

## TZ 200.04

### Drilling jig for a casting



#### Description

- **functional drilling jig as a practice model providing an introduction to technical drawing**
- **cast part representing the workpiece**
- **introduction to simple assembly sequences**

The drilling jig forms part of the extensive GUNT course providing an introduction to technical drawing. The didactic approach involves teaching the systematic and transferable learning matter based on an operational mechanism.

TZ 200.04 comprises two elements: the actual drilling jig and a cast part representing the workpiece. All parts of the drilling jig are precision-manufactured. The surfaces of the steel parts have a gunmetal finish to prevent corrosion.

The cast part is to be drilled with four through-holes using a standard drill. It is clamped in the jig and the drill is fed to it by way of bushes.

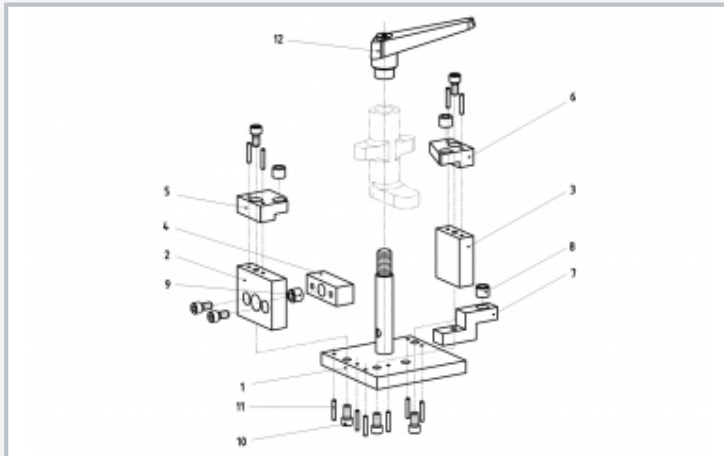
Core didactic aspects are reading and understanding technical drawings, standardised and production-oriented dimensioning of parts, sketching of suggested improvements or required parts. In addition, many other aspects can be covered with the aid of this interdisciplinary teaching model, including: jig geometry, cast parts, clamping techniques, and manufacturing technology.

#### Learning objectives/experiments

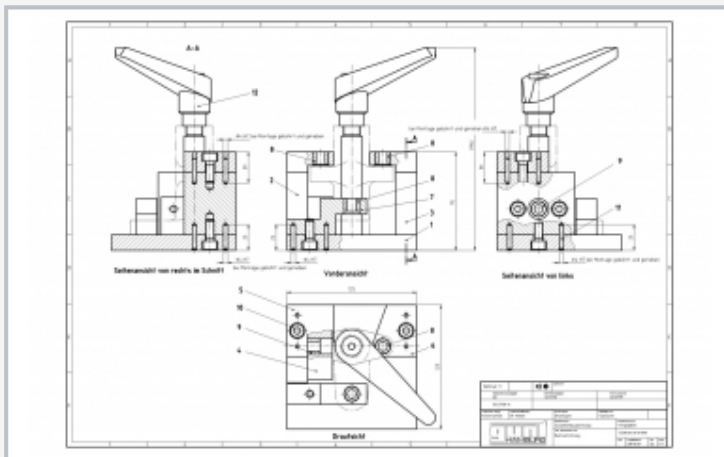
- **technical drawing**
  - ▶ familiarisation with three-dimensional views
  - ▶ production-oriented and standardised representation of components
  - ▶ surface finish and tolerance specifications
  - ▶ overview drawing, parts list
  - ▶ standard parts
  - ▶ 3D views
  - ▶ material specifications
- **technology**
  - ▶ jig and clamping techniques
  - ▶ manufacturing methods
  - ▶ work planning

# TZ 200.04

## Drilling jig for a casting



Exploded-view drawing of the drilling jig



Assembly drawing of the drilling jig



Drilling jig in use

### Specification

- [1] part of the GUNT technical drawing course
- [2] practical drilling jig for machining of a cast part
- [3] all drilling jig components made from steel, precision-manufactured, surfaces in gunmetal finish
- [4] instructional material incorporates action-oriented and interdisciplinary forms of teaching

### Technical data

LxWxH: 125x125x150mm (drilling jig)  
 LxWxH: 60x80x105mm (cast part)  
 Weight: approx. 5kg

### Scope of delivery

- 1 drilling jig
- 1 cast part
- 1 set of instructional material