

## Head Impact Test Rig

### About-

The objective of the “Head impact test rig” is to measure the energy absorbed by the seat after the impact of Head form. The “Head impact test rig” is developed for measuring the energy absorbed by the seat after the impact. The impact velocity and impact material weight must be 24.1km/hr and 6.8Kg respectively.

It consists of:-

3-Phase induction motor (2HP and 3 HP)

1. Accelerometer- To measure “g” values.
2. Scissor lift- For lifting the M.S. casting bed on which the test seat is mounted.
3. LVDT- It is used as an electrical transformer for measuring linear displacement.
4. Servo Valve- closed loop flow or pressure response to an electrical or electronic control signal.
5. Actuator- For creating impact pressure.
6. Industrial PC and touch screen display system- For control and logic for the machine functioning.
7. Control Panel- for 3 phase supply to motor, drive and control hardware.

# NEOMETRIX



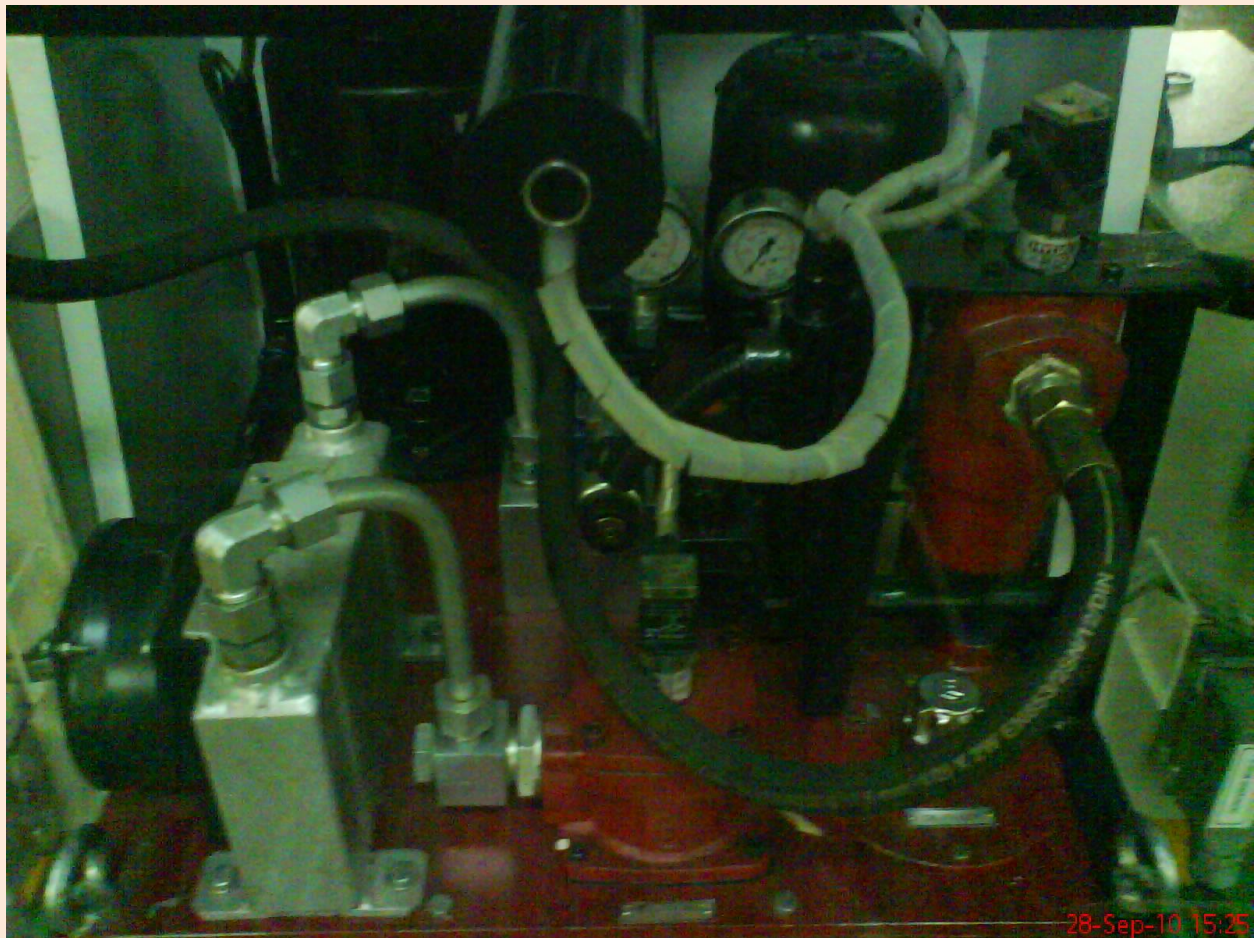
**Neometrix Engineering Private Limited**

E-148, Sector-63, Noida India 201301

Email – [contact@neometrixgroup.com](mailto:contact@neometrixgroup.com), Contact No.- +91-0120-4500800, 7777-876-876

## Technical Specification-

1. Plate Thickness : 20mm
2. Plate length : 930mm.
3. Weight : 6.8 Kg
4. Material density :  $2.7 \times 10^{-6}$  kg/ mm<sup>3</sup>
5. Total Volume :  $1.925 \times 10^6$  mm<sup>3</sup>
6. Slot Width : A1: 10.189mm A2: 10.218mm





## Application-

1. Steering and dashboard testing
2. cushioning effect of seat in term of G.
3. Complence of the helmet.
4. Front of Rear Test of ant vehicles.



## Key Features-

1. Up to 1 MHz DAQ rate with 8 clocked lines
2. 16-bit resolution
3. Build-in 2XUSB 2.0 for communication
4. Accuracy: 0.1km/hr
5. Impact Speed up to 40km/hr.



**Neometrix Engineering Private Limited**

E-148, Sector-63, Noida India 201301

Email – [contact@neometrixgroup.com](mailto:contact@neometrixgroup.com), Contact No.- +91-0120-4500800, 7777-876-876