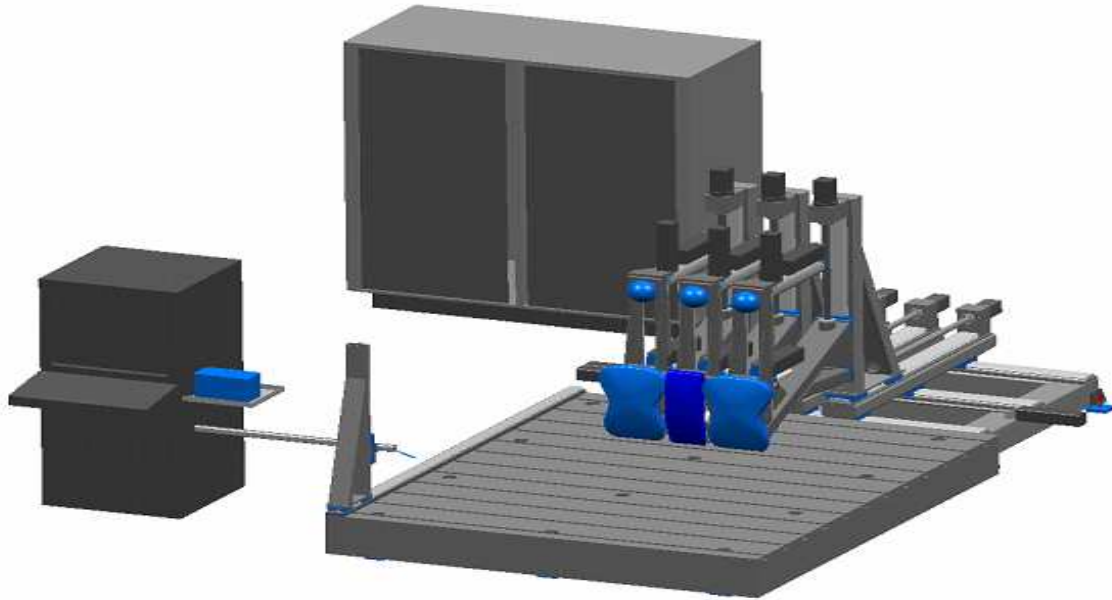


# Concept<sup>®</sup> - Head & Seatback Restraint Test Bench



## Functional Description

This from Concept developed Test System is capable to perform head and seat back tests. This equipment is used to arrange tests according to FMVSS 202a and ECE- R17.

Due to an adequate clamping test in vertically direction it can be handled regarding to FMVSS 201a. Up to 3 seats can be tested simultaneously.

Each of the test units which are electrical driven can be adjusted, regarding to the legislative described position. The testing process will be done after adjusting automatically. The intermediate test impactor is incremental adjustable by 15 mm steps to adapt the system to many vehicle configurations.

**From Concept- Technologie developed head and Seat Back restraint test bench covers a wide test range due to high flexibility.**

## FROM USER TO USER

As a user and system developer, we offer our customers our know-how.

## Benefits at a Glance:

- ✓ Reducing of investment costs due to test possibilities of 3 seats simultaneously.
- ✓ Reducing of investment cost due to avoidance of test replications as a result of high repeat precision availed by free from backlash drive and automatically clamping.
- ✓ Easy to handle due to option wireless remote control with digital display.
- ✓ Time saving on account of easy adjustment of H- Point Position with additional measurement devices.
- ✓ High flexibility because of variable limited of test speed, test forces and test distance.

# Concept<sup>®</sup> Head & Seatback Restraint Test Bench



www.concept-tech.com

## Technical Description:

- Overall Mass: ca. 1.800 kg (w/o Base plate)
- PLC: Siemens S7
- E- Power Supply: ca. 3 kW

