



*Light, stable and precise. 2-stage belt drive and additional electronic up to 5,000rpm. The right cutting speed for even the smallest pieces.*

## Precision lathe FD 150/E

*For face turning, longitudinal turning, boring, taper turning, slicing and drilling. Complete with 3-jaw chuck and live centre.*



**Centre distance 150mm. Swing 55mm. Height over cross slide 33mm.**

**Machine bed** with dovetail guides of continuous casting aluminium.

Die-cast aluminium **spindle headstock**. With quiet special DC motor, 2-stage belt drive and additional electronic speed control for high engine power at low speeds for larger work pieces and for the appropriate cutting speed, even for the smallest pieces. Main switch with emergency stop function and restart protection. Precision bearing mounted main spindle with continuous 8.5mm bore. Chuck fit for standard ER 11 type collets.

**Three-jaw chuck**, self-centering (inside jaws 1 – 20mm), outside jaws 20 – 50mm).

Die-cast aluminium **tailstock** with spindle and live centre (fitting MK 0/ short).

**Support:** To be shifted manually on the bed and clamped with lever. Rotating tool post for turning steels 6 x 6mm.

Processing via top slide (60mm, travel distance Z) and cross slide (40mm, travel distance X). The angle adjustment of the upper carriage makes it possible to turn tapers up to +/- 45°.

**Handwheels** with zero adjustable scale ring (1 division = 0.05mm, 1 revolution = 1mm).

### **Other technical data:**

230V. 50/60Hz. Distance between centres 150mm. Swing 55mm. Height over cross slide 33mm. Cross slide travel (X) 40mm, top slide travel (Z) 60mm. Steel tool post for turning steels 6 x 6mm. Spindle bore 8.5mm. 2-stage belt drive with electronic speed control: Stage 1 = 800 – 2,800rpm. Stage 2 = 1,500 – 5,000rpm. Dimensions approx. 360 x 150 x 150mm. Weight 4.5kg. Insulated to class 1.

**NO 24 150**

speed control enable spindle speeds  
Made in Europe.

### 6-piece turning tool set. Made of high-quality cobalt HSS steel. Ground.



One each boring, roughing out, parting, finishing, right and left cutter. Size 6 x 6 x 65mm. For FD 150/E, supplied in wooden box.

**NO 24 524** 6 pieces

### Drill chuck. Capacity 0.5 – 6.5mm.



Industrial quality with high concentricity (allowed up to 10,000rpm). Complete with arbour B 10 x MK 0/short. For the tailstock of the FD 150/E.

**NO 24 152**

### Multiple range standard ER 11 type collets (DIN ISO 15488)



Offering high concentricity. May be reduced up to 0.5mm below their nominal diameter (intermediate sizes not required). D = 11.5mm, L = 18mm. One each of 2 – 2.5 – 3 – 4 – 5 – 6 and 7mm are included. With clamping nut M 16 x 1. Suitable for the main spindle of the FD 150/E. Supplied in a wooden box.

**NO 24 154** 7 pieces

### Chip collecting tray with splash guard for the FD 150/E

Of 1.5mm thick sheet steel, powder-coated. Bevelled edges at the front and back enable easy cleaning. Pre-drilled mounting holes for the secure stability of the FD 150/E. L 400 x W 165 x H 140mm. The lathe depicted here is not included in the scope of delivery.

**NO 24 156**



## Drill sharpener BSG 220

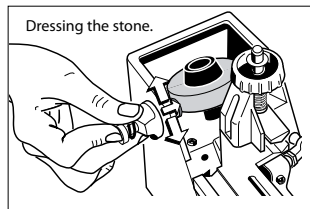
Easy sharpening of drill bits from 3 to 13mm diameter, standard angle of 118°.



#### Note:

Operating the Drill sharpener BSG 220 is quite simple. Also untrained users will be able to re-sharpen spiral drills according to DIN. In order to obtain satisfactory results though, it is important to study the product manual attentively before working with this machine. Starting without reading these relevant instructions, one will not be able to achieve the expected precision.

#### The sharpening operation is controlled exactly by means of the movable carriage.



This moves from left to right and also rotates the drill bit on its own axis. This operation yields the correct relief angle. The carriage is fitted with a feed screw for fine feed. A dressing stone, ensuring a sharp cutting surface, is also fitted.

#### Other technical data:

230V, 85W. Corundum grinding disc size 50 x 13mm. ABS housing with fixing holes. Weight 1.7kg. An easy to understand operating manual and replacement disc accompany the unit. For further spare discs see page 38.

**NO 21 200**

### Adapters for sharpening of small drill bits

These adapters extend the BSG 220's range to cover 1.5 – 3mm. One each adapter for sizes 1.5 – 1.6 – 2 – 2.4 – 2.5 and 3mm. Neatly packed in a wooden box with sliding lid.

