# P1.1 OXYVAC-CHTE

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# GAS CYLINDER HEAT TREATM UNIT











# Important

This Equipment should be operated & maintained only by technicians who are suitably trained, experienced with Industrial Gas filling plant and fully conversant with the specifications.

In pursuing a policy of continuous improvement, the company reserves the right to alter the specification of any product without prior notification



## General

Industrial Gas Cylinder Heat Treatments Unit

Oxyvac is the Indigenous Manufacturer Industrial Gas Cylinder Heat treatment Unit for Different Range of Industrial Gas Cylinder. Heat Treatment Equipment that includes Heaters with Temperature control panel, Vacuum pump, Heavy duty Air Blower, Cylinder Connecting Header Installed in Close Insulated Box with 3" insulation by Heat Resistance Materials.

It is specially designed for Industrial Gas Cylinders. We manufacture Heat box and Equipment and supply to client in complete compliance with industry standards using best quality materials. Prior to supply and installation that Equipments are stringently tested on standard quality parameters

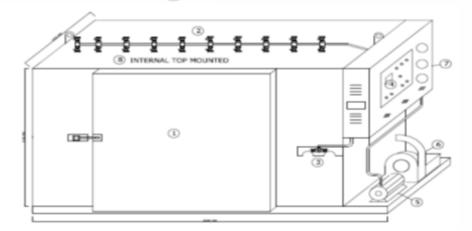
All the components and equipments are meeting the Technical Standards/Specifications.

Features:
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- Robust construction
- Smooth operation
- Longer service life
- Elevated durability

Item Description	Gas Cylinder Heat Treatment Unit
Application	Gas cylinder Moisture removal & Drying
Design Codes	ASME B31.8, ASME Sec. VIII Div.1, EN and PESO GCR rules 2016
Design Life	15 Years
Material of Construction	MS/SS304/SS316/BRASS/COPPER
MAWP	200 BAR
Types	For 20 Cylinder,10 Cylinder and 5 Cylinder

The GA of the Heat Treatment Unit is shown in Fig.







## **SOP: Gas Cylinder Heat Treatment Unit**

## Instruction for Installation of Gas Cylinder Heat Treatment Unit

- Don't Install Heat box near Oxygen cylinders, Oxygen Line and other flammable
- Do proper earthlings on Heat box to avoid sparking
- Do proper Stability of Heat Box and proper Electrical Connections.

## **Instruction to Use of Heat Box**

- Connect the all hydro tested (20 Nos.)Cylinders to the Manifold Line and insure the all valve's spindles are open.
- (2) Close the doors Heat box and insure that there are no air leakage in door
- (3) Open the Purging valve, vent valve and release all residual pressure.
- (4) Start the Blower and Heaters accordingly and wait for the Temperature increase.
- (5) After 90'c Temperature Display on Panel Wait 20 Min for Equalization of temperature in cylinders.
- (6) Then Close the Vent valve.
- (7) Take Approx 2 Bar pressure in process cylinder from input Pressure Valve and take 10 Min Rest to settle the Pressure in all cylinders.
- (8) Open the vent valve and release the pressure. After closing the Vent Valve start Vacuum Pump and open the Vacuum Valve and Run Approx 20 min.
- (9) Close the Vacuum Valve and Stop the vacuum pump.
- (10) Apply once Again the above step No. 7, 8, and 9 and take Approx 2 Bar pressure for positive cylinder pressure.
- (11) Stop the Heaters and after 5 Min stop the Blower.
- (12) Open the Doors and close all cylinders' spindles and remove from Heat box.
- Apply Hand Gloves for Cylinders Handling.
- Apply DCP type Fire Extinguisher for Prevent Fire.
- Wear safety Shoes Compulsory.



# Main Component of Gas Cylinder Heat Treatment Unit

## (01) Structure of Heat Box

Filling panel constructed with MS fabricated.Heat Box constructed with MS materials with Hot Insulated with Rockwool and Powder coated/Epoxy painted as per Gas color code specifications.

#### (02) Vacuum Pump

IVAC Oil Sealed Rotary Vane pump is double stage complete with base frame, safety cover, handles, motor pulley, v – belt, and electric motor having following specifications.

- Displacement: 1000 LPM
- Ult. Pressure with GB open in Torr 5 X10-2
- Ult. Pressure with GB closed in Torr 5 X 10-3
- Pump rotation speed(RPM): 600
- 3 Ph electric Motor: 50 hz., 1400 RPM, TEFC, 1.5 KW
- Oil capacity: 6 lits.
- Inlet port in mm Dia 50
- Outlet port: BSP 1½"

### (03) Heavy duty Air Blower

General design: this blower is a high pressure blower with belt drive.

- High Performance.
- Easy and cost Free Maintenance
- Belt Drive Blower with Changeable Ration of Drive.
- Design and tested with Our Experienced Technician
- H.P Motor with Belt Drive



## (04) Control Panel

General Design: This Blower is a High Pressure Blower with Belt Drive.

- For Gas Purging and Temp. Control of Box.
- Temp. Range 100'c to 150'c automatically control by Temperature controller.
- Easy and safe Control
- It has Pressure gauge, vacuum gauge, Angle valve, Gas Master Valve.
- Design and tested with Our Experienced
   Technician and Engineers
- Power Consumption : 9KW-12 kW 3 Phase





## (05) Gas Manifold Header with Spindle Valve and Pigtails

Manifold for 20 and 10 cylinder with spindle valve .Manifold connected with 20-10 pigtails that connect gas cylinder with the manifolds. Working Pressure: 200 bar .Moc: SS316/SS304.

%" size inner Teflon tube and outer SS wire double braided and both end brass fittings as per gas specification. Pigtails full length covered by safety wire rope and spring protected.MAWP-200 bar, Hydro tested: 300 Bar. Copper Pigtails with Brass fittings WP-200 Bar

## (06) Pressure Gauges and Vacuum Gauges

Pressure gauges of Range 0-300 Bar, Dial size 4" Panel Mounted Provided of Baumer /Micro Make, MOC: SS316, Vacuum gauges of Range -1 to 7 Bar, Dial size 4" Panel Mounted Provided of Baumer /Micro Make, MOC: SS316

