

MG 100

Instructional kit: assembly with dowel pins



Learning objectives/experiments

- familiarisation with different types of pin and their specific applications: grooved pins, dowel pins, straight pins, tapered pins
- familiarisation with the relevant standard designations and terms, including graphical representation
- planning and execution of all steps in the workshop environment
- familiarisation with types of pinned joint
- working with fits and tolerances

Specification

- [1] set of material for workshop exercises relating to pin joints
- [2] joining flat items
- [3] joining cylindrical items
- [4] pin puller
- [5] all parts clearly laid out on a tray
- [6] multiple trays stackable

Technical data

Straight pins: $d=6, 8\text{mm}$
 Grooved pins: $d=3, 5, 8\text{mm}$
 Dowel pins: $d=5\text{mm}$
 Tapered pins: $d=6, 8\text{mm}$
 Studs: $d=8\text{mm}$

Shaft with set collar:
 shaft diameter: $d=40\text{mm}$

All parts made from steel, some with gunmetal finish

LxWxH: $500 \times 350 \times 110\text{mm}$ (tray)
 Weight: approx. 14kg

Scope of delivery

- 1 complete set of material, laid out on a tray
- 1 set of instructional material

Description

- practical workshop exercise relating to pin joints
- familiarisation with various pin types, their special features and applications

The practice kit provides the material necessary for students to systematically learn how components can be joined together in a professional way using pins. Both flat and cylindrical parts are pinned together. We recommend that the exercises are carried out in a workshop, as all preparations such as scribing, drilling, clamping, reaming and joining must be carried out in a correct and proper manner by the student.

The material is clearly laid out on a plastic tray. The well-structured instructional material outlines all the necessary technical information and provides a step-by-step guide through the exercises.