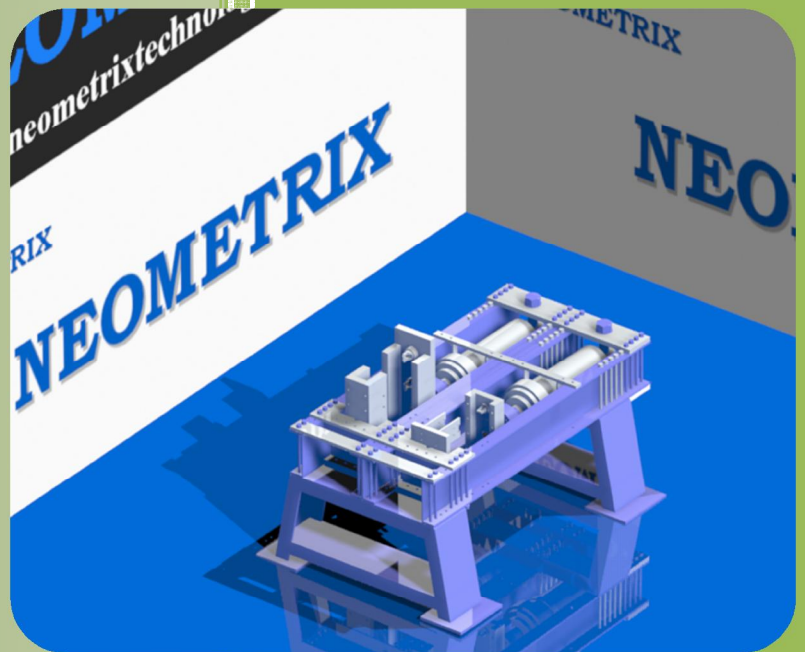


LOCK LOADING TEST RIG

PRODUCT
CATALOGUE

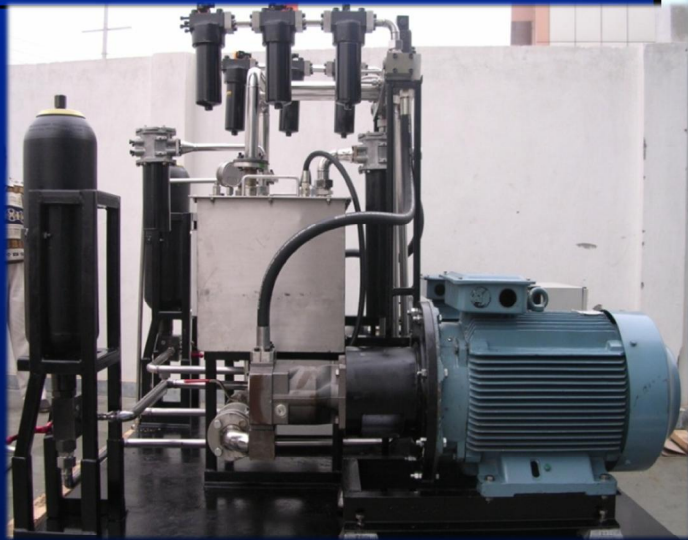


NEOMETRIX ENGINEERING PVT.LTD.

E-148,SECTOR-63,

NOIDA (U.P.)-201301

Ph.No.: 0120-4500800 fax:0120-4500888



+++ NEOMETRIX *The Complete Engineering Solutions Company*

An ISO 9001-2008 Certified Company

Introduction

Neometrix Engineering Pvt. Ltd. is a complete engineering solutions company based in Noida (India).

We specialize in Hydraulics, Mechanical, Pneumatic, Oxygen/ Helium (High Purity Gases), Electronics/ Electrical Test Benches, and Complete PC Based Automation Solutions.

