

# PT 101

## Dimensional metrology I: training kit 1



### Learning objectives/experiments

- familiarisation with steel ruler and vernier caliper gauge
- measurement of pre-determined lengths:
  - ▶ with the steel ruler and an auxiliary stop
  - ▶ with the vernier caliper gauge
- keeping a measurement log
- estimating measurement variations
- identifying typical errors

### Specification

- [1] practice kit for dimensional metrology in the metalworking trades
- [2] measurement exercises on a stainless steel spacer plate
- [3] instructional kit complete with test pieces and measuring aids
- [4] 10 test pieces, each of different dimensions
- [5] plastic storage system to house all parts
- [6] detailed instructional material

### Technical data

Test pieces: 13 lengths measurable  
 Vernier caliper gauge: 200mm  
 Steel ruler: 300mm  
 Set square: 90°, LxW: 100x70mm

LxWxH: 500x350x110mm (storage system)  
 Weight: approx. 5kg

### Description

- **tried and tested dimensional metrology exercises**
- **several test aids and 10 test pieces**
- **comprehensive and well-structured instructional material**

All parts are clearly laid out and well protected on a plastic storage system. The storage systems are stackable, providing for space-saving storage.

The dimensional metrology practice kit is designed for practical training in the metalworking trades.

The kit offers the advantage of being ready for use immediately; it contains everything required for the exercises. The test pieces used are flat stainless steel spacer plates. They were manufactured with the accuracy of CNC parts. The kit includes ten spacer plates, all of which differ to a minor degree in length and each of which is individually marked.

### Scope of delivery

- 1 storage system with foam inlay
- 1 vernier caliper gauge
- 1 steel ruler
- 10 test pieces (spacer plates)
- 1 set square
- 1 auxiliary stop
- 1 set of instructional material