

## MICRO woodturning lathe DB 250

*Turning in miniature is a pleasing hobby. One can make glasses, cups, saucers, vases and columns for a doll house. In model trains, one can make lighting*

The electronic speed control assists in the lower range in a 'semi-automated' painting process.



*masts, windows, tanks. Limbs for marionettes and hundreds of classical miniature turning tasks may be carried out with ease.*

### Technical data:

Centre distance of 250mm, 40mm swing. 25mm swing over support. Motor 220 – 240V, 150W, 50/60Hz. Variable speed control covering between 1,000 and 5,000rpm. Headstock spindle bore of 10mm. Tail-stock travel 20mm.

Includes 6 collets (2 – 3 – 4 – 6 – 8 – 10mm), drive centre, live centre and face plate.

**NO 27 020**



Work pieces are secured by means of collets (1 each of 2 – 3 – 4 – 6 – 8 and 10mm are included).

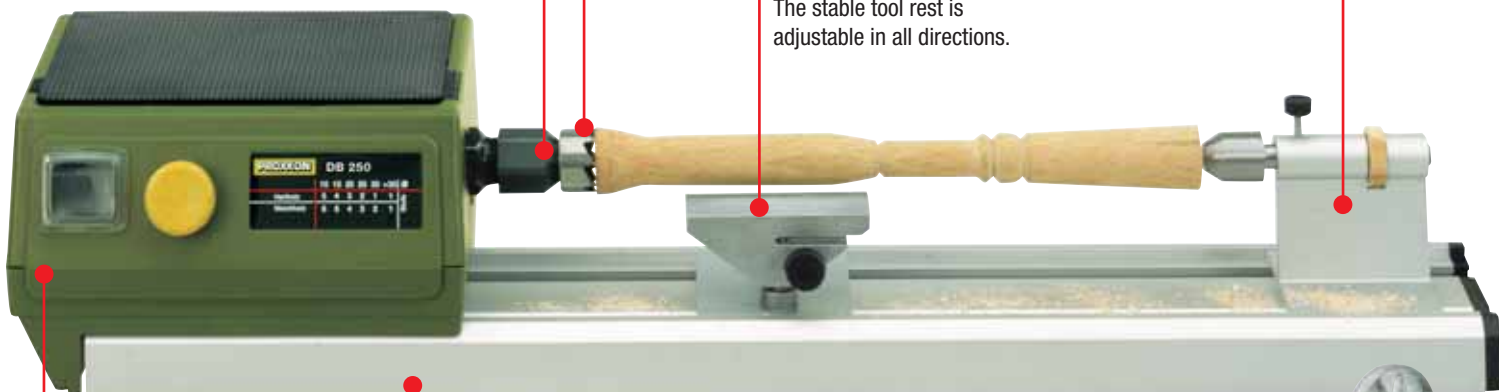


Ball bearing spindle is bored through at 10mm. For series production of small parts.

Square carrier with back centre and 10mm shaft.

Tailstock with quill travel.

The stable tool rest is adjustable in all directions.



Powerful drive motor with speed control between 1,000 and 5,000rpm.

The bed is made from stable, thick-walled aluminium profile.

A face plate for turning larger items is included.



### Five piece HSS chisel set

Highest quality set with the most frequently used chisels: tube chisel, flat chisel, pointed chisel, anvil chisel and finishing chisel. Neatly packed in a wooden box.

**NO 27 023**



### Drill chuck with sliding sleeve for the tailstock of the DB 250

Clamps up to 5.0mm. Is inserted on the spot of the rotating back centre. The feed movement results from sliding the complete tailstock.

**NO 27 028**



### Independent four jaw chuck for the DB 250

With individually adjustable jaws. Used to clamp asymmetrical pieces such as rectangles. The reversible jaws clamp from 1.5 – 35mm (inside) and from 14 - 67mm (outside). The DB 250 headstock spindle of thread M16 x 1 screws directly into the chuck.