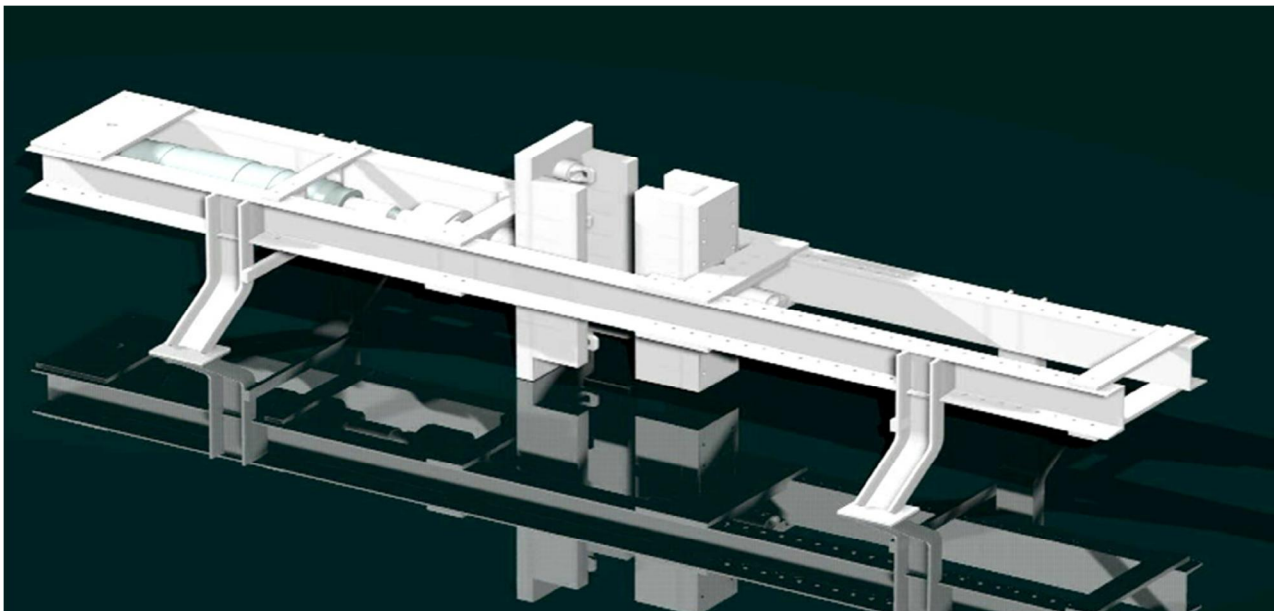
We are working very closely with Parker USA (www.parker.com), world leader in Hydraulics and National Instruments USA (www.ni.com), world leader in PC Based Test Measurement and Automation.

With such alliances and our own engineering capabilities, we are in a position to deliver you state of the art world class Test Rig.

