

System Description

Flare Stack is used to burn excess gas during land operations. Mobile flare system, consisting of hydraulic system for quick build-up and mobilization. Flare Stack allows gas to be burned at a safe distance from the work area, protecting workers and the environment. Also, used in hazardous environments as H₂S.

Flare Stack is CE Certified according to the Machinery Directive (2006/42/EC) and Electromagnetic Compatibility Directive (2014/30/EU).

Applications

- Land locations
- Gas flaring at land locations
- Production Well Testing
- Well Testing gas disposal
- Relief line vent flare

Dimensions

Skid dimension during rig up:

L 11.8 x W 14 x H 18.2 meter.

Skid dimension during lay down or Transportation:

L: 10.3 x W: 1.9 x H: 2.6 meter.

Skid weight:

W: 4200 kg



Properties

- Flare stack has:
 - 1 ea 8" High Pressure Gas Discharge Line
 - 1 ea 1" Electric Cables Line
 - 2 ea 3/8" Pilot Gas (SS Tubing) Line
- 6" Inlet piping equipped with 1 ea 6" Flame arrestors.
- Flare stack has an Automatic Ignition System which consists of 2 Pilot Sparking Units and 1 Ex-Proof Control Panel.
- Flare stack supported by 3 guided wires which is connected to 2 side support and 1 main skid.
- Gas Pilot Ignition system supported by industrial propane tube. Pilot gas controlled by solenoid valves.
- The bottom part of the flare has a mechanic fluid accumulation & dump system and fluid level indicator.
- Flare tip sections and wind shield made from SS 304 & 316 materials.
- The thermal sensor reignites the pilot when the flameouts occur.
- The rig up & rig down can be performed by hydraulic lifting system.



Ignition Control Panel

For the automatic ignition of the gas in the mobile flare stack, there are two independent pilot gas ignitors which are positioned at a 180° angle from each other and operating redundantly.

This automatic ignition system is controlled by an Ex-Proof panel mounted on skid and operates on 220V power.



Hydraulic Control Panel

After the flare stack is transported to the designated area, its installation can be carried out easily and quickly using the hydraulic piston system. With the control panel on the skid, the flare stack can be raised and lowered on its skid.



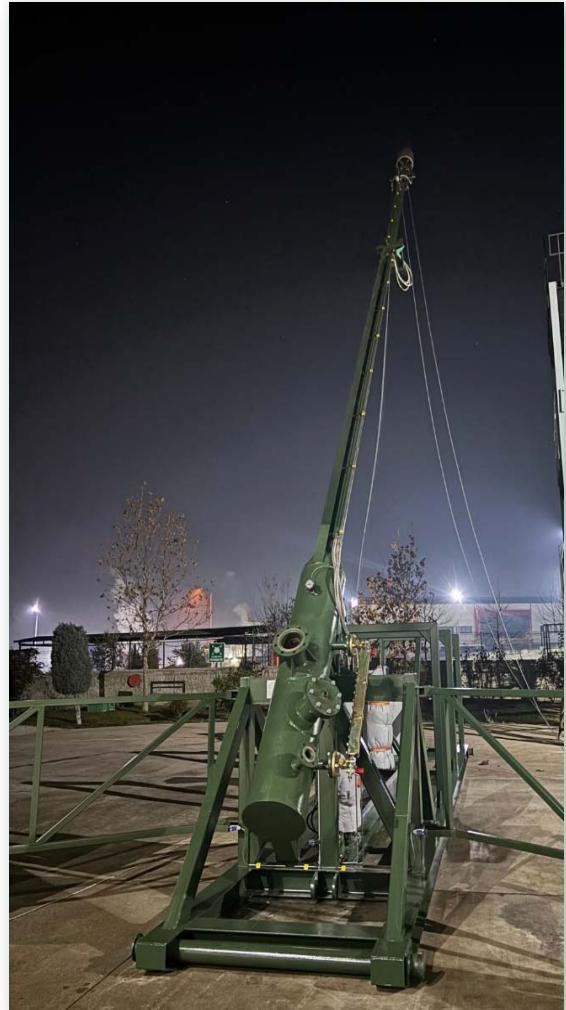
Flare Tip

Stainless Steel
 Wind shield is 316 SS
 Pilot Nozzle: 316 SS
 Pilot Pipe: 304 SS
 Thermocouple Sensor: One (1) @ Pilot
 Type of Thermocouple: Chromel
 High Intensity Spark Unit equipped with:
 High Intensity Igniter Assembly
 High Intensity Exciter Assembly

General Specifications

Service	Standard and H ₂ S
Capacity	30,000 m ³ /day
Wind speed	45 m/sec
Exposure Type	C
Size of Flare Tip	3"
Overall Height of Flare Stack	18.2 meters
Gas Barrier Section	1 meter
Length of Flare Tip	1.3 meters

Note: Various sizes and configurations available.



Extension Wire

Extension wire is equipped with high temperature insulation and proper radiation shielding to prevent heat damage to the cable. This is important, since the flare burner flame heat radiation will provide elevated temperatures at/near the flare burner and higher stack elevations. Normal temperature cable insulation is not sufficient to prevent damage, which would render control and monitoring equipment useless. Extension wire will protect against this type of failure and provide efficient and trouble free electronic pilot operation.

Painting of Flare Stack

The points where the steel exposed to heat is painted with heat resistant paint. Where the skid is painted with a special coating which is resisting to outer condition.