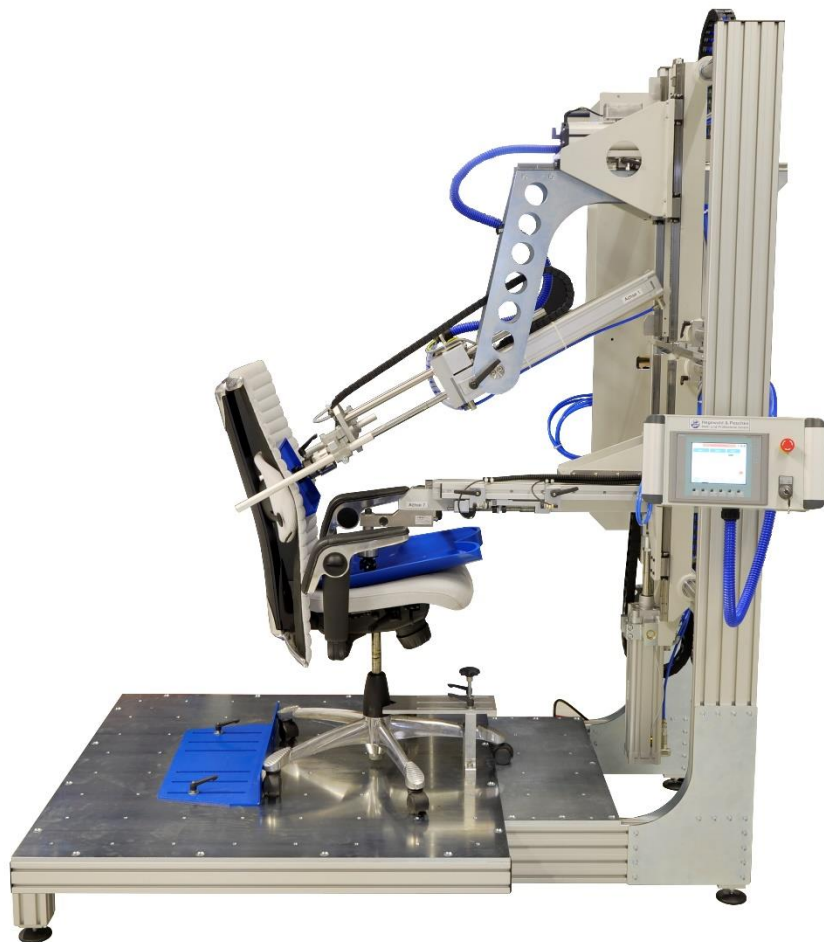




Product information

Alternating bending test rig

for seat and back rest (e.g. acc. EN 1335, EN 581-2, EN 1728, BIFMA X5.1, BS 5459),
Calmar I-Series, direct force regulation



Application:

Alternating bending test rig for seat and back rest, according to BIFMA X5.1, EN 581-2, EN1335-3:2009, EN 1728 and BS5459.

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 intervalls, maximum and minimum values can be set.

During the test run the user can view the test status. The cycle number, failure messages and a graphical visualization of the test run can be observed. Specifically for the testing application an adaptive controller was developed, which allows the closed-loop controlled testing performance with a substantial time saving and in consequence an enhanced cycle time. 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. The computer software is not included. Optionally H&P offers a flexible report generator tool.

consisting of:

- 1 test frame based on a stainless steel base plate 1.2 x 1.2 m, 12 mm strong, steel galvanized, with underscrewed enforcement, on vibration damped feet, M10 thread pattern for flexible fixation possibilities
- vertical column with height adjustments and horizontal displacement for 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
- centralized pressurized air connection (NW7,2) with air conditioning unit consisting of filtering systems, pressurized air distributor and switch-on-valve
- 1 test axis for backrest testing, angular adjustment and +/- 150mm lateral positioning, an additional guiding minimizes the risk of cross-loads and avoids the twist away of the chair, sidewise end positions to also fix the chair at excentric load applications, F_{max} 1500 N
- 1 test axis for seat loading, flexible front/rear moving, depending on test requirements

spring balanced fixation (EN1335) or controlled 400 mm moveable to different load application positions (BS 5459), F_{max} 2500 N

- 2 load cells

enclosed accessories:

- 1 seat loading pad; clamping connection \varnothing 20 cardanic; EN 1335, made of GF-UP (41-006-220)
- 1 backrest loading pad 250x200-R450/R12; clamping connection \varnothing 20 cardanic; DIN EN 1335, made of GF-UP (41-006-303)
- fixation elements for office chairs (40-001-050, 40-001-056), 4 eyebolts and 2 straps
- 1 stop bar (40-001-056)
- case with accessories kit, e.g. 2 eyebolts and 2 straps for fixation of the specimen (40-001-059)

Other accessories, e.g., for other test objects, can be offered when required separately.

Technical data:

- power connection: 230VAC, 50 Hz
- pneumatic connection: pressurized air 6 .. 10 bar; quality acc. ISO/DIS 8573-1 (oil content less than class 2; impurity content better as class 3; water content less than class 4)
- control accuracy: \pm 5% of set value above 20% of nominal load
- load resolution: 0.5 N
- load accuracy: \pm 1% of end value

Optional accessories:

computer & monitor for data export
 18-350-001 report generator
 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)
 41-006-101 loading pad \varnothing 200mm-R300/R12; clamping connection \varnothing 20 cardanic; acc. DIN EN 1335 (2x for side-to-side test)