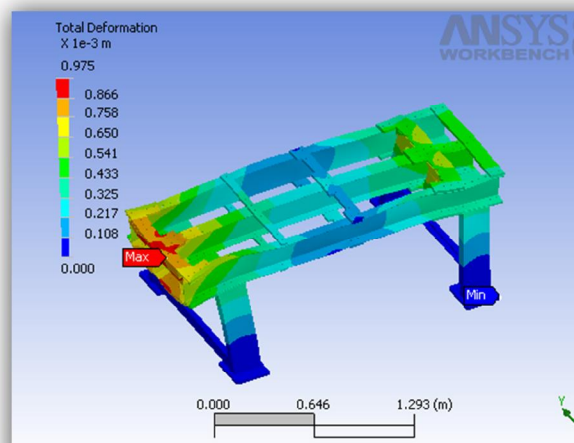
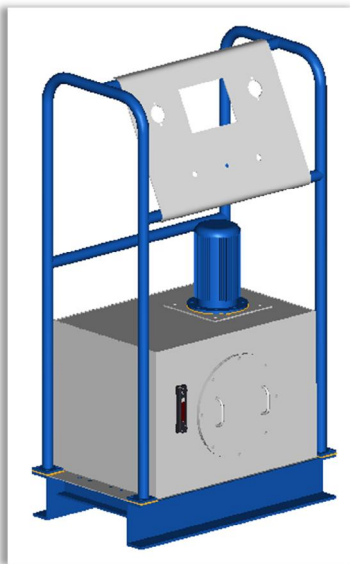
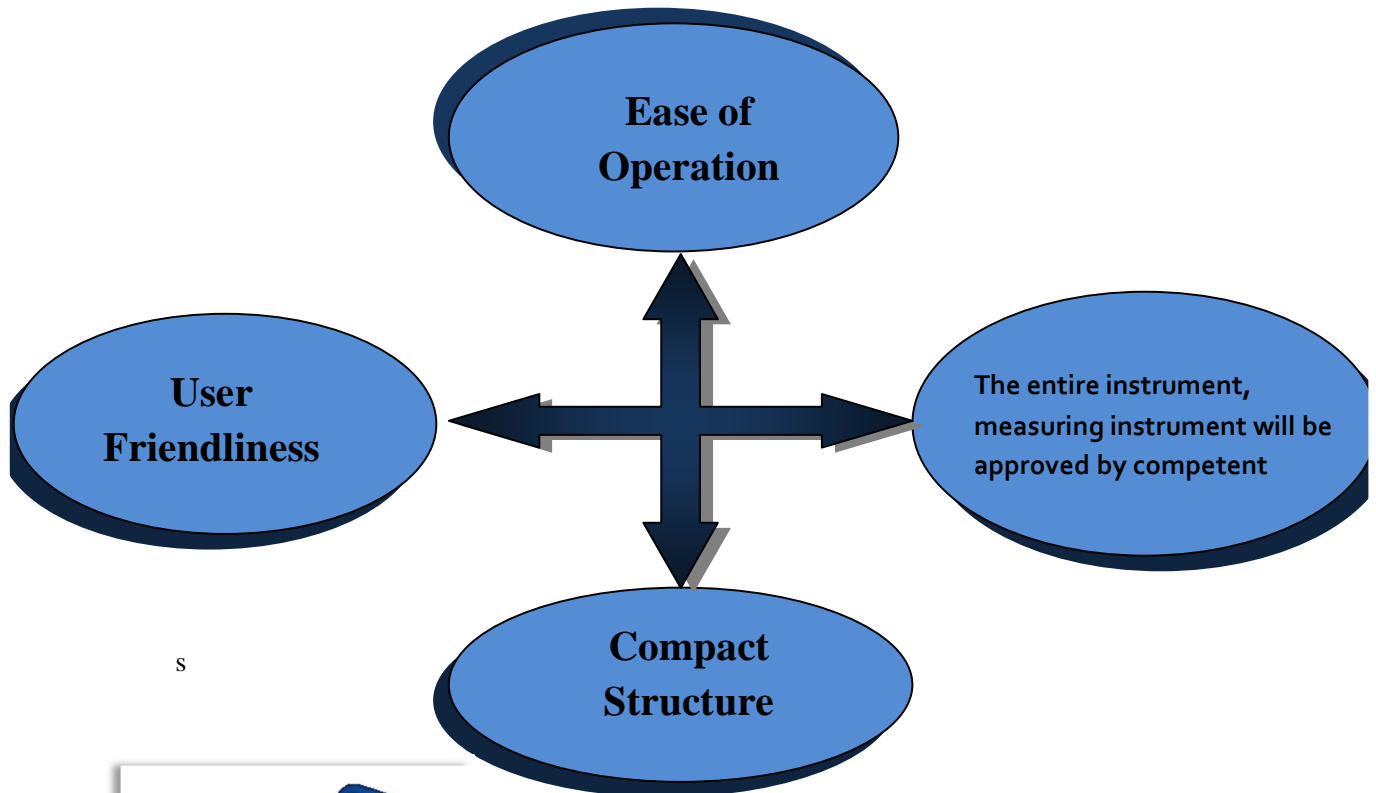
LOCK LOADING TEST RIG

Specification

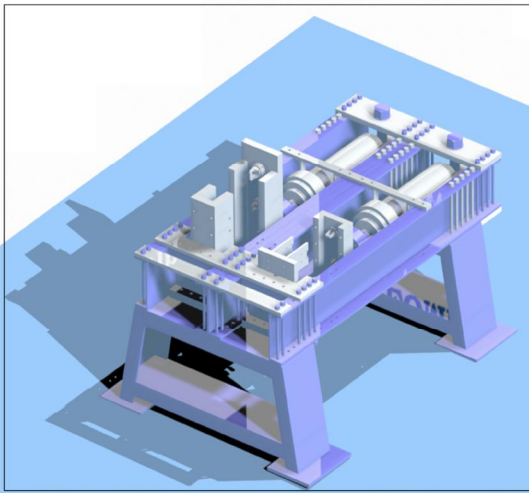
This rig is designed for testing Ejection Release Units (ERU119 & ERU 120) which are tested for Hook Proving Loads. These units are tested for load deformation and the test results will automatically come out as OK/NG on the basis of pre-fed Deformation & Load settings in the system. A self-contained Test Bench is provided to test both types of units.



