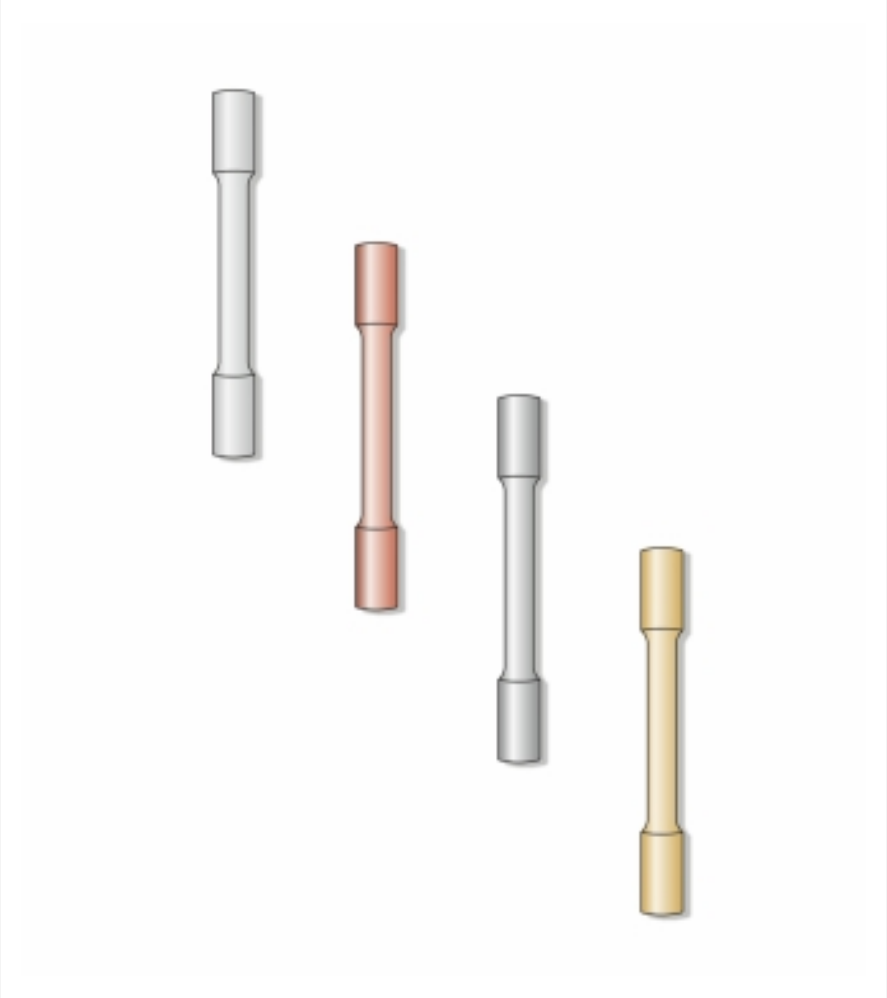
WP 130.01

Set of 4 bending and torsion specimens, Al, Cu, St, CuZn



Learning objectives/experiments

- with WP 130: multi-axial loading of specimens by combined torsion and bending
  - determination of the yield point
  - verification of the Rankine yield criterion
  - verification of the Tresca yield criterion

Specification

[1] specimens for experiments on multi-axial stress states
[2] specimens made of aluminium, copper, steel, brass
[3] accessory for WP 130 Verification of stress hypotheses

Technical data

Specimens, aluminium, copper, brass
- length: 49mm
- clamping length: 11,5mm
- clamping diameter: 12mm
- specimen diameter in measuring cross-section: 4,5mm
- cross-sectional area: 8,8mm^2

Specimen, steel
- length: 49mm
- clamping length: 11,5mm
- clamping diameter: 12mm
- specimen diameter in measuring cross-section: 4mm
- cross-sectional area: 5,5mm^2

Weight: approx. 100g

Scope of delivery

1 set of specimens (4 pieces)

Description

- **specimens made of different metals to investigate bending and torsion loading on the WP 130 experimental unit**

This set of specimens is available as an accessory for the WP 130 experimental unit.

The experimental unit WP 130 is used to verify these comparative stress hypotheses on test specimens made of various metals. For the purpose, a multi-axial stress state is produced at a point on the specimen and the resulting deformation is measured. The specimens have a ring-shaped cross-section in the area loaded.

The ends of the specimens are appropriately reinforced for clamping to the WP 130.

The set contains one specimen made of aluminium (AlMgSi0,5F22), one of copper (E-Cu), one of brass (CuZn39Pb3) and one of steel (St37).

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Required accessories

WP 130	Verification of stress hypotheses