

# MECHANICAL LABORATORY

FOR TESTING LPG CYLINDERS, SC VALVES AND DPR



NABL ACCREDITED

*The Mechanical Lab is highly equipped laboratory with advanced testing facility and equipments for testing LPG Equipments as per the relevant Indian Standards. The test facilities are duly certified by ISO-IEC 17025:2005 (Quality System for Competence of Testing and Calibration Laboratories).*

The activities carried out in the lab are

- Testing of LPG Cylinders as per IS 3196:2013 Part I & III
- Testing of SC Valves as per IS 8737:1195 (RA 2010)
- Testing of Domestic Pressure Regulator as per IS 9798:2013



## TESTING FACILITIES / EQUIPMENTS

### COMPUTERIZED DIGITAL TENSILE TESTING MACHINE

For determining the stress – strain properties in tension for metal (Ferrous & Non-Ferrous)

- Provided with an Electronic Extensometer for accurate measurements
- Upgraded software for determining yield point and calculating the mechanical properties.



### SPARK EMISSION SPECTROMETER

For analysing and determining the chemical composition of metals

- Sophisticated analytical instrument used for analysing a wide spectrum of elements.
- Used for Iron based alloys, Zinc based alloys, Copper based Alloys and Aluminium based alloys.

# AUTOMATED PRESSURE TEST FACILITY



Computerized menu driven facility for measuring the water capacity of cylinder and conducting the hydrostatic test and burst test to determine the burst pressure and volumetric expansion of cylinder. Also has the facility for real time monitoring of the pressure and weight increase with time.



## Automated Test Bench for SC Valve and Domestic Pressure Regulator



Used for carrying out Pneumatic, Hydrostatic and Life Cycle Test for SC Valve and Domestic Pressure Regulator

## Automated Laboratory Freezer for Low Temperature Test



In-House Tool Room Facilities with Central Lathe Machine, Pillar Drilling Machine, Surface Grinding Machine, Band saw, Fly Press and Milling Machine

## Other Test Facilities include:-

- Precision Measuring Instruments and Gauges for Dimension Metrology
- Cyclic Corrosion Cabinet for Salt Spray test of DPR.
- Izod Impact Testing Machine for determining the impact strength of Non Ferrous Materials.
- Paint Thickness Testing Facilities for range  $1\mu$  to  $200\mu$