

# PT 102

## Dimensional metrology I: training kit 2



### Learning objectives/experiments

- familiarisation with vernier caliper gauge, depth caliper gauge, external micrometer and depth micrometer
- measurement of pre-determined lengths, depths and diameters
- keeping a measurement log
- estimating measurement variations
- identifying typical errors

### Specification

- [1] training kit for dimensional metrology in the metalworking trades
- [2] measurement exercises on a stainless steel bearing 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: 9 lengths, 4 depths, 4 diameters measurable  
 Vernier caliper gauge: 0...200mm  
 Pocket caliper gauge: 0...150mm  
 Depth caliper gauge: 0...150mm  
 External micrometer: 0...25mm, resolution: 0,01mm  
 Depth micrometer: 0...25mm

LxWxH: 500x350x110mm (storage system)

Weight: approx. 7kg

### 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.

This 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 stainless steel bearing plates. They were manufactured with the accuracy of CNC parts. The kit includes ten bearing plates, all of which differ to a minor degree in dimensions and each of which is individually marked.

### Scope of delivery

- 1 storage system with foam inlay
- 1 vernier caliper gauge
- 1 pocket caliper gauge
- 1 depth caliper gauge
- 1 external micrometer
- 1 depth micrometer
- 10 test pieces (bearing plates)
- 1 set of instructional material