



The manhole cover testing machine is design as per is 12592. The machine is capable of measuring following.

- Load test
- Permanent set (displacement)

The machine will consist of two units.

- Pumping unit
- Load frame

Pumping unit:

- The pumping unit will work on single phase, 220 volts.
- The pumping unit will be compact, filled with hydraulic oil.
- The pumping unit will have two valves.
- Pressure release valve
- Pressure control valve
- The pressure release valve will facilitate building and release of the pressure.
- The pressure control valve will allow to control the pace rate of the machine from 2 kN / sec to 10 kN / sec
- The pumping unit will have digital read out, showing actual load, peak load and permanent set .
- The pumping unit will be equipped with pressure sensor to give accurate reading of load in kN.
- The accuracy of the pumping unit will be + or - 1% and will give resolution in 0.1 kn.
- There will be sensor to find out the permanent set of deformation in the manhole cover.
- The pumping unit will have over load protection which will trip the machine in case of over load.
- The machine is able to conduct 5 cyclic load test manually for permanent set.
- The machine is able to hold the load for 30 sec to conduct the load test.

Load frame :

- The load frame will be fully welded which will be able to take a load of 500 kN.
- The load frame will be able to accommodate manhole cover of 1200 mm x 1200 mm size.
- The machine will be supplied with the plate to place the manhole cover. The plate will be hardened and properly shaped.
- The hydraulic jack of the machine will be provided on the top of the machine which will be able to slide up-down with the help of the handle. The ram dia of the jack will be 120.00 mm
- The load frame will be connected to the pumping unit with the help of hose pipe.
- The machine will be supplied with operation manual and calibration certificate.

Note: Specifications are subject to change.