

The Head Restraint Performance Test system is an electrical test bench able to evaluate structural strength and stiffness of seats, their backs, anchorages and headrest.

The heavy-duty system is a cost-efficient solution, capable of testing up to 3 seats simultaneously and independently.

The system has been designed according to the following regulations:

- FMVSS 202A, FMVSS 202
- ECE R17, R25
- GTR 7
- EEC Dir 78/932
- GB 11550 - 1995, GB 15083 - 2006
- IS 15546 - 2005
- AIS 016, AIS 023

- ✓ Precise programmable load rate control with high performances
- ✓ Height Retention Test included
- ✓ Specimen-holder moving table for easy placement of seats or vehicle section
- ✓ Easy-to-use control system with a powerful user-friendly software
- ✓ High resolution (16 bit) and high accuracy for all range of loads (torque, force)
- ✓ H-point laser alignment tool (Easy configuration of R-H points)
- ✓ Low maintenance required

# Head Restraint Performance Test System



## **Main Loading Specification:**

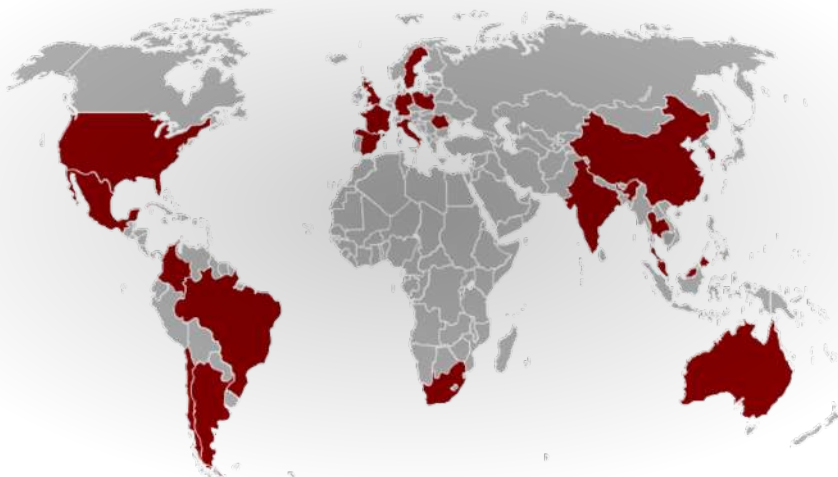
- Back Station Moment: Up to 5.000 Nm
- Back Station actuator Stroke: 600 mm
- Head-form Station Moment: Up to 2.500 Nm
- Head-form actuator Stroke: 700 mm
- Head Retention Test Force: 2.500 N
- Head Retention Stroke: 400 mm
- Minimum lateral separation between two lateral stations: 250 mm

## **Regulation ranges:**

- H-point height regulation: 200mm-900mm
- Head form distance to H-point: 450mm-900 mm
- Y-direction regulation of the 2 Lateral Loading Stations: 500 mm movement
- X-direction regulation of Central Loading Stations: 150 mm movement
- X-direction regulation of Sample Table: 800 mm

## **Instrumentation:**

- Head displacement: 3 x displacement sensors
- Head retention: 3 x displacement sensors
- Head force: 3 x load cells
- Back angle: 3 x inclinometer
- Back force: 3 x load cell



## **New approach to the automotive safety testing**

Additium Technologies is a young company formed by professionals with more than 20 years in direct experience on the design, manufacturing, commissioning and support of custom made test systems.

**ADDED value Passive Safety  
Test Systems**

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