Key features



Mechanical system:



- Independent Bench for ERU119 & ERU120 is provided.
- Horizontal Loading Facility for the units is provided.
- Custom made fixture for holding the units, and unit profile will be accommodated in the fixture so that the unit is not damaged during testing
- LVDT with magnetic contact is provided for displacement measurement
- Both systems have Load Cells with in-situ calibration facility. In- situ calibration will be done automatically

LOADING SYSTEM:

The loading of the unit is done sequentially

For both ERU120 & ERU119 the loading condition is as follows:

For ERU120:**For 14" hooks:**

Load per hook: 31500 lbf

Ultimate load(on both the hooks):

63000 lbf

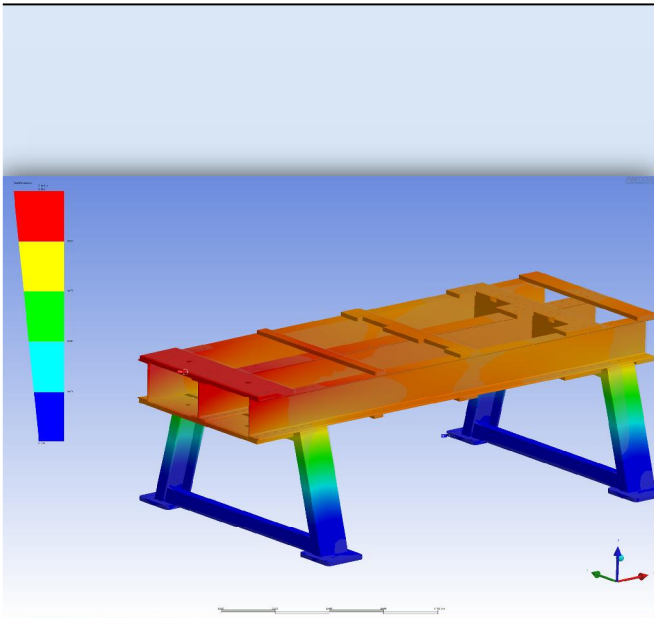
- The mechanical fixture is designed such that the load is evenly applied on both the hooks through Pin-joined structure

For 30" hooks:

Load per hook: 77700 lbf.

Ultimate load (on both the hooks):

38850 lbf.

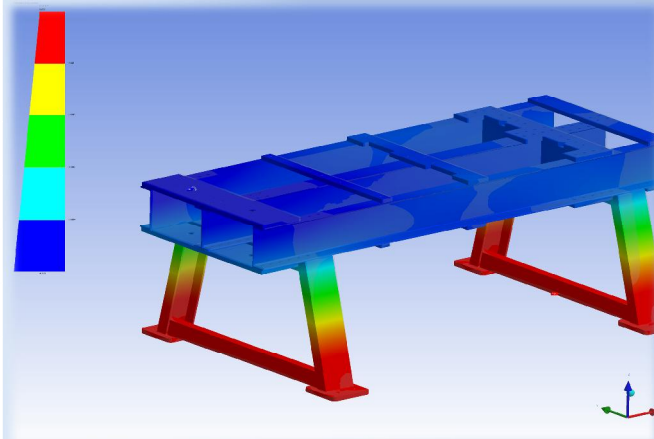


The mechanical fixture is designed such that the load is evenly applied on both the hooks through Pin-joint structure

For ERU119:

Load Per Hook:34600lbf.