**NO 27 024**



### Three jaw chuck for the lathe DB 250

Used for concentric clamping. Made from die-cast zinc and offering 1.5 to 32mm and 12 to 65mm when reversing the jaws. The chuck has a M16 x 1 thread for fitting directly to the DB 250 headstock spindle.

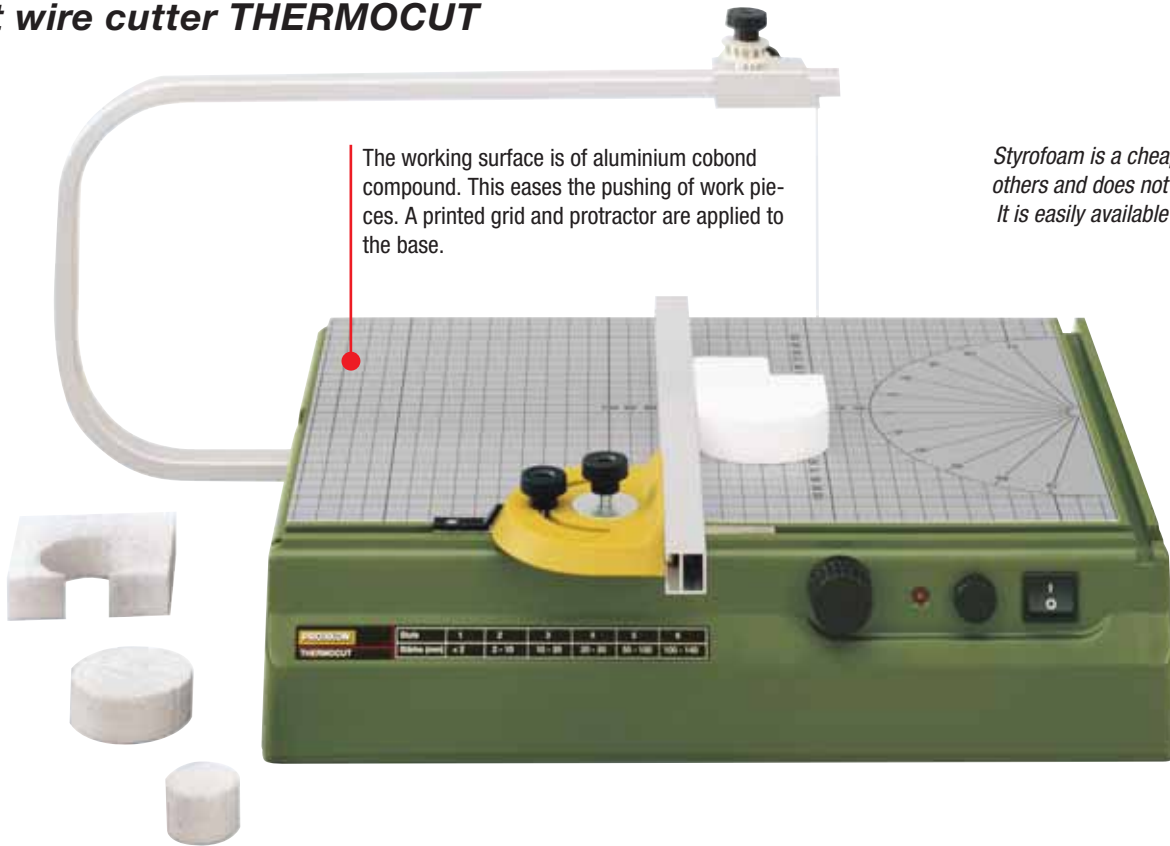
**NO 27 026**





*Used to cut styrofoam and thermoplastic materials, both freehand and with stencils.*

## Hot wire cutter THERMOCUT



**Note:**

*Styrofoam is a cheap material compared to others and does not harm the environment. It is easily available in art, craft, hobby and similar shops.*



*Ideal for architectural models, designers, decorators, artists, teaching too, prototypes as well as classical railroad, plane and boat model building.*

**Note:**

*The unit's double wound transformer and insulation to class 2 ensure the cutter is absolutely safe. The cutting wire operates at 10V, 1A.*

The large base with 390 x 280mm table with surface of aluminium cobond compound ensures smooth and easy movement of the workpiece. The printed grid and protractor ease division and cutting. The solid aluminium overarm has a 350mm throat and offers 140mm capacity in height. The holder and wire coil (30m, 0.2mm diameter is included) may be shifted along the overarm to enable mitre cutting. A LED indicates operation and prevents burnt fingers (the cutting wire heats to maximum in less than 1 second).

