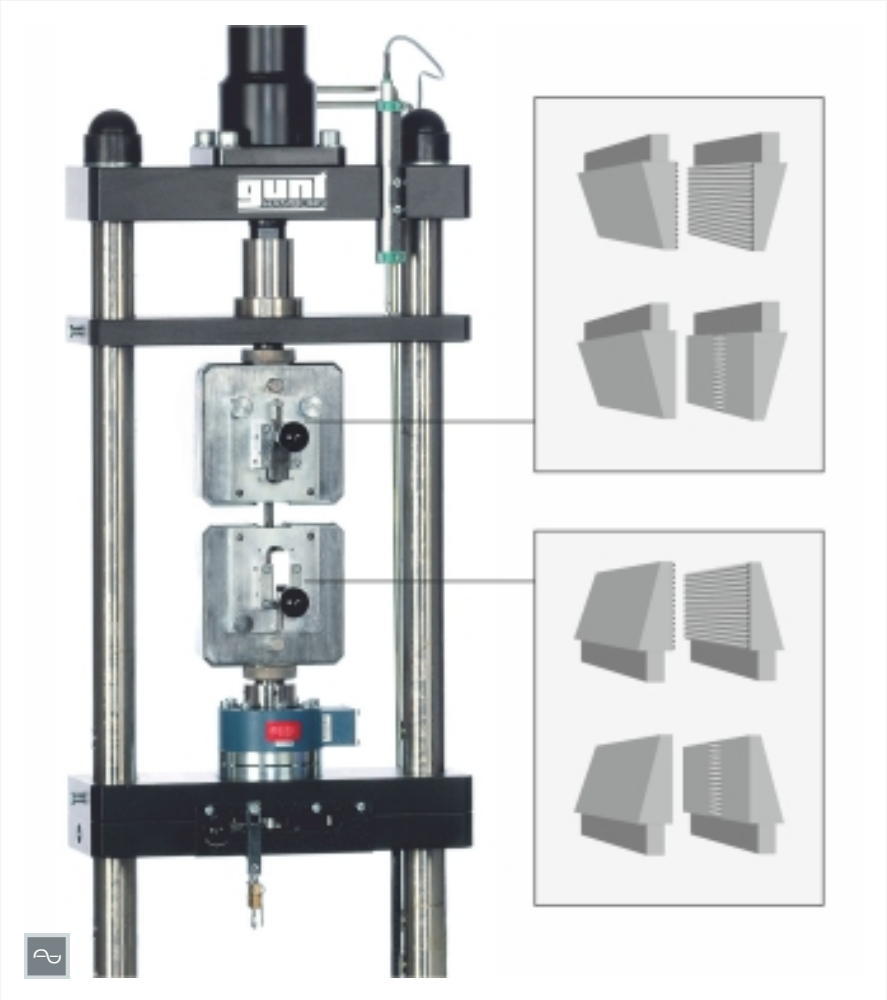
WP 310.05

Clamping device for tensile specimens, round and flat



The illustration shows both clamping devices with grips for round specimens and grips for flat specimens

Description

- **tensile experiment based on DIN 50125**
- **easy to install clamping devices with exchangeable grips for round and flat specimens**
- **round specimens included**
- **accessory for WP 310**

This accessory for WP 310 makes it possible to carry out tensile experiments on flat or round specimens. The tensile strength is determined as an important characteristic of a material. Additionally, the fracture strain can be determined as a measure for the material's toughness.

The accessory contains two clamping devices with two exchangeable grips for round and flat specimens. Both clamping devices are secured to the crossbars of WP 310. The wedge grips are easily opened with a lever. They remain locked in the open position.

In the tensile experiment, a uniaxial state of stress is produced in a standardised specimen. This state of stress is produced by an external load on the specimen in the longitudinal direction via a tensile force. Then a uniform normal stress distribution prevails in the test cross-section of the specimen.

In order to determine the strength of the material, the load on the specimen is slowly and steadily increased, until the specimen breaks.

A set of round specimens made of steel is included to carry out experiments.

Learning objectives/experiments

- tensile experiments with flat specimens or round specimens on the WP 310 experimental unit

Specification

[1] 2 clamping devices for securing tensile specimens on the WP 310 experimental unit
[2] exchangeable grips for round and flat specimens
[3] 10 round specimens made of steel
[4] accessory for WP 310

Technical data

Exchangeable grips for
- round specimens included
  - type: DIN 50125 F
  - Ø 5...15mm
- flat specimens
  - type: DIN 50125 E or G
  - thickness: 0...10mm

LxWxH: 2x 160x160x90mm
Total weight: approx. 40kg

Scope of delivery

2 clamping devices
4 grips for round specimens
4 grips for flat specimens
1 set of specimens (10 pieces)
1 set of accessories

WP 310.05

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Required accessories

WP 310	Materials testing, 50kN

Optional accessories

WP 310.12	Set of 10 tensile specimens F10x50, St