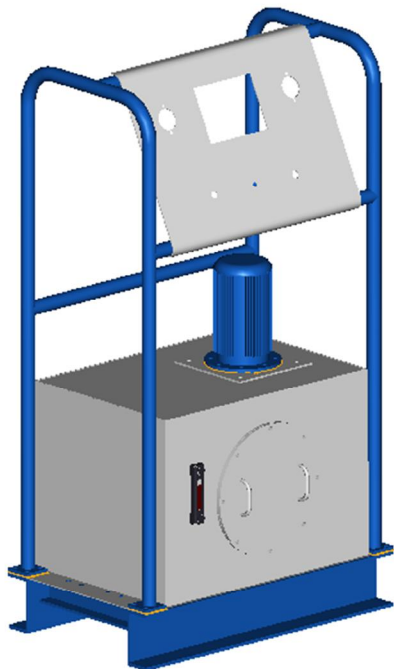
Ultimate load(on both the hooks):
17300 lbf



The mechanical fixture is designed such that the load is evenly applied on both the hooks through Pin-joint structure

Loading Analysis

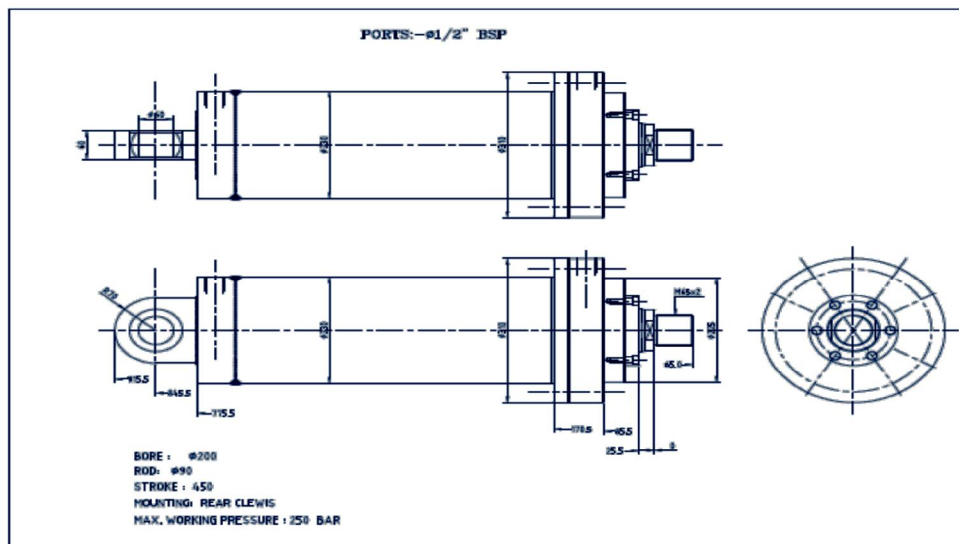
Hydraulic System:



**final Assembly of LLTR
PowerPack**

- Independent Hydraulic Cylinder based Loading Systems for both are provided.
- Both hydraulic Cylinders are operated by the same hydraulic power pack.
- Hydraulic System Piping & fittings are of imported SS316 material.
- All fittings are compressible fittings.
- Pressure transmitters is provided to measure pressure on both sides of the Hydraulic system
- IN-Situ calibration facility for Pressure Transmitters is provided.

- The Electronic Components are certified for harsh industrial environment.
- The electronic hardware is software programmable.
- Sampling Port for CM20 connection is provided
- Built-in safety interlocks (independent battery operated PLC)



HYDRAULIC CYLINDER

Monitoring & control System:

- Following details will be displayed during test in control panel:
 - Load Value (lbf.)
 - Displacement Value
 - Pressure (P1)
 - Pressure (P2)
 - Temperature of the hydraulic oil.
 - Ok/NG will be displayed
- Alarm in case of any error with message displayed on the touch screen panel..
- In-Situ calibration for the load cell is to be provided with the help of pressure transmitters.
- Rugged real time controller.
- Embedded graphical programming.
- **Controller has following features**
 - 1 Ethernet port, 3 RS-232 ports, 1 RS-485 port.
 - 128 MB non-volatile storage & 512 MB flash storage.
 - NEMA4/IP65 compliant industrial touch screen monitor with 2 USB, 3 RS-232/485 and 1 Ethernet port and compact flash expansion slots (2 nos.)

Neometrix Product Range

Heat Transfer Systems Testing

- Burst Test for Radiator & Condensers
- Pressure Cycle Test for Radiator & Condensers
- Vibration Test for Radiator & Condensers
- Combined Pressure & Vibration Test
- Combined all above mentioned Test

Endurance Test Machines

- Door Testing Machine
- Tyre Rim Testing Machine
- Steering Testing Machine
- Gear handle testing Machine
- Ring and Gear tooth Testing Machine