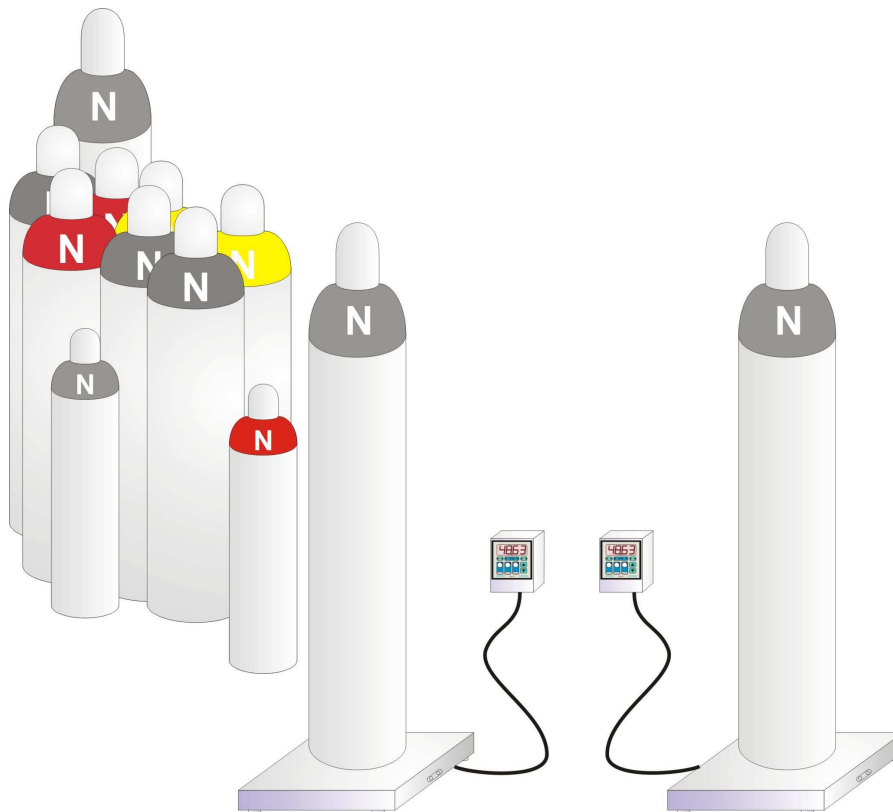


LIQUID GAS LEVEL

Local monitoring for gases liquid control



The weighing system constitute the only solution available for determinate the content in gas cylinder characterized by low steam tension at ambient temperature.

The low steam tension effect determinate the nearly constant pressure into the cylinder independently to the filling state, caused by presence of liquid and gas state. For this reason it is impossible measure the quantity of products by pressure monitoring as used for mostly of cases because efficient and low cost.

To the low steam tension category belong the following gases: Carbon dioxide, Nitrous oxide, Chlorine, Ammonia, Hydrogen Chloride, Acetylene and others.

Also when it is possible measure the cylinder quantity through pressure monitoring, the weighing system results more precise; as already known at parity of volume and moles, the cylinder pressure is directly proportioned to the fluid absolute temperature, therefore the forecast storages are dependent to the atmospheric temperature variation. On the contrary weighing systems supply results independent to other conditions, atmospheric temperature too.

In some cases where the gas cylinder are installed in explosion dangerous areas, it is necessary following the ATEX directive and the intrinsically safe EExia protection method.