

Product Information

Test rig for side to side tests on seating furniture

e.g. acc. EN 581-2, EN 1335, EN 1728, BIFMA X5.1; Calmar I series







Field of application: performance of side-to side tests in development and quality control during batch production

Test objects: chairs, revolving chairs, armchairs, stools, rocking chairs

The system is based on a PLC with data export functionality to a personal computer. The PLC with analogue value processing is directly mounted to the test rig in a handy panel, tiltable in the up/down and left/right direction to fit the user point of view. The touch panel allows the parameterization of tests and depicts the real time status of the connected test axis. The parameterization can be done individually and saved as a template or based on a prevalent standard conform template. For example parameters such as the amount of cycles, time intervals, maximum and minimum values can be set.

During the test run the user can view the test status. E.g. the cycle number, failure messages and a graphical visualization of the test run can be observed. At test end the control saves automatically all for the documentation necessary parameter and allows the export of the data to a computer for test reporting.

Consisting of:

- 1 test frame based on a stainless steel base plate 1.2 x 1.2 m, 12 mm strong, steel galvanised, with underscrewed enforcement, on vibration damped feet, M10 thread pattern for flexible fixation possibilities, height adjustable feet for the compensation of floor unevenness
- 1 frame work fixed cross girder for mounting the test axis
- 1 PLC with touch display in a handy panel tiltable in the up/down and left/right direction to fit the user point of view

- 2 cylinders for seat load mounted vertically fixed and horizontally movable under traverse, Fmax 1600N.
- 2 load cells 2 kN mounted on the plunger
- 2 small loading pads for seats acc. to EN 1335 (\$\phi\$200mm, radius 300mm, rounded edges with radius 12mm) with cardanic clamping (41-006-101)
- fixation set for office chairs

Technical data:

- power connection: 230VAC, 50 Hz
- pneum. connection: pressurized air 6-10 bar, quality acc. ISO/DIS 8573-1
- control accuracy: ±5% of set value above 20% of nominal load
- load resolution: 0.5 N
- load accuracy: ±1% of end value

Options:

- computer & monitor for data export
- remote maintenance modul (40-930-009)
- 40-001-055: fixation set for free swinging chairs, raster 120 and 150
- 40-001-117: fixation set for table testing (12mm high, also for 4 leg chairs)
- 41-006-110 loading pad Ø100mm, Ø20mm cardanic acc. to EN527