



Product Information

Bending Fatigue Testing Machine 180°

For wire specimen according to DIN EN ISO 15630 and ISO 7801





Application:

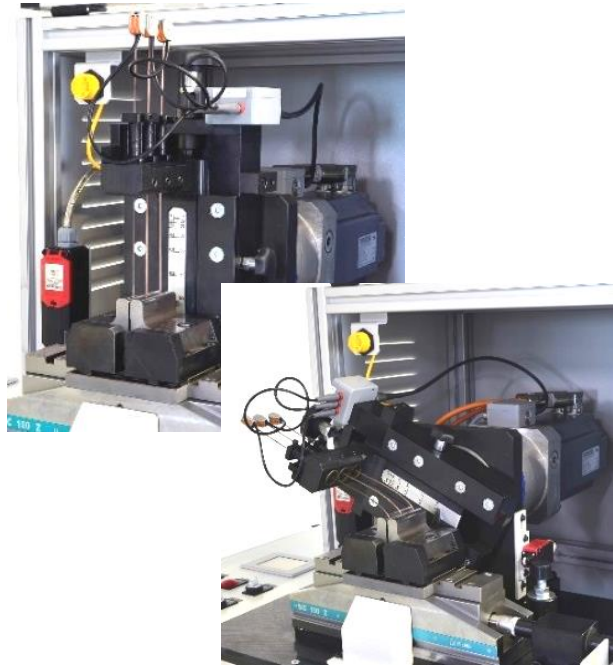
The facility is used for bending fatigue tests according to DIN EN ISO 15630 and ISO 7801 on wires with diameters of 0.3mm to 10.0mm (max. tensile strength 2.000MPa). Up to 3 samples can be tested at the same time

Functional principle:

The wire samples are bent with a 90° angle to the left and to the right. The lower end of the wire is clamped into a screw terminal and guided through a pair of bending rolls. The rolls ensure bending defined by the wire diameter. The angle deviates by max. +/- 3°. The upper end of the wire is clamped into a movable, motor-driven bending arm. The bending rolls can be exchanged.

The upper end of the wire is clamped into a movable, motor-driven bending arm. The bending arm is driven by a servomotor.

The testing facility is adjustable according to the standards indicated before. The detection of specimen breakage is based on the electrical conductivity.



Technical data:

Test materials	Wire specimen with a diameter between 0.3 - 10.0 mm and a max. tensile strength of 2.000MPa. In dependence of the wire diameter up to three wires of identical diameter might be tested simultaneously. 3 specimen: 0,3 mm ≤ 2 mm 2 specimen: 2 mm ≤ 5 mm 1 specimen: 5 mm ≤ 12 mm
Bending speed	max. 180° bending per second (longer intervals can be set)
Drive	Servomotor
Control and Evaluation Electronics	Parameters that need to be entered: number of cycles, bending speed Output parameters on digital display: cycle counter, number of cycles at sample fracture
Dimensions (WxDxH)/ Weight	1030 mm x 800 mm x 1385 mm/ 300 kg
Connection	3 P/ PE/ 400 V/ 50 Hz/ (TN- network) 4.0 kW, 5 - 40°C, 20 - 80% humidity
Necessary accessories	Bending grips for different wire diameters: (41-028-2xx)
Optional accessory	Alternative clamping with self-compensating specimen clamping device for fixing wires with slightly different specimen diameter or asymmetrical specimen cross section (41-028-202-BG03)