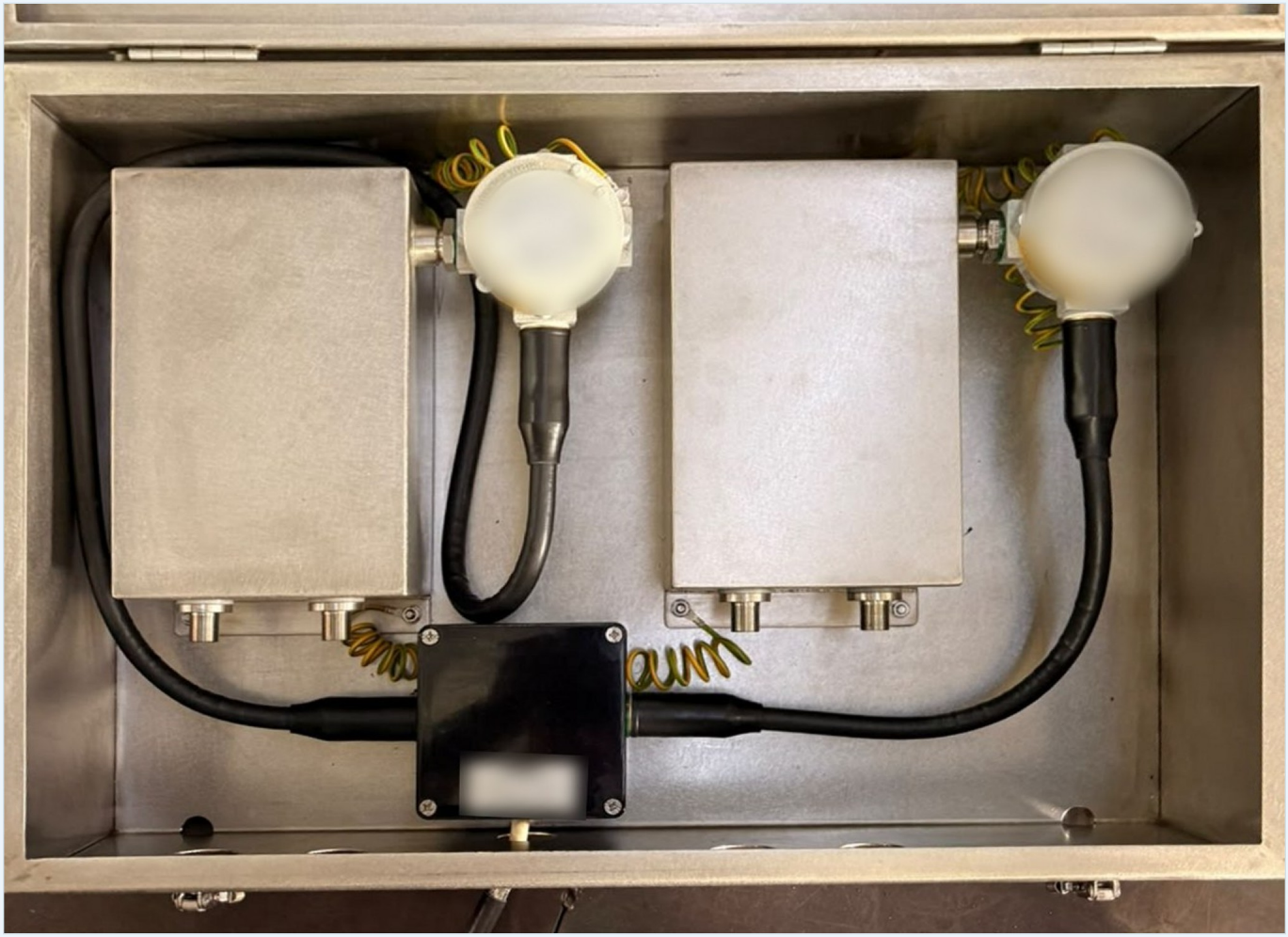
IGNITION SYSTEMS

HEI ignition system for flare pilots and burners.

High-energy ignition systems for oil, gas and petrochemical plants, built at our workshop in Singapore. Fixed and portable units, with igniters, ignition cables and pilot assemblies made to suit your burner.



