

WP 300.04

Bending test device



Learning objectives/experiments

- loading of a bending beam by a point force
- influence of modulus of elasticity and second moment of area on elastic deformation

Specification

- [1] elastic deformation of bending beams subject to a point force
- [2] specimen made of cold drawn flat steel
- [3] I-section steel beam as bearing base
- [4] support distance adjustable
- [5] accessory for WP 300

Technical data

Specimen, flat steel cold drawn

- cross-section: 40x12mm
- length: 320mm

Support distance: 100...300mm

LxWxH: 320x50x120mm Weight: approx. 3,5kg

Scope of delivery

- 1 bending test device
- 1 specimen
- 1 set of accessories

Description

- elastic deformation of a bending beam by a point force
- support distance and point of application of force can be chosen
- accessory for WP 300

This accessory for WP 300 allows the investigation of a bending beam. The relationship between load and elastic deformation can be demonstrated. The influence of the modulus of elasticity and second moment of area is also demonstrated.

The bending beam is mounted on two supports and loaded with a point force generated by the test device. By sliding the bearing it is possible to apply the force in different positions and change the support width.

An I-section steel beam is bolted to the lower cross-member on the WP 300 and is used as the base.

One specimen made of cold drawn flat steel belongs to the scope of delivery.



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Required accessories

WP 300 Materials testing, 20kN

Optional accessories

WP 300.61 Set of 3 bending specimens, Al, St, CuZn