

**TECHNICAL SPECIFICATION OF GAS FIRED HOT AIR
GENERATOR(1.5 LKCAL.)**

A. Heat Output	0.15 MKCALS/HR
B. Calorific Value	11000 KCALS/Kg
C. Burner Pres. Drop	70 mmwg
D. Modulation	ON/OFF
E. Mode of Operation	Fully Automatic
F. Flame Sensor	U V Type Detector
G. Electric supply	220V 50Cycles

HOT AIR GENERATOR

Hot air generator shall be double shell type .The HAG shall have inner shell and outer shell. Both the shells shall be made from MS sheet (IS 2062) 5mm Thick. The approximate dimensions shall be as given in the sketch enclosed.(exact dimension of shell shall be provided after final design of HAG is Completed).

Inner Shell : 600 OD X 1200Length X 5mm Thick, MOC Ms, is 2062 GRA

Outer Shell: 700 OD X 1500 Length X 5mm/ thick MOC: is 2062 GRA

Mixing chamber shall be fabricated with MS Sheet 5mm thick, MOC, MS IS 2062 GR.A outer shell shall be insulated with mineral wool 50mm and claded with GI Sheet 22 guage. Dilution air inlet duct connection shall be provided to the outer shell.

SL NO	Description	Qty
1	Combustion chamber for HAG(Annixture)	1 No
2	Industrial Gas Burner (ON/OFF)	1 No
3	Gas train for above Burner	1 No
4	Gas control panel	1 No
5	F D Fan & Motor	1 No
6	Dilution Fan & Motor	1 No
7	Burner Management System	1 No
8	Tempereture indicating controller	4 No
9	Control vavle with motorised actuator 230vac	4 No

INDUSTRIAL GAS BURNER (ON/OFF)

Burner shall be completely painted Pre-Wired and assembled with all the components required for satisfactory and safe operation and broadly consist of the following:

1	Metal Sheet Burner Body	2	Gas Nozzels
3	Air Damper 6Nos	4	Flame view port
5	Low Air Pressure Switch	6	Flame Tube
7	Diffuser plate	8	Ignition Transformer
9	Ignition Cable	10	Ignition Electrode
11	Insulator for electrode	12	Gas butterfly valve

GAS TRAIN

- Main isolating valve 25NB, **MAKE:** AUDCO
- Gas filter 25 NB, **MAKE:** VANAZ
- Pressure gauge at outlet of filter with isolating valves Range: 0- 4bar. DIAL SIZE: 100mm
- GAS filter 25NB, **MAKE:** AVCON
- Pressure gauge with isolating Valve at the outlet the regulator, Range : 0-2000mmwg
- Dial size 100mm, **MAKE:** H.GURU
- Low GAS PRESSURE SWITCH: Range:0-100mmwg, **MAKE:**HONEYWELL
- Gas relief valve 25NB, **MAKE** VANAZ
- First Gas valve (safety):25NB Solenoid Operated, **MAKE:** HONETWELL
- Second Gas valve (burner), 25NB Solenoid Operated, **MAKE:** HONETWELL
- Pressure gauge with isolating Valve at burner inlet Range : 0-2000mmwc, **MAKE** : H.GURU

CONTROL PANEL

Control Panel shall be Floor Mounted type Cabinet in IP 54 Enclosure. It shall be Powder coated, Pre- wired as per standard wiring and shall consist of the following:

- Main Isolator.
- Power Contactors for FD Fan & Dilution Fan
- Control Fuses and Contactors
- Rotary Switches &push Buttons
- LED Indicating Lamps
- Hotter
- Gas Sequence Controller (BMS) Gas programmer with UV tube & relay Temperature Controller 1 No. For each Channel
- F.D fan /dilution fan –Suitable for the System

TECHNICAL DATA

A	Gas pressure at Inlet: Max	2.0kg/Cm
	Min	1.0kg\cm2
B	Electric supply	220V. % 0c/s

LIST OF SPARES TO BE SUPPLIED

SI no	Description	Qty (Nos.)
1	Diffuse plate	1
2	Flame Tube	1
3	Ignition Electrode	1 set
4	Ceramic Insulator	4
5	Ignition Transformer	1
6	Ignition cable	1
7	Pressure gauge for gas train	1
8	Low Gas pressure switch	1
9	Low air pressure switch	1
10	Gas valve Honeywell	1
11	Sequence controller	1
12	UV Tube	1
13	UV Relay	1
14	Temperature indicator, controller with thermocouple	4