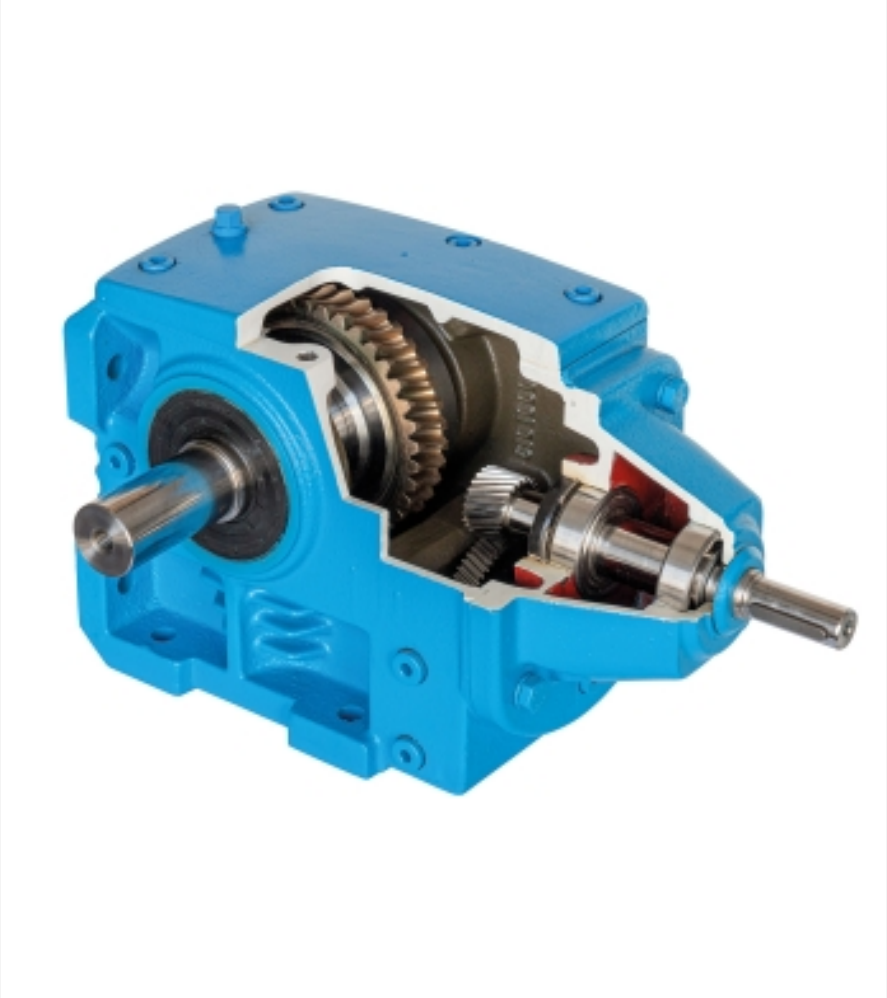
MT 110.10

Cutaway model: spur and worm gear



Learning objectives/experiments

- principle of operation and design of a spur and worm gear

Specification

[1] hand-operated cutaway model for demonstrating the function of a spur and worm gear
[2] industrial original component, fully functional cutaway model
[3] solid metal base plate, handles

Technical data

Transmission ratios
- spur gear stage: i=2,83
- worm gear stage: i=12,33
- total gear ratio: i=34,94

Spur gear stage
- pinion: number of teeth: z=24, real pitch module: m=1mm
- gear wheel: z=68, m=1mm

Worm gear stage
- worm: z=3
- worm gear wheel: z=37, m=2,7mm

LxWxH: 300x150x200mm
Weight: approx. 20kg

Scope of delivery

1 cutaway model
1 description
1 sectional view

Description

- **demonstration of a spur and worm gear and demonstration of its principle of operation**

By using cutaway models it is possible to clearly demonstrate the operational principles of complex machine elements such as a gear unit.

The cutaway model MT 110.10 shows a spur and worm gear. It is a useful addition to the assembly exercises for spur and worm gears.

In order to be able to use the cutaway models in engineering teaching, each model comes with a standards-compliant and practical drawing and a technical description.

Problems of engineering drawing, fasteners and machine parts or production and testing technology can be studied in a clear and practical manner using the cutaway models.

The cutaway models represent original components in which the active parts are clearly visible to the user while fully maintaining their mechanical functionality. Each of the cutaway models is securely mounted on a base plate, which also has handles to allow them to be carried. They are powered by hand.

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Optional accessories

051.12300	MT 123	Assembly exercise: spur and worm gear