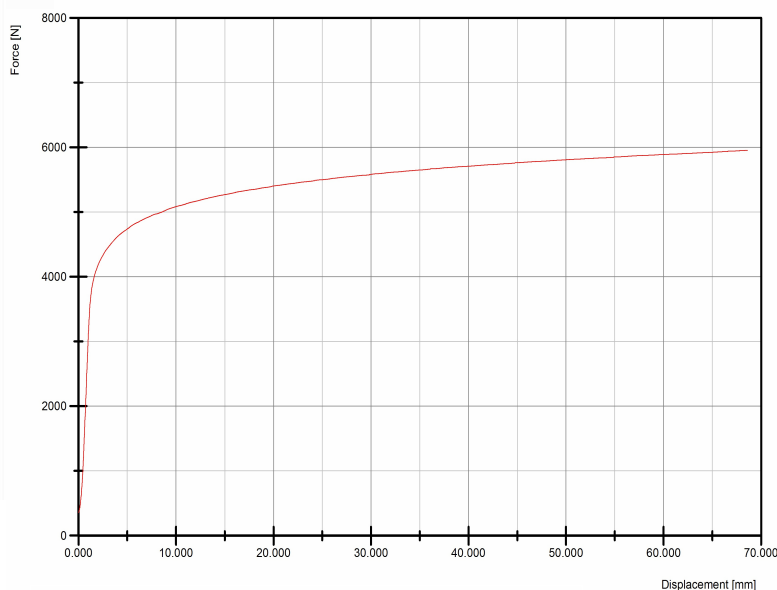
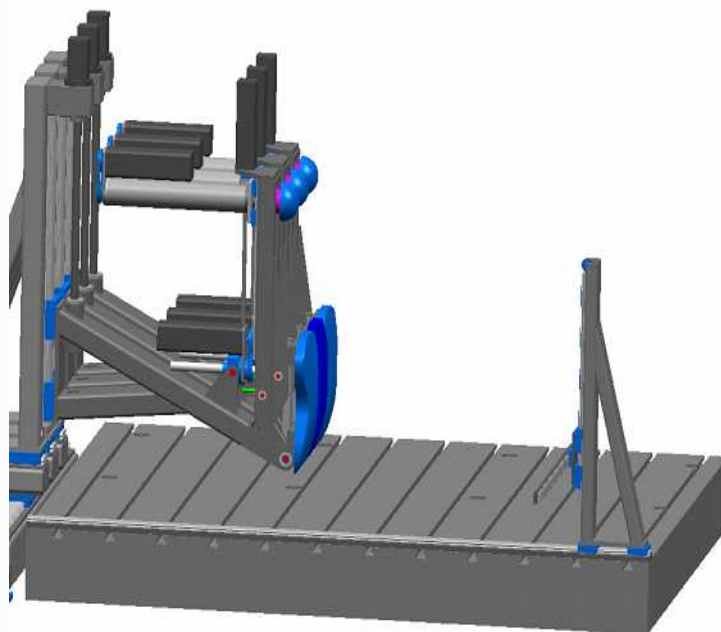
## Standard Scope of supply

- 1 Base Plate with T- Slots 3.000x2.500x300 [mm]
- 3 linear axes for Y- Adjustment
- 3 linear axes for X- Adjustment
- 3 linear axes for Z- Adjustment
- 3 linear axes for Head form Z- adjustment
- 3 rotating axes for Torso- movement
- 3 linear drive for head X- movement
- 1 control and measurement system
- 1 adjustment device for H- Point localisation (optional)
- 1 PC for operating and measurement

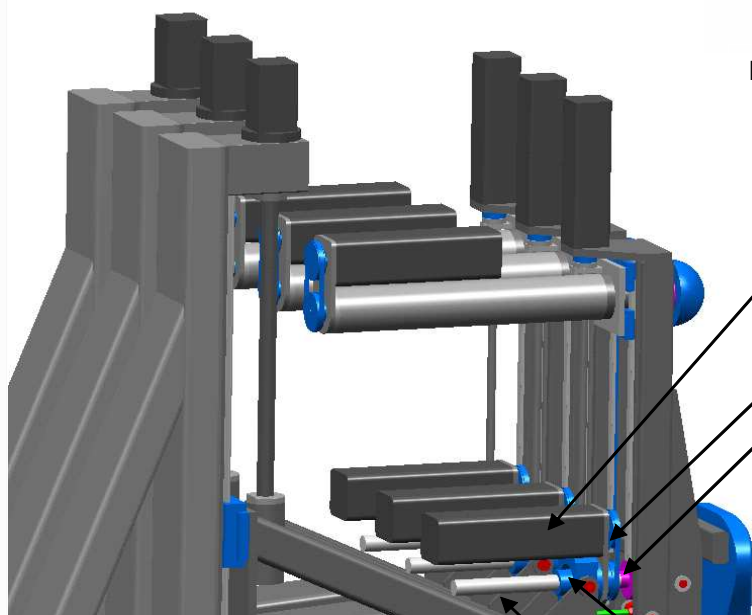
All axes are driven and clamped via pre- stressed linear guidance system with recirculating linear ball bearings. The bearing is done via backlash free linear bearings.

## Dimensions:

- Overall length: ca. 5.000 mm (incl. base plate)
- Overall width: ca. 2.500 mm
- Overall height: ca. 2.200 mm



Illustr.: Force/Displacement Diagram



- Servo Drive
- Synchronous Belt Drive
- Load Cell

Linear Guidance System with recirculating linear ball bearings