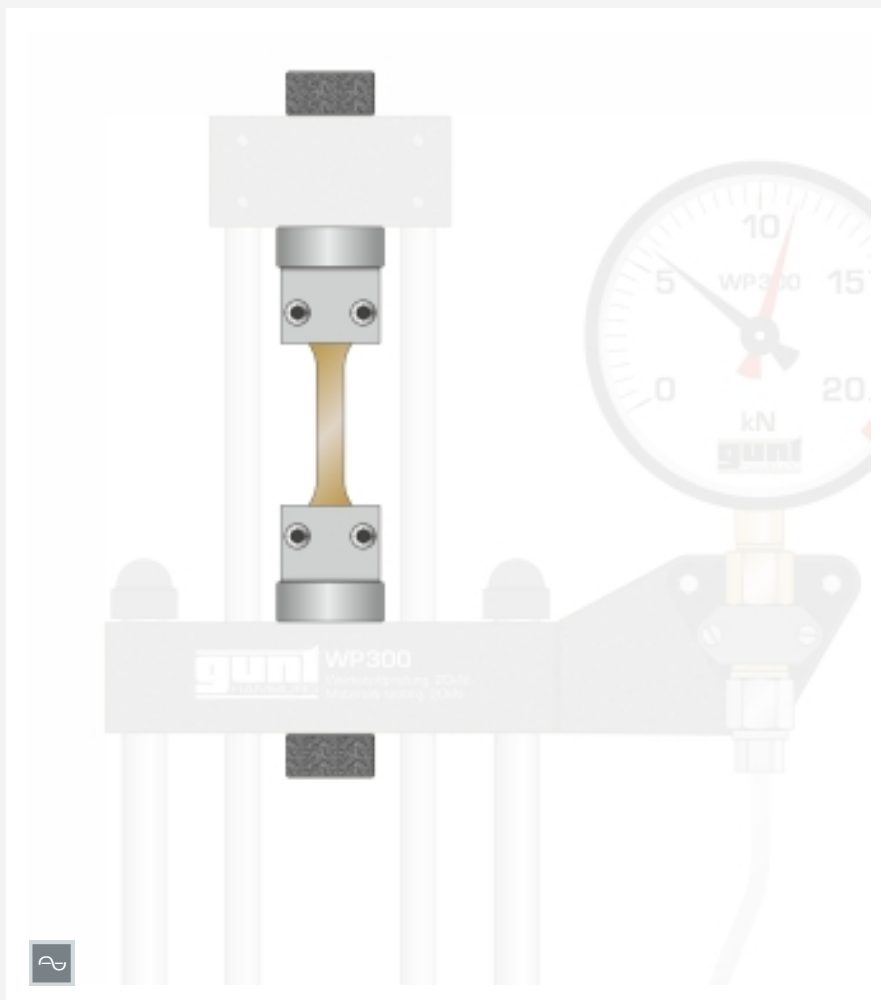


# WP 300.14

## Clamping device for flat tensile specimens



### Learning objectives/experiments

- tensile experiments with WP 300.25 flat specimens on the WP 300 experimental unit

### Specification

- [1] accessory set of clamping devices for securing tensile flat specimens on the WP 300 experimental unit
- [2] connection to WP 300 via M16 thread
- [3] 4 specimens made of aluminium, copper, brass, steel
- [4] accessory for WP 300

### Technical data

- 4 tensile specimens
- LxWxH: 144x45x1,5mm
  - cross-section: 12,5x1,5mm
  - length studied: 25mm
  - material: Al, Cu, St, CuZn

Fixing thread: M16

LxWxH: 50x50x360mm  
Weight: approx. 2,5kg

### Scope of delivery

- 2 specimen holders
- 2 retaining plates
- 1 set of specimens (4 pieces)
- 1 set of accessories

### Description

- **tensile experiment based on DIN 50125**
- **easy to install specimen holder for tensile testing of flat specimens on the WP 300 experimental unit**

This accessory for WP 300 makes it possible to carry out tensile experiments on flat 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 specimen holders and two retaining plates, used to hold flat specimens. Both specimen holders are secured to the crossbars of WP 300 using screws. The specimen holders are fitted with undercuts, so that the flat specimens are held securely in place.

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 specimens is included to carry out experiments. The set contains one aluminium sample, one copper sample, one brass sample and one steel sample.

# **WP 300.14**

## **Clamping device for flat tensile specimens**

Required accessories

WP 300                    Materials testing, 20kN

Optional accessories

WP 300.25                Set of 4 tension specimens, flat, Al, Cu, St, CuZn