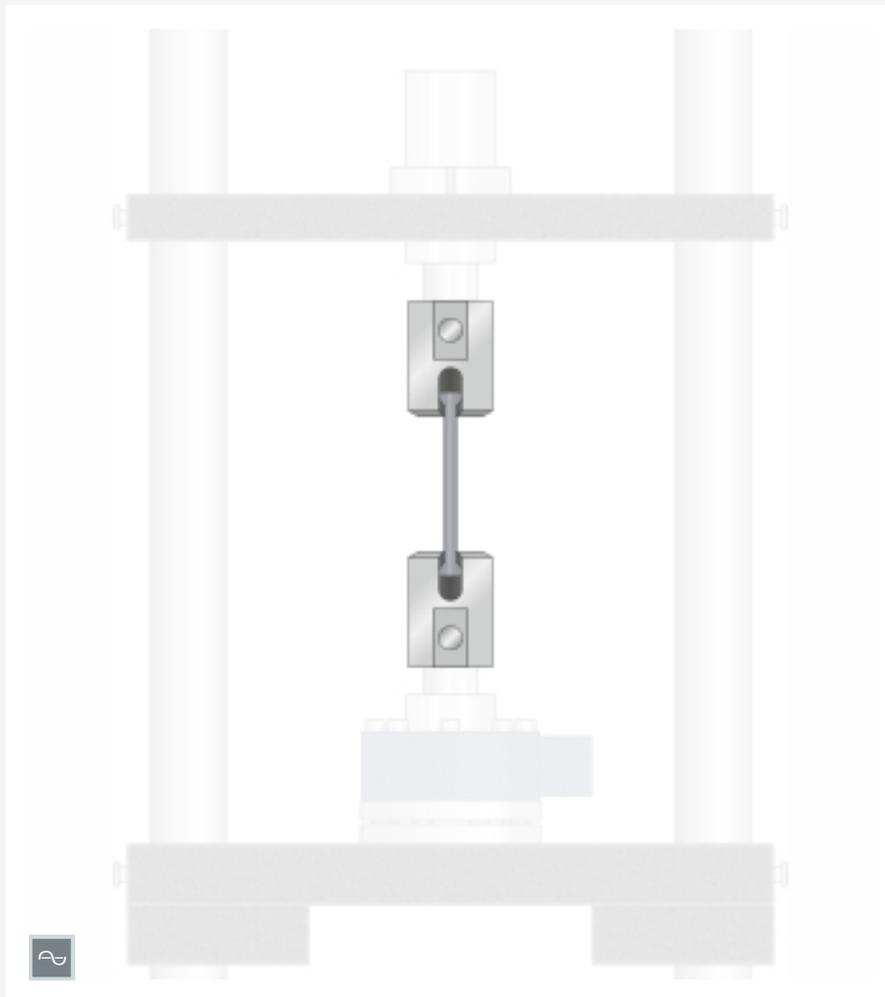


## WP 310.07

### Clamping device for tensile specimens, dumbbell-shaped



The illustration shows the accessory WP 310.07 mounted into the operating area of WP 310.

#### Description

- **easy to install clamping device**
- **tensile testing of round specimens on the WP 310 experimental unit**

This accessory for WP 310 makes it possible to carry out tensile experiments on 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 specimens have a circular cross-section and are dumbbell shaped.

The accessory contains two clamping heads with holders for the round specimens. Both clamping heads are secured to the crossbars of WP 310.

In the tensile test, 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 WP 310.13 round specimens on the WP 310 experimental unit

#### Specification

- [1] 2 clamping heads for fastening tensile round specimens on the WP 310 experimental unit
- [2] 10 steel specimens
- [3] accessory for WP 310

#### Technical data

2 clamping heads  
 ■ DxH: 55x80mm

10 tensile specimens  
 ■ specimen diameter: 8mm  
 ■ shoulder diameter: 14mm  
 ■ shoulder length: 10mm  
 ■ specimen total length: 122mm  
 ■ material: St

Dxh: 2x 55x80mm  
 Total weight: approx. 3kg

#### Scope of delivery

- 2 clamping heads
- 1 set of specimens (10 pieces)

## **WP 310.07**

### **Clamping device for tensile specimens, dumbbell-shaped**

Required accessories

WP 310                    Materials testing, 50kN

Optional accessories

WP 310.13                Set of 10 tensile specimens, dumbbell-shaped, St