

AMOGH GASES PVT LTD.

Plot No.9A ,KAIDB Industrial area,

Hirahalli village, Uridgere Hobli,

Tumkur (dist) PIN – 572168

Annual Sales for the year 2012-13: Rs.120.00 Lakhs

Total Employees: 18

Primary Line of Business: INDUSTRIAL GAS MANUFACTURERS

Management Directory:

•R. Mohan kumar, Managing Director

• Shivraj kumar R.S, Director

BUSINESS PROFILE:

Since it is started in the year 2011 at Hirehalli Tumkur District, AMOGH GASES PVT LTD. has become the leading supplier of Industrial Gases in Karnataka and South India, with offices in 2 cities, including the Bangalore Headquarters in Rajajinagar. This is the only Plant which can produce upto 50 cum/hr. ours is a biggst plant in south india. The company has expanded its operation in Karnataka and Tamil nadu



SITE AND BUILDING:

We have 2 acres of land allotted by KIADB in Hirehalli Industrial Area In which oxygen and DA plants are built spaciously as per the explosive norms.



ADMINISTRATION BLOCK

Admin block is provided with good architecture at the entrance. Sanctioned power is 64HP. Also we have 62.5 KVA D/G set to meet urgent requirement during power failure.

We have our own bore well in which water yield is sufficient. Also we have provided rain water harvesting schemes to our all buildings and sites. We are re-useing our lime settled water to DA Generator to minimize water consumption.

If we want to know much more about us please make one visit to out plant with your convenient

QUALITY AND QUANTITY

Or set Apparatus are provided in both oxygen and DA plants to analyze the purity of the gases. Additionally in DA plant SNS testing also conducting every batch production.

Oxygen cylinders are filled up to 150kg/cm2 pressure and are measured on volume Basis - m3

DA cylinders are filled up to 20 kg/cm² (settled pressure in maximum 16 to 18 kg/cm²) measured by weighment. We have 200kgs capacity digital type electronic weighing scale this was checked daily with standard weights and cal liberated once in a 6 months.

SAFETY FIRST SALES NEXT

ABC fire extinguishers 5kgs,10kgs, Fire buckets are provided sufficiently individual places of the plant .28kgs CO2 fire extinguishers -2 no's and 50kgs DCP trolley type extinguisher are specially provided in Generator section of DA Plant.

We have taken most care on safety point in D A Plant. All electrical motors, Light fittings and Switches are Flame Proof.

All our employees are using PPE along with uniforms. We are using brass tools to open and operate carbide drums. Mobiles and cigars are not allowed inside the premises.





We have provided sufficient warning boards in different places of the plant to literate our employees.

Also provided hard rubber pads in loading and unloading points of cylinders in all areas of our plants.

Plants are running with experienced operators and skilled helpers who will know about gases. The whole plant activities are monitored and managed by a senior engineer who has 25 yr of experience in industrial gas plants as Production Manager.



STORE INVENTORY:

We have our own 5000 Nos cylinders of oxygen and 5000 Nos cylinders of DA. We will meet our Entire customer requirements round the clock. We meant for service and not for profit.

OXYGEN PLANT



The generator is horizontal type,4000Ltrs Water Capacity has 2Hoppers, 2flash back arresters, screw feed arrangement with hydraulic pump and motors, Agitator arrangement with motor, water level indicators, water top-up and sludge draining arrangement, fitted with temperature gauges, pressure gauges, safety valves and check valves. Carbide feeding, water level makeup and lime discharging-are all automatic.

As the carbide feed by screw feeder to the generator, the Acetylene Gas liberated by the chemical reaction between the carbide and water.

CaC2 + 2H20 - C2H2 + Ca(OH)2 + Heat

The liberated Acetylene gas passes through the Flash Back Arrester, check valve and the pipe line enter at the top of the Condenser and leaves at the bottom. Here the gases is cooled and then enters in to the LP Dryer. Here Calcium Chloride Chemical is packed to remove the moisture. Then the gas is freed through the purifier. The purifier is packed with purifying chemical (Ferric Chloride compound) in 3 Beds. The gas is passing through chemical from top to bottom. Here moisture phosphorous compound (PH3) and Sulfide compound (H2S) are removed as impurity. Here 2 purifier are provided, one is in operation and the other one is in Regeneration. After the purifier, the gas is passing through the Ammonia Scrubber. Here the gas enters at the bottom, bubbling through water and leaves at the top. Here impurity ammonia has dissolved in water.

The cooled gas then enter in the compressor the Acetylene compressor is a 3 stage, radial type water immersion compressor. This has cylinders, piston, suction and delivery valves, cooling pipes, pressure gauges and SRV for each stage. The whole assembly was immersed in water tank this was driven by a 15 HP flames proof motor connected through the V-Belts and fly Wheel. A separate geared type Oil pump was connected fly wheel with a V-Belt to supply oil to valve plates of the compressor. The process pressure $0.5 \, \text{kg}$ / cm2 was increased stage by stage in compressor gradually. After 3rd stage the gas entered in to the dryer battery set , this battery set has 4 forged bottles, as gas connection pipes ,filling covers at the top and draining valves at the bottom The 1st two bottoms are filled with chain to avoid voiding of the gas and the other two are filled with calcium chloride (fused) to remove final stage of moisture and oil traces obtained from the compressor .Finally the gas from the drying battery enters in to the manifold rack .Here we have 2 manifold racks ,each has 60 cylinders filling capacity

Each rack has Non Return valve flash back arrestor, Main control valve, 60cylinder individual control valves to connect cylinders with SS bladed pigtails.



