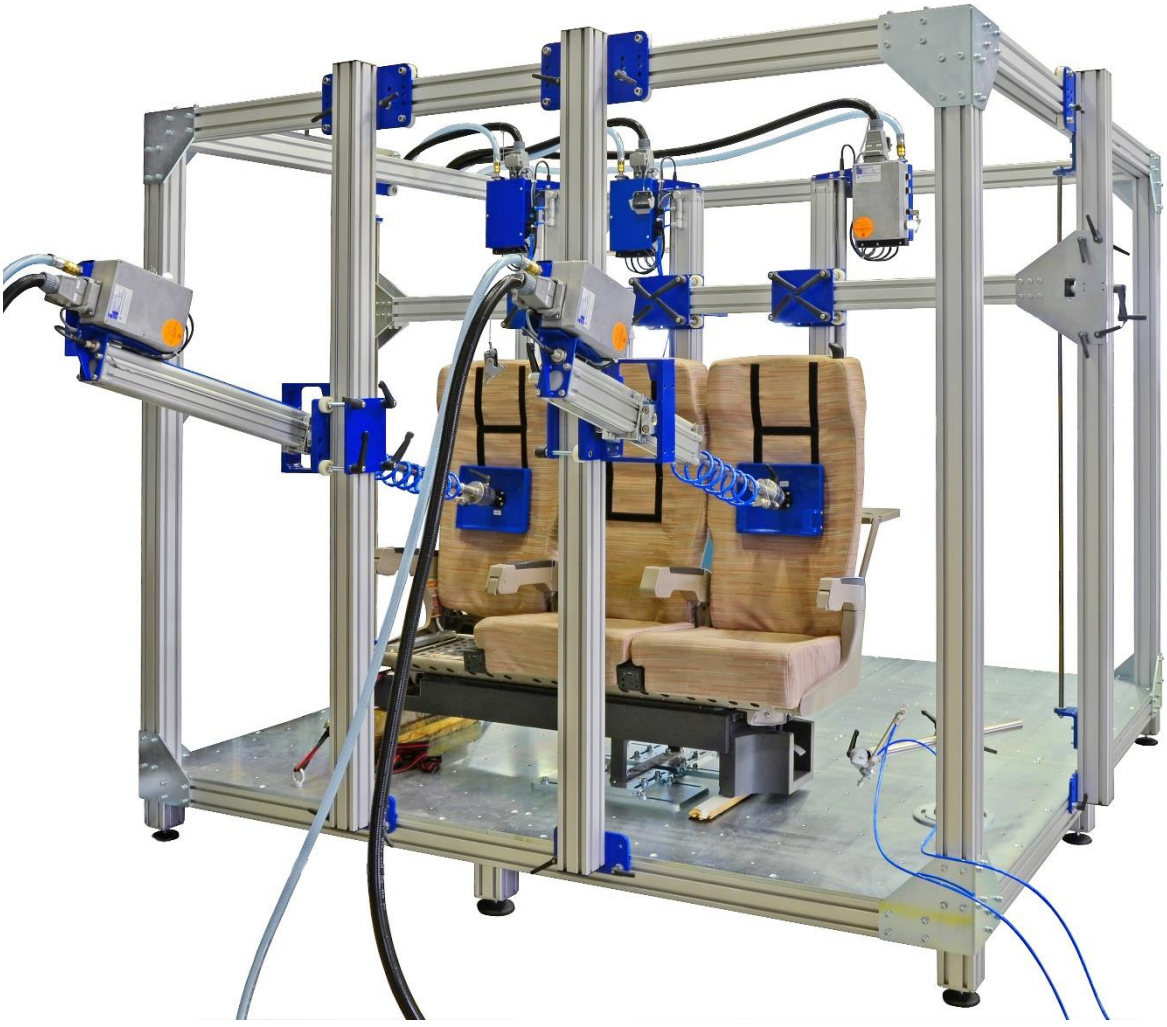
Hegewald & Peschke
Meß- und Prüftechnik GmbH

Application flyer

Testing technology for seats and seat rows in rail vehicles



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Universal test field for railway seats

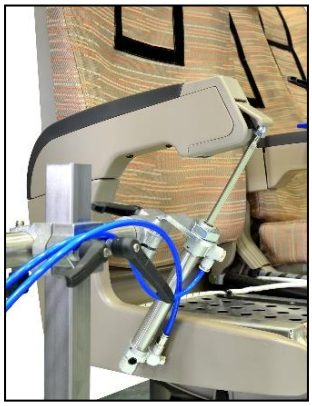
- Equipped with pneumatic or electromotive test axes and various load pads for force application
- Flexible arrangement of the test axes
  - in height (height-adjustable transverse profiles)
  - in width (horizontally freely positionable holders)
  - in depth (roller guide)
- Tensile and compressive load possible
- Test angle infinitely adjustable via swivelling bearings

Software-based control with Calmar Pro

- Decentralised, modular control concept for test configurations with up to 5 axes
- Test axes can be operated separately or flexibly combined for test procedures
- Processing of tests on the basis of test templates (standard-compliant or customer-specific)
- Free parameterisation of test sequences
- Customer-specific characteristics / results / test sequences
- Test report
- Online visualisation (real-time graphics/values)

Wide range of testing possibilities:

