Cold Bending Test Device

LT-U0200 | Hydraulic bending and reverse bending system

Interchangeable mandrels • Adjustable rollers • Controlled deformation



160 kN

MAXIMUM TEST CAPACITY

0-6 mm/s

ADJUSTABLE PISTON SPEED

EN ISO 7438 • EN ISO 15630-1 • ASTM A615/A615M

LT-U0200

Photographs and Components

Open working area, mandrel and rollers, control panel and accessory shelves

The Cold Bending Test Device evaluates plastic deformation behaviour of reinforcing steel and metallic specimens. A hydraulic piston bends the specimen around the selected mandrel. After testing, the specimen surface is checked for cracking and fracture.

MANDREL AND ROLLERS

Interchangeable tools in the working area form the bending arrangement for the specimen.

ACCESSORY SHELVES

Lower shelves organise different mandrels and tooling components.



CONTROL PANEL

The panel includes directional control, a pump button and a pressure gauge.

PROTECTIVE COVER

The hinged upper cover surrounds the bending working area.



Mandrel, rollers and open bending working area

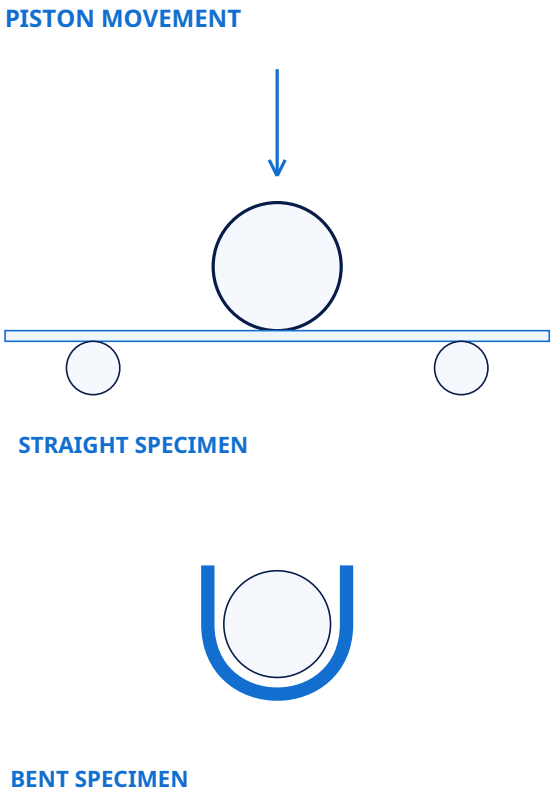


Directional control, pump button and pressure gauge

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Mandrel, Roller and Specimen Arrangement

Specimen positioning • Hydraulic movement • Plastic deformation



Select Suitable Tools

Choose mandrel diameter and roller spacing for bar diameter, steel grade and test method.

Controlled Bending

Set piston speed within 0-6 mm/s. Bend the specimen to the selected test angle.

Inspect the Surface

After testing, check the specimen for cracking, fracture and surface separation.

Align the specimen between the supporting rollers. Hydraulic movement shapes the bar around the mandrel. Interchangeable mandrels and adjustable rollers allow test geometry to be configured for different specimen diameters.

Bending and Reverse Bending

The standard bending configuration supports bends up to 180° with suitable mandrels.

For reverse bending, bend in one direction, apply ageing required by the procedure, then bend again in the opposite direction.

Mandrel and Accessory Selection

The system accepts Ø5-40 mm reinforcing bars. Two roller sets of approximately Ø50 and Ø100 mm are provided.

Select mandrels, holders and brackets separately for specimen diameter and the applicable test standard.

LT-U0200

Technical Specifications

LT-U0200 • Hydraulic capacity, piston speed, specimens and tooling options

Technical Feature	Value / Function
Product Code	LT-U0200
Maximum Test Capacity	160 kN
Piston Speed	0-6 mm/s
Reinforcing Bar Diameter	Ø5-40 mm
Standard Bend Angle	Up to 180° with suitable mandrels
Mandrel for 180° Bending	Up to 96 mm diameter
Roller Sets	Approximately Ø50 and Ø100 mm; two sets
Roller Spacing	Adjustable for specimen diameter
Hydraulic Control	Speed, direction and maximum pressure control
External Dimensions	154 × 80 × 130 cm
Weight	350 kg
Power Supply	220 V, 50-60 Hz, 1 phase

Bend Test Standards

EN ISO 7438 • EN ISO 15630-1 • ASTM A615/A615M. Select mandrel diameter, test angle, specimen preparation and acceptance criteria for the applicable method.

Test Workflow

01
Select Tools
Choose mandrel and rollers for the bar diameter.

02
Align Specimen
Position the specimen and set roller spacing.

03
Apply the Bend
Select speed and reach the required test angle.

04
Inspect Surface
Check the specimen for cracking and fracture.

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