Consists of 20KL Liquid Oxygen Storage Tank, Evaporator, cylinders filling high discharge liquid oxygen pumps supplied by INOX INDIA LIMITED, Gujarat

These are connected in order to cylinders filling manifold which has 40*2 filling point, The manifold 2 Racks each capacity 40 Nos. Each rack has main control valve, 6inch pressure gauges at both end, SRV and individual cylinder control valve with 1meter long SS Braided Pigtail to connect cylinder

The plant also having a hydro static testing station for testing cylinders as per IS:5844. This was setup as per the norms of Chief Controller of Explosive, Nagpur.

Description Process of plant activities



DA PLANT

Consist of a generator (Automatic, medium Pressure Type) condenser, Purifiers, Ammonia scrubber, compressor, HP Dryer Battery and filling manifold.

The generator is horizontal type,4000Ltrs Water Capacity has 2Hoppers, 2flash back arresters, screw feed arrangement with hydraulic pump and motors, Agitator arrangement with motor, water level indicators, water top-up and sludge draining arrangement, fitted with temperature gauges, pressure gauges, safety valves and check valves. Carbide feeding, water level makeup and lime discharging-are all automatic.

As the carbide feed by screw feeder to the generator, the Acetylene Gas liberated by the chemical reaction between the carbide and water.

The liberated Acetylene gas passes through the Flash Back Arrester, check valve and the pipe line enter at the top of the Condenser and leaves at the bottom. Here the gases is cooled and then enters in to the LP Dryer. Here Calcium Chloride Chemical is packed to remove the moisture. Then the gas is freed through the purifier. The purifier is packed with purifying chemical (Ferric Chloride compound) in 3 Beds. The gas is passing through chemical from top to bottom. Here moisture phosphorous compound (PH3) and Sulfide compound (H2S) are removed as impurity. Here 2 purifier are provided, one is in operation and the other one is in Regeneration. After the purifier, the gas is passing through the Ammonia Scrubber. Here the gas enters at the bottom, bubbling through water and leaves at the top. Here impurity ammonia has dissolved in water.

The cooled gas then enter in the compressor the Acetylene compressor is a 3 stage, radial type water immersion compressor. This has cylinders, piston, suction and delivery valves, cooling pipes, pressure gauges and SRV for each stage. The whole assembly was immersed in water tank this was driven by a 15 HP flames proof motor connected through the V-Belts and fly Wheel. A separate geared type Oil pump was connected fly wheel with a V- Belt to supply oil to valve plates of the compressor. The process pressure 0.5kg / cm2 was increased stage by stage in compressor gradually. After 3rd stage the gas entered in to the dryer battery set , this battery set has 4 forged bottles, as gas connection pipes ,filling covers at the top and draining valves at the bottom The 1st two bottoms are filled with chain to avoid voiding of the gas and the other two are filled with calcium chloride (fused) to remove final stage of moisture and oil traces obtained from the compressor .Finally the gas from the drying battery enters in to the manifold rack .Here we have 2 manifold racks ,each has 60 cylinders filling capacity

Each rack has Non Return valve flash back arrestor, Main control valve, 60cylinder individual control valves to connect cylinders with SS bladed pigtails.

The plant is running continuously by feeding carbide and water as per the requirement, the generator temperature has to be controlled with in 65 degree centigrade, moisture to be drained of periodically in respective places, log book to be written an hourly and SNS, purity has to checked in each charge and recorded .DA cylinders are filled under water chilling throughout the process to observe the gas effectively in mass filled cylinders.

List of machinery equipments

OXYGEN PLANT

Liquid oxygen Tank- 20KL Capacity - 01
Evaporator exchange -01
Liquid Oxygen Pump -01
Filling Manifold - 40 cylinders-capacity -02
Pipe Lines, Pressure gauges, safety relief valves, - 1 sets
Cylinders Hydro static Testing Station with complete setups-01 set

DA PLANT

DA Generator – 50CM/Hr – capacity-01
Condensers -01
LP DRYER-01
Purifyer-02
Ammonia Scrubber-01
Acetylene compressor-50CM/Hr
Drying Batteries -01 sets
Filling Manifold - 60 Cylinders Capacity. -2nos
Cylinder Ace toning Unit - 1set

OTHERS

Digital Electronic Weighing Scale-2
Orset Purity Apparatus -2 sets
Standard Weighing buts -up to 1Kg,5Kg,10Kg,20Kg-1sets



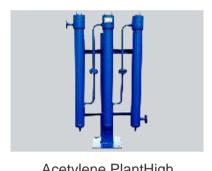
Acetylene Plantr Compressor



Acetylene Purifier



Acetylene Plan Carbide Hopper



Acetylene PlantHigh Pressure .Drier



Acetylene Plant Generator



Acetylene Plan Acetone Pump



Acetylene Plantr Ammonia Scurbe

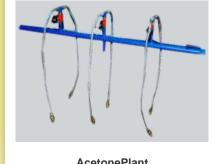


Acetylene Plant GENERATOR



Acetylene Low Pressure Drier





AcetonePlant **Back Mani folds**



Acetylene Plantr Cooler Condense