**NO 21 232**



**Nearly all accessories are supplied in wooden boxes. For proper and value preserving storage!**



**Radius cutting attachment**

Is mounted on the cross slide in place of the tool holder. For producing convex and concave shapes, for turning radii or 3/4 spheres with radii of 32mm max. Height adjustable tool holder (boring tool tip adjustable from 30 through 45mm above cross slide) for use with FD 150/E, PD 250/E, PD 400 and older PROXXON lathes. Dimensions: base plate 67 x 50mm, height 55mm. Including finishing cutter 8 x 8 x 80mm. In wooden box with sliding lid.  
**NO 24 062**

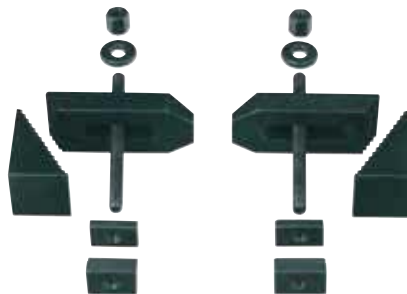


**Tool holder for rotary tools.**  
**For use on lathe machines.**



**Made of steel with standard 20mm MICROMOT collar size.**  
For precise clamping of rotary tool IBS/E or LBS/E in the tool post of the lathe. Shaft 8 x 10mm. Total length 65mm.  
**NO 24 098**

**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.  
For work pieces up to 20mm thickness  
**NO 24 256**  
For work pieces up to 35mm thickness  
**NO 24 257**

**Die holder for round dies**



**For threads M 3 - 4 - 5 - 6 - 8 and 10.**  
With holder Ø 10mm for mounting in the tailstock drill chuck of the lathe. The holder is held by hand while cutting the threads. Neatly packed in wooden box with sliding lid.  
**NO 24 082**

**Precision-milled steel machine vices**  
Perfectly rectangular. To be placed sideways and on the end face. With matching slot nuts and fastening screws.  
Supplied in wooden box with sliding lid.

**Precision vice PM 40**



Jaw width of 46mm. Clamping capacity 34mm. Total length 70mm.  
**NO 24 260**

**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

**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 0.002mm. 2 each of 8 x 10, 15, 20, 25, 30, 35 and 40mm. Length 100mm. Packed in a wooden box.

**NO 24 266**

**Precision vice PM 60**



Jaw width 60mm. Clamping capacity 42mm. Total length 100mm.  
**NO 24 255**

### 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. Comes 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. Comes in wooden box with sliding lid.  
**NO 24 620**



### 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**

### 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**

### Parting tool holder and tool

Used in the PD 400 quick-change system. Used to part stock and cut slots. The 12 x 3 x 85mm HSS tool contains cobalt.



**NO 24 417**

### Spare tool for parting tool holder

As described above.

**NO 24 554**

### Cutting tools of high quality cobalt HSS steel, ground.

#### Five piece set

One each roughing out, parting, finishing cut, left and right cutter. Comes in wooden box with sliding lid.



8 x 8 x 80mm (for PD 230/E and PD 250/E)

**NO 24 530**

10 x 10 x 80mm (for PD 400)

**NO 24 550**

#### Three piece thread cutting set

One cutter for external thread (ground to 60°, metric) one for internal thread, one general cutting. Comes in wooden box with sliding lid.



8 x 8 x 80mm (for PD 230/E and PD 250/E)

**NO 24 540**

10 x 10 x 80mm (for PD 400)

**NO 24 552**

### Cutting tool set for precision lathe FD 150/E.

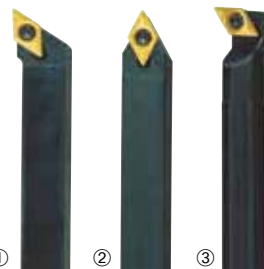
Made of high-quality cobalt HSS steel. Ground, 6-piece.



One each boring, roughing out, parting, finishing, right and left cutter. Size 6 x 6 x 65mm. For FD 150/E. Comes in wooden box with sliding lid.

**NO 24 524** 6 pieces

### Cutter set with tungsten inserts for PD 230/E, PD 250/E and PD 400



Three holders (90mm long)

① for roughing out;

② for longitudinal work;

③ for 90mm boring bar, holes from 12mm. Standard tungsten inserts, 55°, plated (commercially available version). Three additional inserts securing screw and key TX 8 are included.

**NO 24 555** 8 x 8mm

(for PD 230/E and PD 250/E)

**NO 24 556** 10 x 10mm

(for PD 400)

#### Tungsten disposable tips

For the holders as described above.

**NO 24 557** Ten piece set.

### HSS boring tool set, 6 pieces



One each cutter for 60 degree (metric) and 55 degree (Whitworth) inside threads, 1.3mm – 2.65mm and 4mm. Shaft of Ø 6mm. Length 95mm. The cutters are held by a tool holder (8 x 8mm) that mounts to the tool post of either the PD 230/E, PD 250/E or PD 400.

Comes in wooden box with sliding lid.

**NO 24 520**