

SPECIFICATION FOR LPG FIRED STEAM GENERATOR

TYPE	Low Pressure Steam Generator with Super Heater arrangement.
Fuel	LPG Burner
Operating Pressure	0.9 Kg/CM ²
Test Pressure	4 Kg/CM ²
Material	1. The Inner Shell (Min. Diameter 600 X min. 1000mm long) shall be made with Stainless steel of AISI 304 Gr. 5 MM thickness. 2. The Outer Shell (min. OD 960 X min. 1100mm long) be made with M.S, IS 2062 of 10MM thickness. 3. For other critical dimensions refer the attached drawing.

Accessories and fitting to be supplied along with the generator:

1. Safety Valve
 - i. Spring loaded 1 No.
 - ii. Dead Weight 1 No. Set it 1.5 Kg/cm²
2. Pressure gauge: 0-5 Kg/cm² should be mounted on the inner vessel lid.
3. Emergency water filling funnel.
4. Water level indicator: Glass tube with SS guard cover with bronze valve on both ends.
5. SS Float valve ¾" fitted at water inlet.
6. Drain valve 2" with 90° elbow for outflow of water.

General Points:

1. All pipelines connecting inner to outer vessels should be of diameter 1½" with thickness as per Schedule 80.
2. All the connecting flanges for pipelines (refer to 6 in the drawing) should be of Stainless steel 304 grade having a minimum thickness of 14mm.

3. The Top lid cover of the boiler (refer to 10 in the drawing) should have 10mm thickness of Stainless steel 304 .
4. Top lid shall be provided with sealing gasket with **SS bolt and nut.**
5. The outer shell should be insulated with 80mm thick glass wool and covered by 16 SWG Gr.I.
6. A door of 450mm x 350 mm size shall be provided on outer vessel for burner.
7. The burner should be provided with proper mounting for holding.
8. A Mild steel stand of 600 mm height and 20mm thickness top plate shall be supplied to rest the boiler.
9. Chimney of dia 150mm of 14 SWG. MS sheet of 3m height with flanges shall be provided.
10. 02nos.of manholes (opposite to each others) having dimensions 120mm*200mm should be provided in the lower part of the outer vessel for cleaning purpose.
11. Equipment shall be offered for inspection before dispatch.
12. The steam generator **shall be hydraulically tested for 4 Kg/cm² for one hour at supplier work in presence of BHEL Officials.**

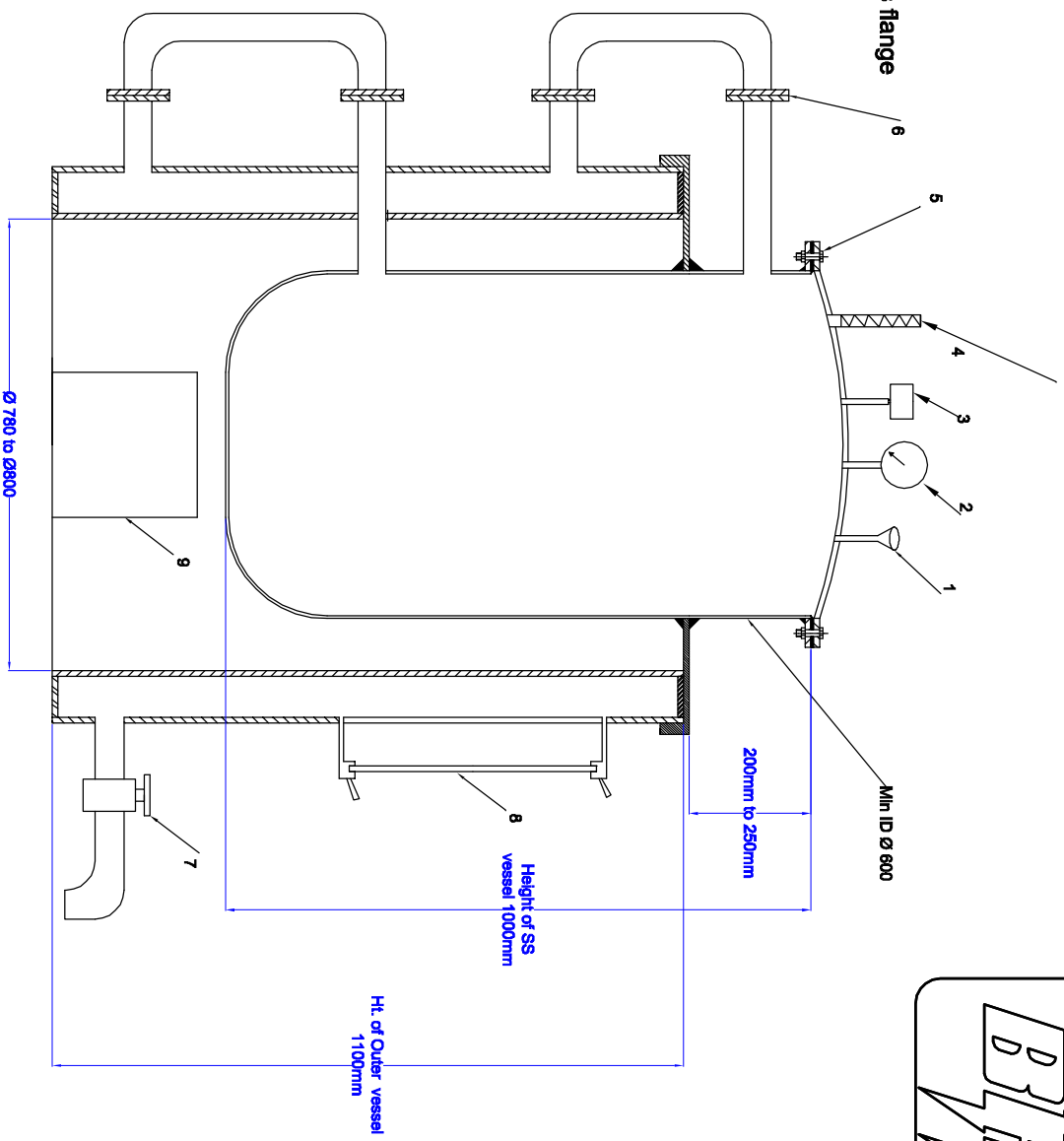
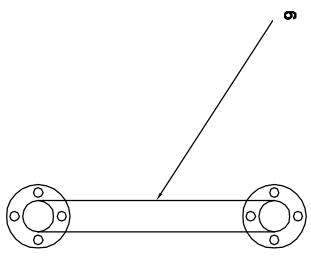
SCOPE: 1. Manufacturing, testing, supply, erection and commissioning.

