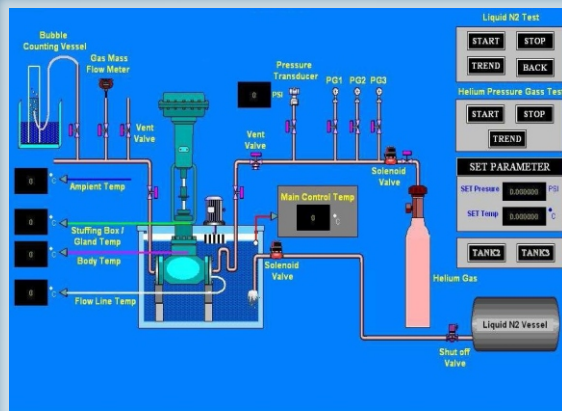


Cryogenic Valve Test Rig

As per BS 6364, Shell Mesc 77/306 international standards



Cryogenic Valve Test Rig



Cryogenic test equipments are capable of achieving temperature Up to -196°C (As per BS 6364, Shell Mesc 77/306 international standards) For testing Valves Size ranges from 2" class 150 to 56" Class 2500.

Its design incorporates special construction techniques in addition to welded structural reinforcement liners.



We design, manufacture and execute cryogenic chambers with PLC based instrumentation using a fully computer controlled and logged testing system for Automatic and manual operation.

PLC with complex logic programs for handling the tasks automatically in a professional manner.



As with all Cryo Scientific products, we are continuously striving to provide you, our customer, with the best products available.

Automated PLC based Rigs

Standard Features

Cabinet:

- Each rig double walled, made of polished stainless steel SS304L
- MS plates for reinforcement for rigid support between walls
- Provided with compacted maximum density Perlite Powder Insulation of 200 mm thickness and high Vacuum
- Doubled walled, split stainless steel lid with handles for convenience.
- Welded structural frame with removable service access panels
- Base with Steel Plates for heavy loading and fork lift handling
- Silicon gaskets to withstand extreme low temperatures.
- Durable Mirror/Glossy finishing (custom colors available)

Cooling:

- Liquid nitrogen spraying manifold for inner chamber $\frac{1}{2}$ " SS316 schedule 80.
- Set of manifold with needle valves, pressure gauge, flexible hose for inlet
- Low pressure liquid nitrogen supply is controlled by cryogenic solenoid, low pressure supply provides most efficient use of liquid nitrogen
- Air circulation by stainless steel fans with externally mounted low speed motors to avoid vibrations
- Outlet - Inverted Jar module for helium leak measurement for valves

Controls:

- Temperature control provided by either microprocessor based controller or Advance PLC based Instrumentation for automatic operation.
- Pt – 100 sensors for monitoring the temperature inside the rigs.
- Entire control circuit mounted in an attractive Instrumentation panel of IP54 rating.

Manual Operated Rigs



Optional Accessories:

- ☐ Helium Leak Detector for Leak testing
- ☐ Helium Manifold with Pressure gauge
- ☐ V- Blocks
- ☐ Helium High Pressure Booster Pump
- ☐ Helium Needle Valves
- ☐ Helium Pressure Hoses
- ☐ Adjustable Blocks for Valve Positioning
- ☐ Valve Test Flange Setup
- ☐ Liquid Nitrogen Flow Line Setup
- ☐ Bubble count setup for manual leak testing(Inverted Jar)



Schematic Test Layout