BUILT IN

Singapore, at our Defu Lane workshop

SUPPLIED AS

Fixed installations and portable units

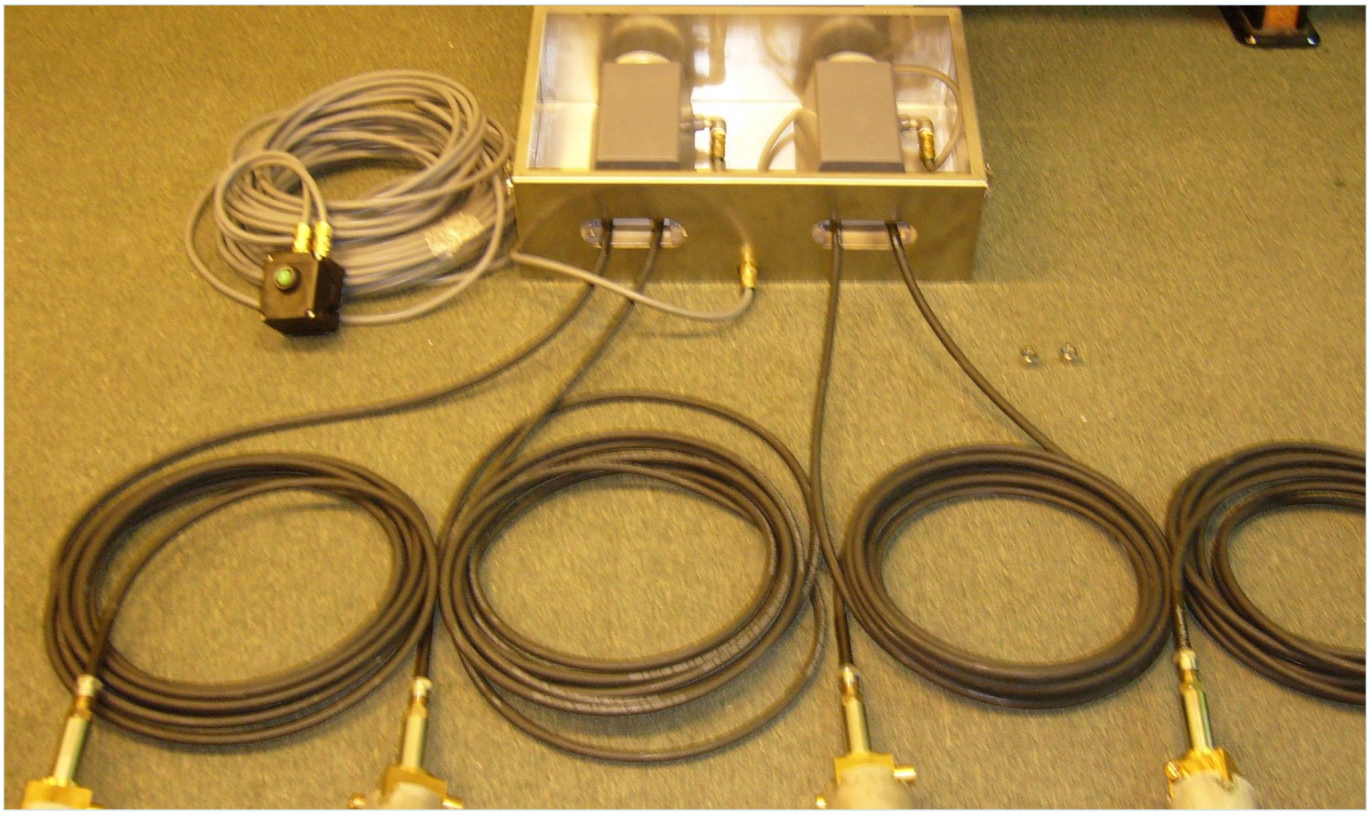
SUPPORT

Spares, cable repair and servicing

THE SYSTEM

Reliable ignition for flare pilots and burners

An HEI system produces a high-energy spark at a fixed point in a pilot or burner. The power pack, ignition cable, igniter and pilot are matched to your burner arrangement and built as one system.



Portable system with two power packs, four ignition cables with pilot igniters, and a push-button station.

