



***A small, high accuracy machining system to mill, drill and bore.
Made in Germany!***

- ❶ Handwheel for height adjustment.
- ❷ Poly-V drive system offers 6 speeds between 280 and 2,200rpm.
- ❸ The fine step feed and the clamps are not included.
- ❹ Handwheels with zero adjustable scale (1 rev = 1.5mm, 1 division = 0.05mm).

MICRO miller FF 230

The headstock swivels through 360°, indicated on a scale.

Height is adjusted via a zero adjustable handwheel, also used as fine feed when milling (one revolution equals 1mm travel). The quill and headstock may be locked in position, essential when milling. The powerful motor effects drive via a poly-V belt, yielding high torques, especially at lower speeds. Collets of 6 - 8 and 10mm are included. The solid table is T-slotted to the MICROMOT standard of 12 x 6 x 5mm.

Other technical data:

230V. 140W. 50/60Hz. Spindle speeds of 280 - 550 - 870 - 1,200 - 1,500 and 2,200rpm. 30mm travel. Table size 270 x 80mm, column 35 x 400mm long. X-Ytravel is 170 x 65mm. Maximum height 180mm and depth 130mm. Overall height approx. 500mm. Weight approx. 17kg.

NO 24 108



See us on YouTube!



Important!

For clean milling we recommend to clamp the quill as well as the headstock onto the column. With the FF 230 this is easily done with the clamp.

Accessories for the FF 230

Fine feed for MICRO miller FF 230

Easily installed in a few seconds. The feed may be used via either the height feed (vertical) or the fine feed in the tilted position. The graduated scale may be zero reset. One revolution is equivalent to 1.5mm spindle travel (1 division = 0.05mm).

NO 24 140



Gear tooth chuck (10mm) with adapter

Industrial quality, however not as accurate as the collets. With 10mm adapter which fits into the 10mm collet. Includes the chuck key.

NO 24 110



Five piece collet set (not depicted)

Includes 1 each of 2.4 - 3 - 3.2 - 4 and 5mm, for milling cutters. Supplied in a wooden box with sliding lid.

NO 24 144

Step clamp set of steel.

2 step blocks and clamps each.

With matching slot nuts and fastening screws for T-slots as per MICROMOT standard (12 x 6 x 5mm). In wooden box with sliding lid.

NO 24 256 For work pieces up to 20mm thickness

NO 24 257 For work pieces up to 35mm thickness



Precision V-blocks

Used to clamp various work pieces.

Made from hardened steel, precision ground in pairs. Four different depths of prism incisions V, all at 90°. Size 50 x 30 x 30mm. The solid clamp and knurled knob ensure superb securing of the workpiece. Supplied in a wooden box with sliding lid.

NO 24 262 2 pieces



Precision vice PM 60

Jaw width 60mm. Clamping capacity 42mm. Total length 100mm.

NO 24 255

**Three piece centre drill set**

Made of HSS steel. DIN 333 (type A) 60°. Complete set centre drills with sizes of 2 - 2.5 and 3.15mm.

NO 24 630

**Milling cutter set (2 - 5mm)**

All cutters with 6mm shaft. Cutters of Ø 2 - 3 - 4 and 5mm. Double fluted according to DIN 327. Made of HSS-Co5. Supplied in wooden box with sliding lid.

NO 24 610

**Milling cutter set (6 - 10mm)**

4 cutters Ø 6 - 7 - 8 and 10mm. Four flute design according to DIN 844. Shafts 6 and 10mm respectively. Made of HSS-Co5. Supplied in wooden box with sliding lid.

NO 24 620

**Edge finder set**

Used for fast and accurate location of starting point of work pieces with respect to the machine spindle on milling machines. Size 6 x 6 x 50mm and 6 x 5 x 75mm. Comes in wooden box with sliding lid.

NO 24 434

**14-piece parallel supports set**

Ground in pairs For adjusting work on drilling machines, lathes and milling machines. Made of high-alloy, hardened steel (58 - 62 HRC). Parallel accuracy 0.02mm. 2 each of 8 x 10, 15, 20, 25, 30, 35 and 40mm. Length 100mm. Packed in a wooden box.

NO 24 266



Dividing attachment TA 250

For accurate machining of circular work pieces (e.g. production of gear wheels). Supplied with two dividing discs (40 and 48 teeth), enabling standard divisions of 2 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - 16 - 20 - 24 - 40 und 48. The taper of the dividing attachment is the same size as that of the main spindle of the PD 250/E lathe, thus 3 jaw chuck (NO 24 034) and 4 jaw chuck (NO 24 036) may be mounted. Horizontal fitting (e.g. on the cross-slide of the lathe) and vertical fitting (on the machine bed) are possible. With matching nuts and screws for fixation in MICROMOT standard T-slots (12 x 6 x 5mm). Supplied in a wooden box with sliding lid. The 3 jaw chuck depicted here is not included in the scope of delivery.

**NO 24 044****Self-centering 3-jaw chuck (not depicted)**

Identical to chuck of lathe PD 250/E. High quality clamping fixture as per DIN 8386, Class 1 (concentricity accuracy 0.04mm). Capacity through reversing jaws from 2 - 75mm. Suitable for PD 250/E and the dividing attachment NO 24 044.

NO 24 034