

GAS HOUSE GAS FILLING ROOM



Cabinet suitable for housing propellant filling machines. The cabin is formed by a supporting structure made of structural steel with fretted sheet panels. It is equipped with a 2.2 m wide double loading door that allows the introduction/installation of the filling machine.

An inspection door has been built in to facilitate access to, and inspection of, the machinery. After the filling machine has been set up, the double loading door is bolted to the supporting structure.

The cabin is also equipped with a tempered glass portlight that enables external visual control. The internal sidewalls, with a resistance of 0.145 bar (1500 Kg/m²), are painted with fire-retardant paint. The floor has a resistance of 0.245 bar (2500 Kg/m²).

The cabin is covered by a low resistance structure of 45 sq.ft (4,2 m²) that easily opens in the event of explosion. The covering is made of impermeable fabric fixed with elastic bands. In the event of explosion the covering breaks up, thus providing an outlet to the exploding gases. The resistance of the covering is about 0.010 bar (100 Kg/m²).

The cabin is equipped with a ventilation system with two centrifugal double-speed fans placed outside on the roof. The fans are operated by a gas concentration sensing device located in a gearcase in a safe place. One fan blows fresh air into the cabin; the other one extracts it.

This system creates a slight depression thus preventing air blows on the feeding channels of the can conveyor belts. The contaminated air is sucked on the opposite side of the blowing fan, both in the machine and on the floor; and is eliminated through expulsion conduits that are linked to an air outlet located outside the cabin. This system guarantees a constant ventilation of the cabin and prevents any potentially hazardous concentrations of gases.

The Gas Filling Room is also provided with a control board in execution IP55, complete with cabin control display and management PLC. This board must be placed in safe area.

A color video camera with explosion-proof case can be placed in the cabin, complete with a non explosion-proof monitor to be placed in a safe place.