WHAT IS IN THE SYSTEM

01 HEI ignition power pack
120 or 240 V AC supply, two igniter outlets.

02 HEI ignition cable
Up to 30 m, flame-resistant at the igniter end.

03 HEI ignition spark plug
Stainless steel 316 igniter, made to length.

04 Gas or diesel pilot assembly
Pilot nozzle, flame shield and mounting bracket.

05 Push-button station
ATEX certified, with 50 m armoured power cable.

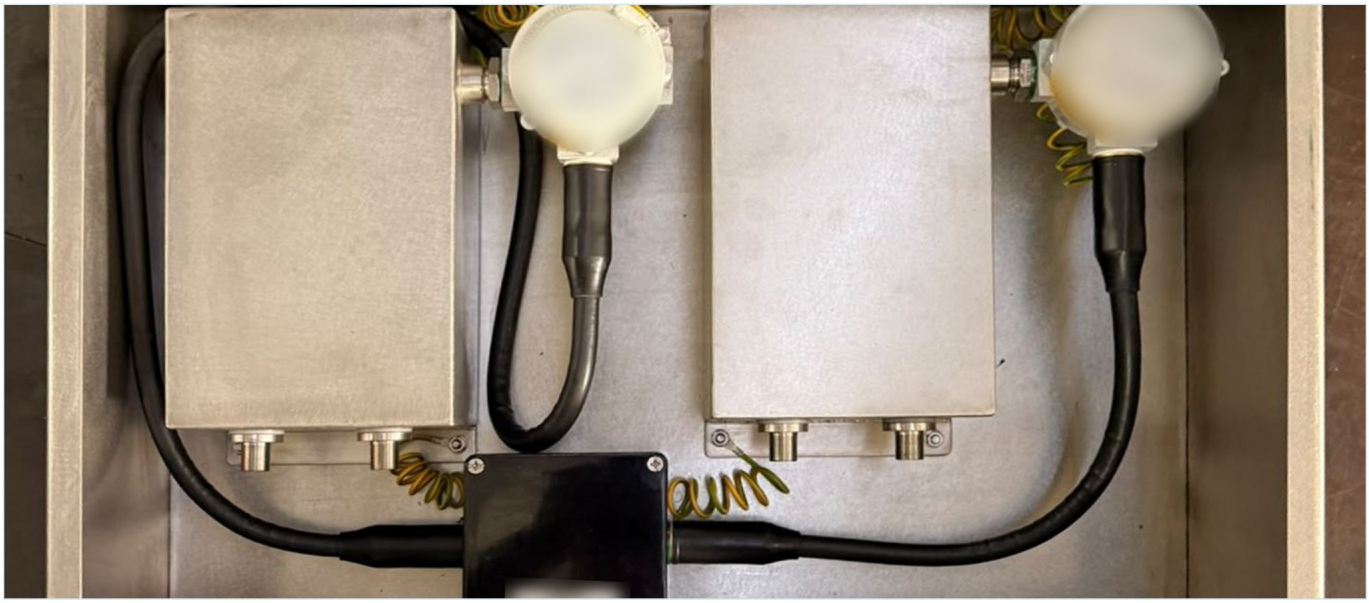
06 Stainless steel flexible hose
Mechanical protection for the ignition cable.

Typical applications: flare pilot ignition, burner ignition, oil and gas, refinery and petrochemical plants, onshore and offshore installations.

01 / POWER PACK

HEI ignition power pack

The power pack turns mains supply into high-energy sparks at the igniter tip. Each unit is housed in a stainless steel 316 enclosure and drives two igniters.



Portable build: two power packs in a stainless steel carry case, giving four igniter outlets.

DESCRIPTION	INFORMATION
Enclosure	Stainless steel 316
Size (L x W x H)	255 x 165 x 130 mm
Power supply	120 V AC or 240 V AC, 50/60 Hz
Input power	150 W
Spark energy	20 J
Output voltage	3,000 V AC
Spark rate	6 to 8 sparks per second
Duty cycle	15 seconds on / 3 seconds off
Igniter outlets	2 per power pack

02 / IGNITION CABLE

HEI ignition cable assembly

The ignition cable carries the high-voltage pulse from the power pack to the igniter. Each cable is made to length with stainless steel end connectors.



Ignition cables with a stainless steel braided section at the igniter end.

DESCRIPTION	INFORMATION
Maximum operating voltage	4,000 V (RMS)
Igniter end	Flame-resistant protection on the 1 m nearest the igniter
End connectors	Stainless steel 316 with high-voltage insulators
Length	Up to 30 m. Please check with us for longer lengths.
Extra protection	Stainless steel flexible hose recommended (see page 07)

Cable repair

We repair damaged ignition cables at our Singapore workshop, which is often faster than waiting for a replacement.

03 / IGNITER

HEI ignition spark plug

The igniter delivers the spark at the pilot. Each one is machined in stainless steel 316 and made to the insertion length your pilot or burner needs, from 6 to 24 inches.



DESCRIPTION	INFORMATION
Construction	Stainless steel 316
Length	6 to 24 inches
Operating voltage	3,000 V
Spark energy	20 J
Spark rate	6 to 8 sparks per second with the HEI power pack
Temperature rating	-20 to 660 °C

