

## VERTICAL SAFETY PUMP SETS – GENERAL DESCRIPTION

Safety pump sets have been designed to centralise vacuum in all work environments such as hospitals, laboratories, etc. where vacuum must be guaranteed 24/7.

They are essentially composed of:

- A vertical welded sheet steel tank with perfect vacuum seal;
- Two rotary vane vacuum pumps to be selected according to the required suction flow rate and level of vacuum;
- A vacuum gauge for a direct reading of the level of vacuum in the tank;
- Two manual valves for vacuum interception, located between the pumps and the tank and one installed on the tank, for the exclusion or connection of the pump set on a user system;
- A cock for condensation drainage;
- A switchgear enclosed in a special watertight metal casing with switches for automatic or manual pump operation, an alarm device with sound and light signal, alarm-test buttons and hour-counter for counting the hours of actual operation of every single pump.

These safety pump sets normally provide for the operation of one pump with subsequent automatic insertion of the second one for larger consumptions and when, for whatever reason, the plant level of vacuum goes under the preset value.

The automatic timed inverter, located on the switchboard, accurately alternates the pump start-up, so that they are both subject to the same mechanical wear.

The switchboard and remote alarm systems operate when the plant level of vacuum is below the set safety value.

