

# **Product Information**

# Alternating bending test rig

for arm rest testing e.g. acc. BIFMA X5.1, BIFMA X5.4, BIFMA X6.5, EN 581-2, EN 1335, EN 1728, BS 5459; **Calmar one** 





Application: arm rest testing (e.g. acc. BIFMA X5.1, BIFMA X5.4, BIFMA X6.5, EN 581-2, EN 1335, EN 1728, BS 5459)

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 an 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. E.g. the cycle number, failure messages and a graphical vizualization 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.
- 1 portal frame work with electrical height adjustable 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
- centralized pressurized air connection (NW7,2) with air conditioning unit consisting of filtering systems, pressurized air distributor and switchon-valve
- 2 test axis for arm rest testing, angular adjustment, incl. fixation. Adjustable stopper restrict the tilting angle to the inside. During loading the test axis can follow the arm rest movement to the outside displacement. Fmax 1500 N
- 2 load cells 2 kN

#### Included accessories:

- 2 arm rest loading pads acc. EN 1335 with cardanic joint (41-006-521)
- 1 set of fixation elements for office chairs (40-001-050)
- 1 stop bar (40-001-056)
- 1 accessories box including 2 eye bolts, 2 straps to enhance fixation of specimen (40-001-059)

#### Technical data:

- power connection: 230 VAC, 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
- report generator (18-350-001)
- fixation set for free swinging chairs (40-001-117)
- fixation set for table testing (12mm high, also for 4 leg chairs) (40-001-117)