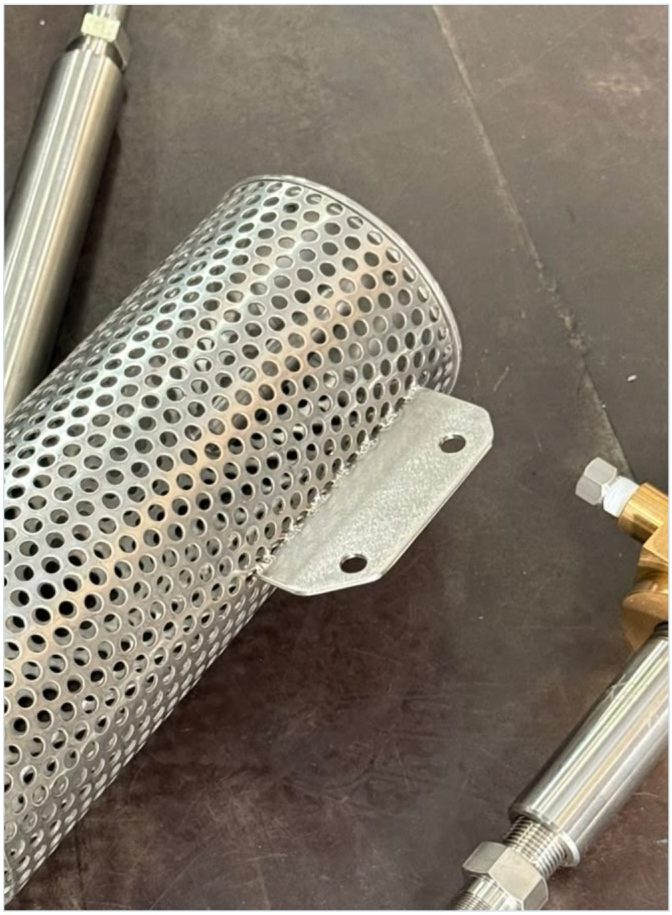


Igniter probe fitted to its ignition cable. Left above: a batch of igniters made at our workshop.

04 / PILOT ASSEMBLY

Gas or diesel pilot assembly

The pilot assembly holds the igniter at the ignition point and shields the pilot flame. It is supplied for gas or diesel pilots and made to suit the burner.





Left: pilot parts before assembly. Right: assembled pilot igniter head with perforated flame shield.

DESCRIPTION	INFORMATION
Construction	Stainless steel 316
Length	6 to 24 inches
Pilot fuel	Gas or diesel

Burner skids to order

We also build complete burner skids, fitted with our pilot igniters and HEI ignition.

05 / CONTROL

Push-button station and power cable



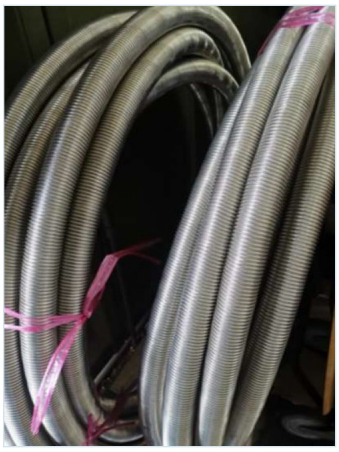
One press of the green button fires the igniters. The station is ATEX certified and comes wired to an armoured marine power cable.

DESCRIPTION	INFORMATION
Certification	ATEX, II 2 G and II 2 D (Zones 1, 2, 21 and 22)
Enclosure	Polyamide, IP66, with 2 x M20 Ex e cable glands
Operator	Green push button with 2 x NO contacts
Power cable	Armoured marine cable, 0.6/1 kV, halogen-free, flame-retardant
Cable length	50 m

ATEX certification applies to the push-button station only.

06 / PROTECTION

Stainless steel flexible hose



A flexible hose sleeves the ignition cable to protect it from knocks, abrasion and heat along the cable run.

DESCRIPTION	INFORMATION
Construction	Stainless steel 304 or 316
Length	Made to suit the ignition cable

OPERATION

Set up and fire in three steps

01 **Assemble the system**
Connect the power pack, ignition cables, igniters and push-button station as shown on the drawing supplied with your system.

02 **Connect the power supply**
Check that the AC voltage matches the HEI power pack before switching on.

03 **Press the ignition button**
Press the button on the push-button station. The igniters should spark.

Spark rate and intensity depend on the power source, power cable length, ignition cable length, number of power packs, the condition of the igniter and how clean the spark gap and assembled system are.

FOR AN ENQUIRY

What to share with us

- Pilot or burner drawings
- Power supply and control signals
- Site location and area classification
- Ignition and operating sequence
- Igniter mounting and cable distance
- Fixed or portable, and number of igniters

GET IN TOUCH

Let's discuss your project.

EMAIL
sales@pstechnology.com.sg

PHONE
+65 6742 6963

WHATSAPP
+65 8817 7008

WORKSHOP
Block 11 Defu Lane 10, #01-456, Singapore 539192

HOURS
Mon to Fri 8am to 5pm
Sat 8am to 12pm

WEBSITE
www.pstechnology.com.sg

ISO 9001 certified (NQA, UKAS accredited) and bizSAFE Level 3.