2. Minimum Guaranty for 1year from the date of commissioning.

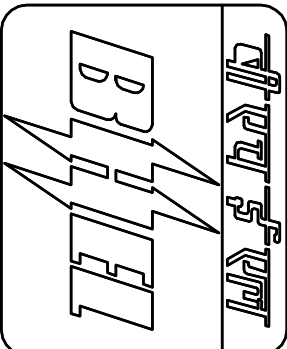
Pre Qualification Requirement:

- 1. Supplier may be manufacturer/distributor/trader of LPG Fired steam boilers.**
- 2. Supplier must have been supplied minimum 1 no. in the last two years.**
- 3. Proof of supply must be submitted along with technical bid.**

- 1 : Emergency funnel for water filling
- 2 : Pressure Gauge
- 3 : Dead Weight safety valve
- 4 : Spring loaded safety valve
- 5 : SS vessel 10mm thickness flange with gasket
- 6 : 1 1/2" Connecting pipeline (Sch 80) with 14mm thickness flange
- 7 : 2" Shut off valve with 90° elbow
- 8 : Glass tube for water level indicator with bronze valves
- 9 : Door for burner 450mm*350mm
- 10 : SS top lid cover having thickness 10mm



LPG Fired Low Pressure Steam Generator with Super Heater





Item Annexure for Enquiry no 2790580E/27.07.2019

Sl no	Material Code	Item Description	Quantity (No)	Quoted/ Not Quoted
1	IM4570008300	Supply of LPG Fired Steam Generator as per Technical Specification	2	
2	IM4570008301	Charges for Erection & Commissioning of LPG Fired Steam Generator	2	

Special Note:-- Sl no 01 to 02 will be procured as a set. Summation cost of all above sl nos. will be deciding factor for L1 (sl no. 01 to sl no. 02).

Signature and Office Seal of Vendor



Price Bid Format for Enquiry no 2790580E/27.07.2019

Sl no	Material Code	Item Description	Quantity (No)	<u>Unit Price in INR</u>
1	IM4570008300	Supply of LPG Fired Steam Generator as per Technical Specification	2	
2	IM4570008301	Charges for Erection & Commissioning of LPG Fired Steam Generator	2	
3	GST on sl no. 01 (Supply) in percentage			
4	GST on sl no. 02 (Commissioning) in percentage			

Special Note:-- Sl no 01 to 02 will be procured as a set. Summation cost of all above sl nos. will be deciding factor for L1 (sl no. 01 to sl no. 02).

Signature and Office Seal of Vendor