INDUSTRIAL GAS MANIFOLD SYSTEMS

MESSER Cutting Systems

Uninterrupted Gas Supply for your Applications

Gas cylinders are used for many applications in factories, workshops, laboratories, hospitals, universities, etc. The gases used have many different physical and chemical properties and they may cause dangerous situations if not handled properly. The best solution is to locate gas cylinder outside the working area and distribute the gas by pipeline to the point of use. Apart from safety, this approach offers quite a few advantages over using single cylinders at the point of use as below -

Safety

- Leaking gas cylinders may create dangerous situations Viz., - fire, explosion, toxic gases: injuries, suffocation etc.,
- Cylinders may drop and damages or cause injuries, as compressed gas cylinders can fly like rockets in case they are damaged at the valve area.

Reliability

- Uninterrupted gas supply by pressure monitoring and/or automatic change-over of the manifold systems.
- Stable working pressure of the gases on a continuous basis.

Gas purity

- The purity of the gas is maintained by using specially designed and cleaned - equipment with integrated purge valves

Cost savings

- Gas cylinders at a central location are easier to handle
- You can have lesser no of gas cylinders working and save on cylinder rentals
- Cylinder control panels ensure more efficient use of the gas cylinders
- Due to better control of the gas purity, all related equipment have a much longer life time.

Other advantages

- Manifolding reduces clutter & increases working space in the shop floor
- Less damage to pressure regulators, hoses and other fittings
- Easier control of leak tightness

A Central Distribution System for gases must fulfil the following requirements:

- Uninterrupted supply of gas
- Maintain the integrity and purity of the gas up to the point of use
- Safe distribution of the gas

Schematic example for a central gas supply system