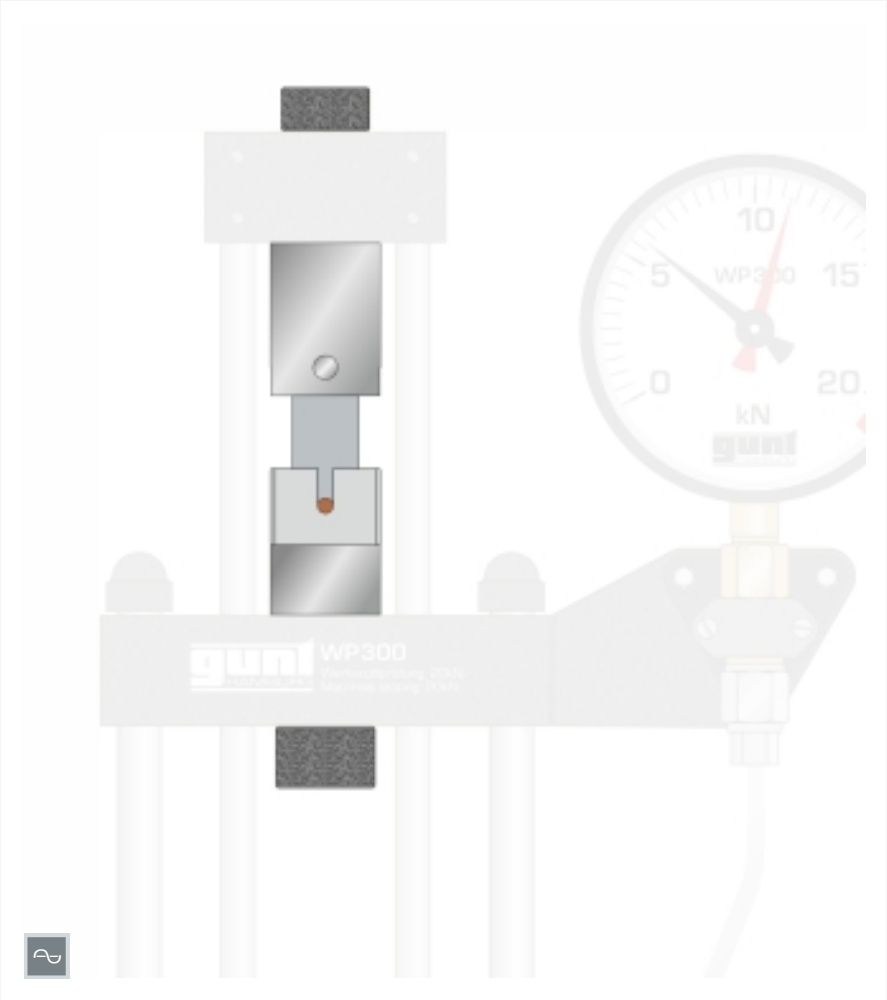
WP 300.13

Device for shear tests, single-shear



Learning objectives/experiments

- shear tests with metallic specimens on the WP 300 experimental unit
- calculate shear strength

Specification

[1] single-shear method based on DIN 50141 for determining shear strength
[2] 5 copper specimens
[3] hardened steel shearing anvils and pull strap
[4] accessory for WP 300

Technical data

5 shear specimens, copper
- specimen diameter: Ø 6mm
- specimen length: 26mm

LxWxH: 50x50x170mm
Weight: approx. 2,5kg

Scope of delivery

1 shear device
1 set of specimens (5 pieces)
1 set of accessories

Description

- **single-shear method based on DIN 50141**
- **type of stress as with rivets and pins**

This accessory for WP 300 allows you to conduct shear tests using the single-shear method.

The shear device consists of one hardened shearing anvil that hold the specimen and a pull strap with a hardened shear tongue. The resulting shear device is installed in the compression area of the WP 300 experimental unit, between bottom crossbar and crosshead.

External shear forces acting on the specimen produce shear stress in the shear specimen and the resistance of the material to shear stress is determined.

The shear strength determined in the shear test is important in the design of bolts, rivets and pins, as well as for calculating the force required for shears and presses.

A set of round copper specimens is included to carry out the experiments.

WP 300.13

Device for shear tests, single-shear

Required accessories

WP 300	Materials testing, 20kN

Optional accessories

WP 300.52	Set of 5 shear specimens, Cu