

60' Triple Stack Mobile Flare

System Description

Flare Stack is used to burn excess gas during land operations. Mobile flare system, consisting modular elements 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.

Applications

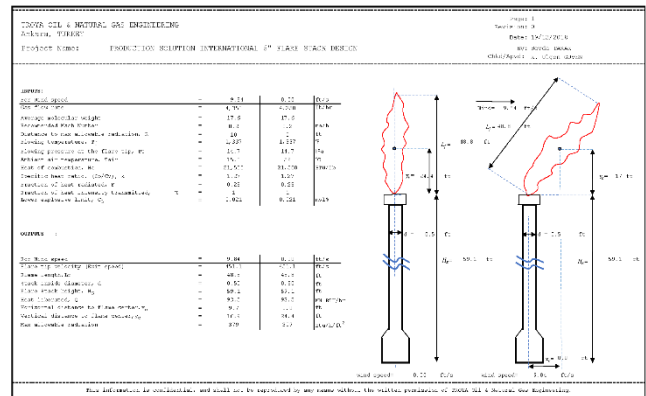
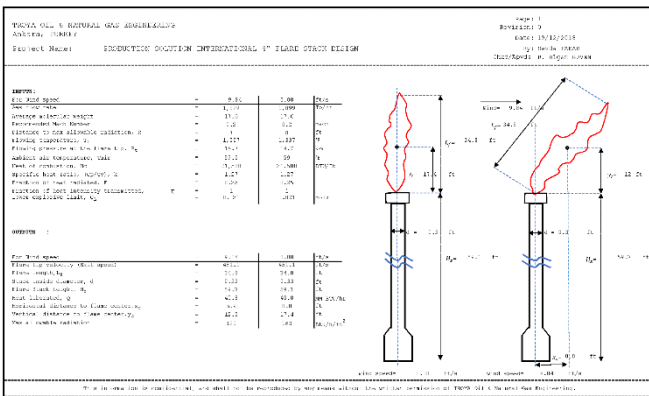
- Land locations
- Gas flaring at land locations
- Production Well Testing
- Well Testing gas disposal
- Relief line vent flare

Dimensions

Skid dimension during rig up:
L 18.45 x W 12.55 x H 18.09 meter.

Skid dimension during lay down or Transportation:
L: 10 x W: 1.95 x H: 3.3 meter.

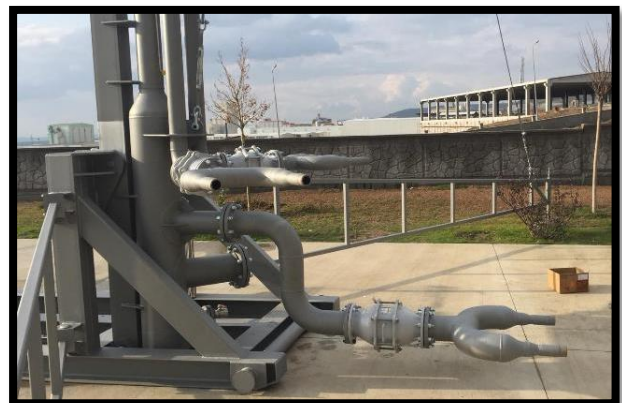
Skid weight:
W: 5000 kg



TROYA Flare Design Spreadsheets

Properties

- Flare stack have;
 - 1 ea 6" High Pressure Gas Discharge Line
 - 1 ea 4" for PSV Gas Relief Line
 - 1 ea 4" for Low Pressure Discharge Line
 - 1 ea 1" Electric Cables Line
 - 1 ea Pilot Gas (SS Tubing) Line
- Inlet piping equipped with 2x4" and 1x6" Class 150 Flame arrestors.
- All three lines have manifolds w/2 separate inlets.
- Flare stack have an Automatic Ignition System which consist of 2 Pilot Sparkling Units and 1 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 manual & solenoid valve.
- Bottom part of flare 6" line has mechanic fluid accumulation & dump system and fluid level indicator.
- Flare tip sections and wind shield made from SS 304 & 316 material.
- Automatic ignition panel sense the presence of a flame.
- Thermal sensor/reignite the pilot when the flameouts occur.
- The rig up & rig down can be performed by hydraulic lifting system according the client's request.



Ignition Control Panel

Automatic/Manual Ignition/Re-ignition for a total of Two (2) pilot weatherproof, Ignition Control Panel is equipped with the following components:

- Solid State Temperature Controller
- Automatic/Alarm Timer
- Ignition Timer
- Manual Reset Pushbutton

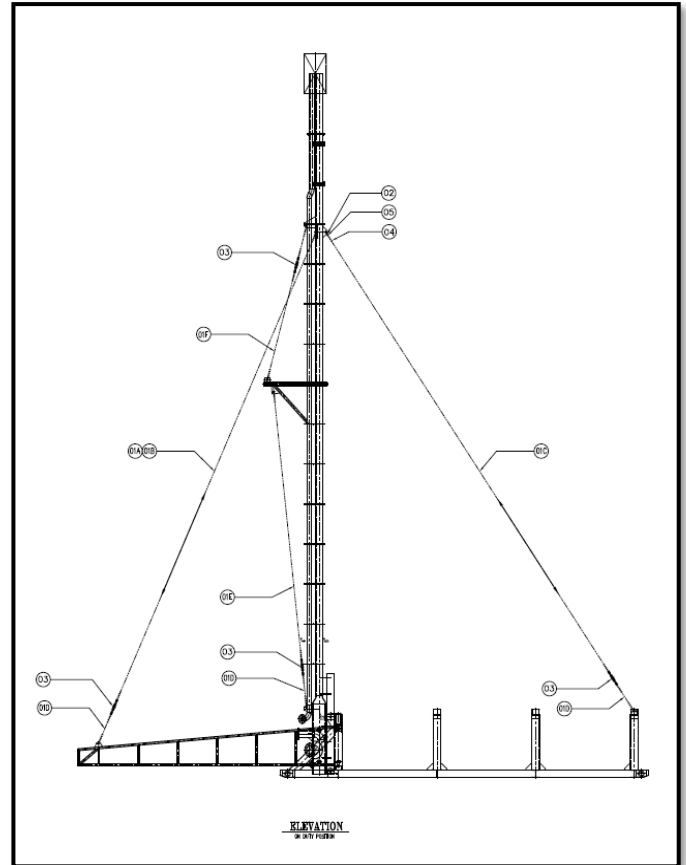
Flare Tip

- Stainless Steel
- 70 cm 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	8,000,000 MMSCF/d
Wind speed	3 m/sec
Exposure Type	C
Size of Flare Tip	6"x4"
Overall Height of Flare Stack	18 meters
Gas Barrier Section	1 meter
Length of Flare Tip	2 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.