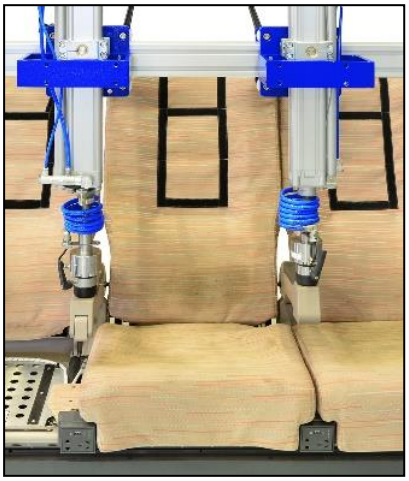
Backrest testing

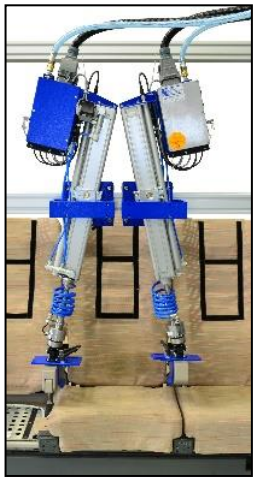


Seat testing

- with pneumatic actuator for operating adjustment switches for the backrest

Armrest testing





Testing of the tables on railway seats

- Load application straight or at a certain angle

Test field for swivel tests on seat modules with 1 to 3 seats

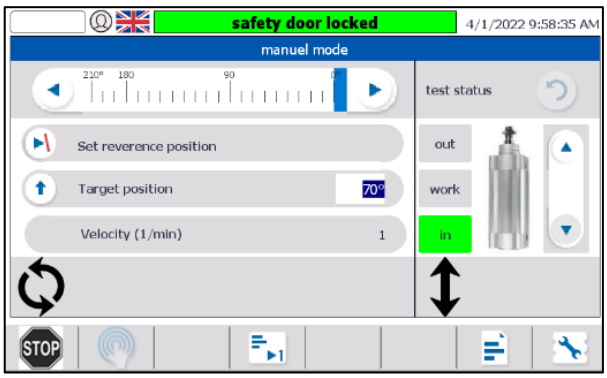
(Item no.: 40-003-070)

- Durability and fatigue test
  - by cyclically rotating the seats horizontally back and forth by 180 degrees
  - by continuous rotation in one direction
- Speed of the swivel test 15 rpm
- Customised design of the protective enclosures

- Rotary drive mounted centrally above the test specimen
- Adjustable drive arms that can be set to the width of the test specimen
- Transfer of the rotary movement via the backrest

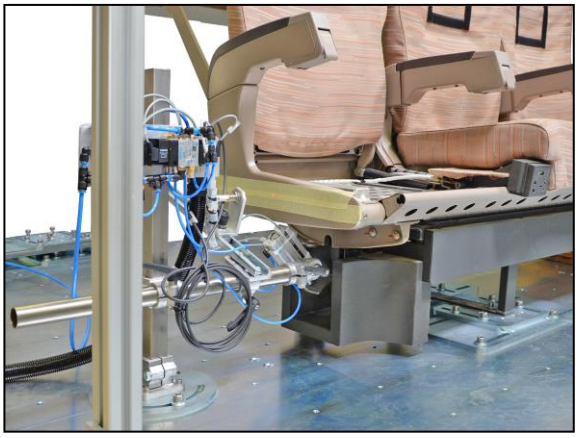
Convenient and intuitive control via PLC with touch screen

- Input of the test parameters via the touch-panel:
  - Number of cycles
  - Angle of rotation
  - Test speed



Pneumatic actuator for releasing the seat rotation function

- Control and monitoring of the actuator integrated in the PLC control system
- Switching status serves as a precondition for the next test step



Pendulum impact test on seat backrests

(Item no.: 41-002-169)

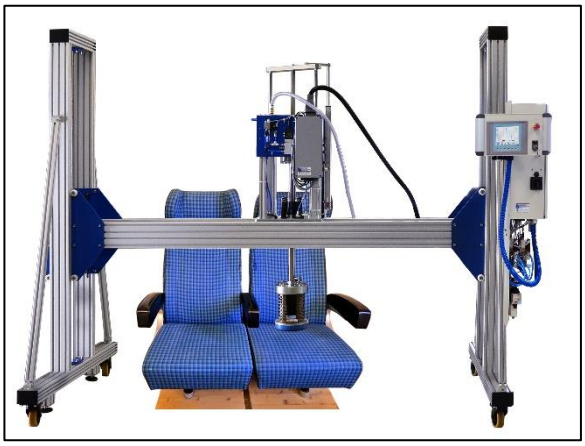
- Testing of the backrests of seats with regard to vibration behaviour and stability according to corresponding standard

- Manually height-adjustable cross-beam for fastening the impact device
- Optional: measurement of the impact force via movable front plate on the impact hammer
  - Impact force is transmitted to a load cell mounted on the rear of the hammer
  - Adjustment of different reaction forces possible

Test rig for drop tests according to EN 1728

(Item no.: 40-930-059)

The drop tester can be used universally for drop test or drop impact tests according to EN 1728, EN 581-2, BIFMA X5.1, BIFMA X 5.5, BIFMA X6.1, DIN4551, DIN 4573, EN 14072, NF DF61-062 or according to QC/T 805-2008 and TB/T2961-1999



- Drop tests with weights from 9.1 kg to 200 kg
- Height and width of test specimens variable
- Max. test specimen height: 1850 mm - drop height
- Comfortable and intuitive control via PLC with touch screen
- Expandable with an acceleration sensor for testing according to RAL GZ430/4.

Advantages:

- Drop cycles adjustable
- Monitoring of ageing
- Optional setting of a constant drop height relative to the test specimen surface or a fixed drop position
- Definable drop zone and tolerance for the adaption of the drop shaft