



High Purity  
Gas Handling System's  
& Lab Furnitures

## Service Offered

- ✓ Gas Purification Panel & related accessories supplies for GC, GC/MS, LC/MS, ICPOES, ICPMS, ICPEs from, gas station to the instrument.

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- ✓ AAS Fume Hoods With Exhaust SS.

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- ✓ We take up projects of tubing from 1/16" to 1" SS fittings.

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- ✓ Supply Electronics (Digital)/Mechanical Automatic Auto changeover system for High purity applications.

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- ✓ Gas Generators.

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- ✓ Air Compressor & Air Dryer (Imported & indigenous)

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- ✓ Gas Detectors/Analyzer/Detection Systems

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- ✓ Lab Furnitures

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## GAS PURIFICATION SYSTEMS



MK Scientific Gas purification and controller system is designed to remove oxygen, moisture, Hydrocarbon, Oil and other materials form gas streams. All Gas streams are controlled by a constant pressure Regulator .The Inlet & outlet pressure being displayed on gauge. The system is wall mounted.

**Hydrogen** : Moisture Filter consists of molecular sieve, Hydrocarbon filter consist of Activated carbon sieves with inlet & outlet Gauge, Genetic Regulator with toggle valve for on/off, Of Gas.

**Nitrogen** : Moisture filter consists of molecular sieve, regenerable type Oxytrap for trapping oxygen from Nitrogen. With inlet & outlet pressure Gauge, Genetic Regulator With toggle valve for on/off Gas.

**Zero Air** : Moisture Filter consist of molecular sieve, Hydrocarbon filter consist of Activated carbon sieves with inlet & outlet Gauge, Genetic Regulator with toggle valve for on/off, Of Gas.

**Helium** : Moisture filter consists of molecular sieve, regenerable type Oxytrap for trapping oxygen from Helium. With inlet & outlet pressure Gauge, Genetic Regulator With toggle valve for on/off Gas.

(Moisture Trap & Hydrocarbon Trap will be of 10" long it removes Moisture, Co<sub>2</sub>, Organic & In-Organic impurities, dust particulate etc, from gas line.& Regenerable type Oxytrap will be available optionally to absorb oxygen from Carrier gas like Nitrogen/Helium Inert gas.0-150 psi made up of SS machine sealed type, on/off valve, Miniature type pressure Regulator.)

## GAS CONTROL BOX

Gas control boxes when each instrument requires different delivery pressure and flow. Gas control Box is generally installed between gas purification system and gas chromatograph. It consists of pressure gauge. Pressure regulator and toggle valves. This also isolated system.



## GAS SELECTOR BOX



It is very useful where frequent changeover of Gas is required. Results into Zero leakage, while changing gas line from one gas to another gas stream. It is very useful in case of Helium gas, which is very expensive & Hydrogen which is hazardous gas & is very useful in case of carrier gas like Nitrogen / Helium

## CYLINDER REGULATORS



Cylinder regulators are available in Brass & SS body with SS diaphragm. It is available in double stage regulators. It will have cylinder pressure gauge & output set pressure gauge. We supply imported & indigenous regulators for different gases.



Hydrogen



Online Regulator



Air



Nitrogen



Helium

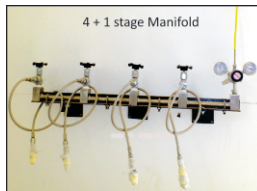


Nitrous Oxide  
with Pre Heater



Acetylene

## MANIFOLDS



4 + 1 stage Manifold



Two Stage Manifold



Single Stage Manifold

Manifold is available for Multiple cylinders as well as for one cylinder. It is advisable to use where replacement of cylinder is more frequent.

Available in Brass & SS with wall mounting bracket. In this case, we have to install only one regulator & protect cylinder regulator from damage at the time of changing cylinder.

## CYLINDER WALL MOUNTING BRACKETS

Cylinder mounting bracket is made up of Mild Steel having Epoxy based powder coating. Bracket is having Welcrow / Chain for holding cylinder. It is installed one feet above ground level & one feet below the height of cylinder. It is available in pairs.





Tubing is available in Stainless Steel, Copper, Nylon & Teflon in different size. It is specially made for Chromatograph use. Tubing is good in strength, flexible & in capillary form.

Available Sizes : 1", 1/2", 3/8", 1/4", 1/8", 1/16".

## AIR COMPRESSOR (Imported & Indegenious)



AAS requires compressed Air supply of high flow rate which can be supplied by Air Compressor which consists of 20 litres storage tank, pressure switch, safety valve, gauge & outlet valve etc.

Oil free as well as Noiseless (oil based) are available.



## AIR FILTER WITH MANUAL DRAIN

Moisture free Air is must for AAS filter of 5 microns & 0.1 microns which is to be attached after air compressor for the removal of Moisture, oil, dust & mist particles.



## FUME HOOD FOR AAS, ICPOES / ICPMS



AAS delivers fumes which needs to be exhaust outside the lab which is to be ventilated by fumehood with exhaust fan or blower.

## ACCESSORIES



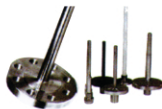
Butt weld Fittings



Flanges



QRC  
Quick Release Coupling



Thermowell



Table Mounted Valve



Air Header



Gas Sampling Bomb

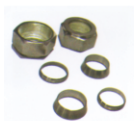


Condensate Pots



Cylinder Trolley

## FITTINGS



## BALL VALVE



## NEEDLE VALVES



## VALVES



## MANIFOLD VALVES



Non Returnable Valve



OD Micron Filter



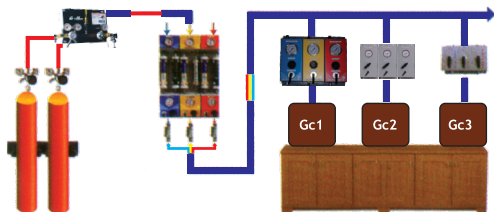
Metering Valve



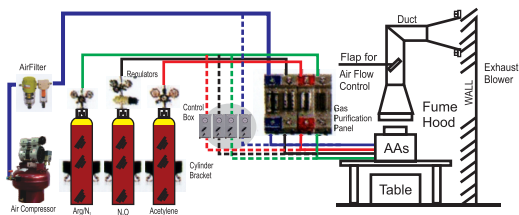
## GAS FILTERATION & PIPE LINE - Completed Projects



## INSTALLATION DIAGRAM FOR GC



## INSTALLATION DIAGRAM FOR AAS



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