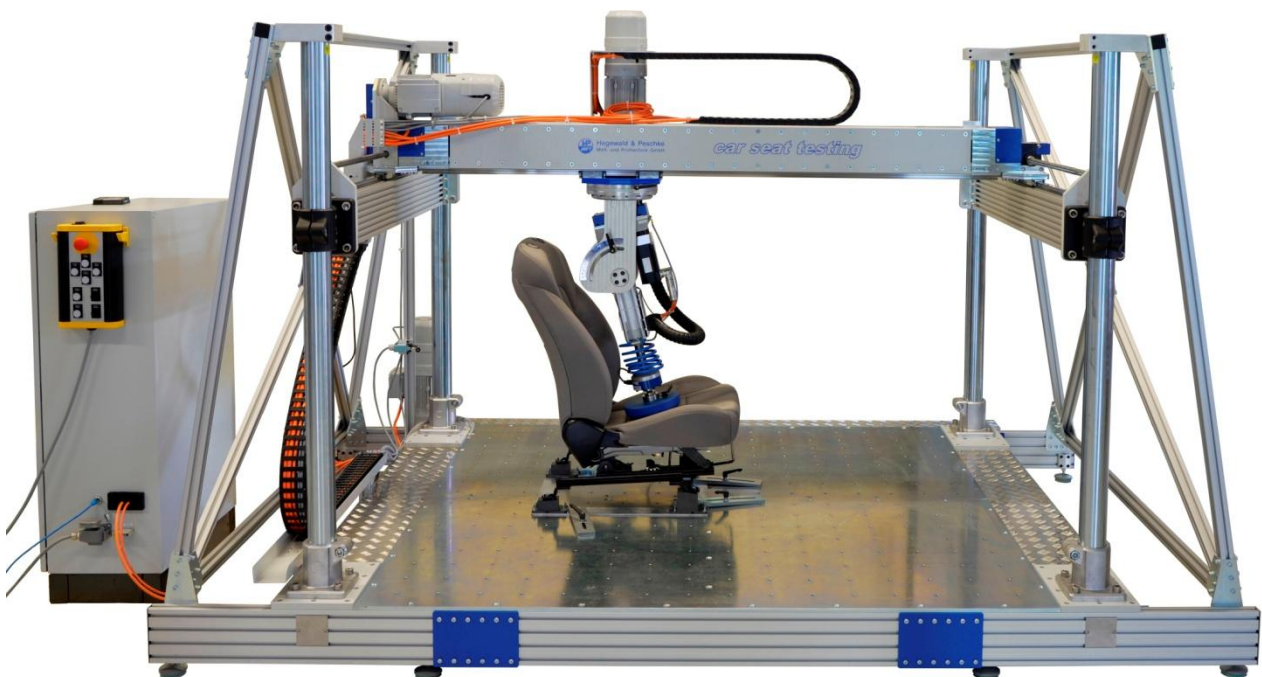




Product information

Test rig for car seats

With 1 electromechanical actuator 5kN load-/position controlled



Application:

Test rig for vertical und horizontal test of car seats. 1 electromechanical actuator without loading pads, including force sensor. Test procedure supported by comprehensive software. The actuator is driven by a special controller for test machines, which provides a high accuracy in load-, position- and speed controlled mode.

consisting of:

- the frame of the rig is 2.0 x 2.0 m bases on 2 plates 1000 x 2000mm, thickness 12mm, material steel galvanised, drilling pattern 120mm x 120mm with thread M10 on an aluminium profile construction
- lift system for the cross beam consisting of 4 vertical tubular linear units at the corners of the base plate. Below the base plate the units are common driven by angular gears and spacer shafts to a gear motor. In consequence of this arrangement the base plate is approx. 250mm above the floor. The two guides of the linear units left / right are assembled at a stabile aluminium profile which contains two further linear guide for the cross beam.
- The tube linear units are reinforced among themselves and to the rigs frame by an aluminium construction, so that the frame can absorb transverse forces with minimal deflections. With higher cross beam position during the test more deflection is expected. Relevant notes will be stated in the manual.
- A solid cross beam is electromotive driven moveable in the depth of the test rig. On hold its position is self-locking. The cross beam is equipped additionally with ball guides, so that the actuator-unit can be moved electromotive along the cross beam.
- 1 electromechanical actuator load-/position controlled, stroke 200mm, load max. 5kN; suitable for force sensor 5kN. It is rotatable 360° and tiltable 0 .. 90° mounted below of the cross beam, so that tests are possible in every direction. Both axis are lockable.

- 1 force sensor 5kN
- 3 incremental position sensors for all linear axis (X, Y and Z). The values can be stored by software. Positioning must be done manually.
- 2 scales at the rotation axis.
- Measurement of the actuator position by the motor encoder
- Controller contains the supply for all driven axis and the communication to the computer
- The parameters force, stroke and speed (indirect by timing), cycles and waiting times are free configurable using our standard software LabMaster, in addition this software allows a free definition of the complete test procedure using the block program, which encloses cyclic commands too.

Technical data:

stroke max.:	200 mm
position accuracy:	±1mm
load:	±5000 N max.
speed max.:	90 mm/s
working height:	250 .. 1000 mm (swivel axis of the actuator above base plate)
angle range:	within 0 .. 90° (horizontal .. vertical downward) 0 .. 360° around the vertical axis
adapter for loading pads:	R20/8

Other parameters on request!

enclosed accessories:

- 1 set case for tools to change the loading pads
Further accessories, such as for other specimens, we can offer on request.

not enclosed:

- PC (Win7), screen, printer
- testing software LabMaster
- loading pads
- fastening elements to fix the specimen