

GT-L41 Chair Drop Tester



Application

- ✧ Test rig for alternating bending tests according to EN 527-3, EN 581-2, EN 1728, DIN 4551, BIFMA X5.1 and X5.5, BS 5459 and NEN 1812, load controlled.
- ✧ Drop weights between 9.1 and 136kg with different rams and seat impactor.
- ✧ The pneumatic test axis has its own controller assembled in the immediate vicinity, which is operated from a PC via CAN-bus and works synchronised.
- ✧ It is supplied by a central supply terminal, which can carry up to 2 pneumatic test axes.
- ✧ Central supply terminal, PC, screen, and keyboard can be positioned on a separate, moveable framework.
- ✧ Via a USB interface on the PC the data, control commands and software settings are transmitted via the central supply terminal to the pneumatic test axis.
- ✧ Part of the test stand is our extensive testing and evaluation software for the system software
- ✧ Windows 2000 or XP.

The test rig consists of:

- ✧ 1 framework with crosshead and base plate 1250 x 1350mm, 12mm thick, galvanised steel, with screwed on stiffening, drill pattern with thread M10; moveable and vibration-reduced
- ✧ 2 electrical stroke systems for height adjustment of the crosshead
- ✧ 1 drop tester, position-controlled (weight up to 136kg, drop distance max. 500mm for part nr. 40-920-057 and 320mm for part nr. 40-920-056)
- ✧ 1 drop weight plunger, base weight 36 kg according to BIFMA, contact area 16"
- ✧ 1 drop weight plunger for arm rest testing according to BIFMA, contact area 8"
- ✧ 1 set of additional drop weights according to BIFMA (weight bags filled with steel shot, diameter 0.5mm)
- ✧ 1 seat impactor with air bag according to BIFMA X5.1 and EN 1728
- ✧ Operating pressure and cylinder limit switch control
- ✧ 1 emergency stop button
- ✧ set of fastening elements (4 mounting links, 8 eyebolts, 4 tension belts) for the specimens, also it is possible to fix chairs central on gas spring (stop rail, clamping bridge)
- ✧ Number of cycles and course of load to be set arbitrarily in the PC software
- ✧ extensive evaluation and logging of test and results

- ✧ **1 supply terminal for 2 test axes**
 - The supply terminal is used as a connector for up to 2 test axes. It converts the CAN-protocol to USB and therefore is the connection to the PC.
 - The cables for connecting the test axes are built-in. Furthermore it contains a central emergency stop, which can shut off all axes in a hazardous situation. The air conditioning consisting of filter, switch-on-valve and distributor is also situated on the supply terminal. The test axes can be attached via hoses with quick disconnect couplers.

❖ **1 Framework for supply terminal, PC, keyboard and screen, moveable**

- Framework for supply terminal made from aluminium profiles for installing a supply terminal and setting it up separately next to the test rig.
- It stands on fixable plastic wheels and can thus be used as a moveable or stationary system.
- On the backside of the supply terminal there is a table approx. 1000mm above the ground to carry a TFT-display, keyboard and mouse. Below the tabletop is storage to carry the PC. A gap in the tabletop allows cable feedthrough.
- Accessories for the CAN-Bus and PC connection via USB interface

Not included:

- PC with accessories (screen, printer..)