**Note:**

*The correct temperature, being material type and thickness dependent, is easily learnt. Optimum profiles are cut at lower temperatures and cutting force.*

**Other technical data:**

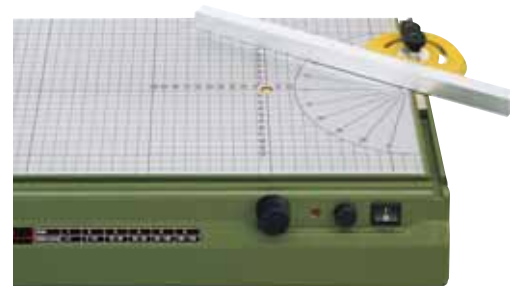
220 – 240V, 50/60Hz. Transformer secondary max. 10V, 1A. Cutting wire temperature with 0.2mm diameter is variable between approx. 100 and 200 °C. Weight approx. 3kg. Insulated to class 2 requirements.

NO 27 080

**Spare cutting wire**

Used on the THERMOCUT and other similar units. Made of NiCr 8020. Spool of 30m x 0.2mm.

NO 28 080



Double function fence with lockable feed bar (German Patent 100 00 102.5).



Crosscuts are achieved by means of a simple yet efficient solution: secure drawing-pin to table by means of a tape, it serves as a fixed centre.

## Bench circular saw KS 230

**The 58mm diameter super-cut blade cuts soft woods up to 8mm.**

The 85W VDE tested motor is quiet, operates off 220 - 240V and has a prolonged life expectancy. Cutting performance: in wood up to 8mm, plas-tics (Pertinax too) to approx. 3mm, non-ferrous metals to approx. 1.5mm. Even fibreglass reinforced PC cards could be cut with the tungsten blade. The side door allows easy sawdust removal. Overall size approx. 240 x 180 x 80mm. Weight approx. 1.8kg.

**NO 27 006**

### Important!

Power transmission by toothed belt via ball bearings, housed in sturdy casing, ensures the right blade speed for the job (approx. 5,000rpm) with a doubling of torque (approx.). Above all, it ensures good cutting depth.



**Diamond blade.** 50mm diameter (10mm bore). With 0,5mm layer of class 'D107' diamond for cutting ceramics, as well as fibreglass sheets. Total thickness 0.7mm.  
**NO 28 012**

### Note:

*The larger version of the circular saw KS 230 (model FKS/E) is described on page 38.*

Graduated mitre stop.

Machined, die-cast aluminium table of 160 x 160mm.

Quiet, high performance VDE approved motor for prolonged use.

Base of ABS with a sawdust door on the right.

### Crosscut 'super-cut' blade



58mm diameter (10mm bore). 80 alternately set teeth. Ideal for hard and soft wood as well as plastic and Pertinax. For fast, clean cuts. Teeth are individually set and sharpened. Superior cutting power!

**NO 28 014**

### Solid carbide saw blade



50mm diameter (10mm bore) 0.5mm thick. Fine toothed: ideal for cutting fibreglass sheets up to 3mm, non-ferrous metals, duro-plastics and other 'difficult' materials.

**NO 28 011**

### HSS saw blade



50mm diameter (10 mm bore), fine teeth. Designed for precision cutting.

**NO 28 020**

### Tungsten tipped saw blades



50mm  $\varnothing$  x 1.1mm (10mm bore). 10 teeth. Used to cut hard and soft woods, PC cards, PERTINAX and aluminium.

**NO 28 016**

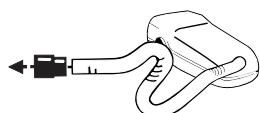
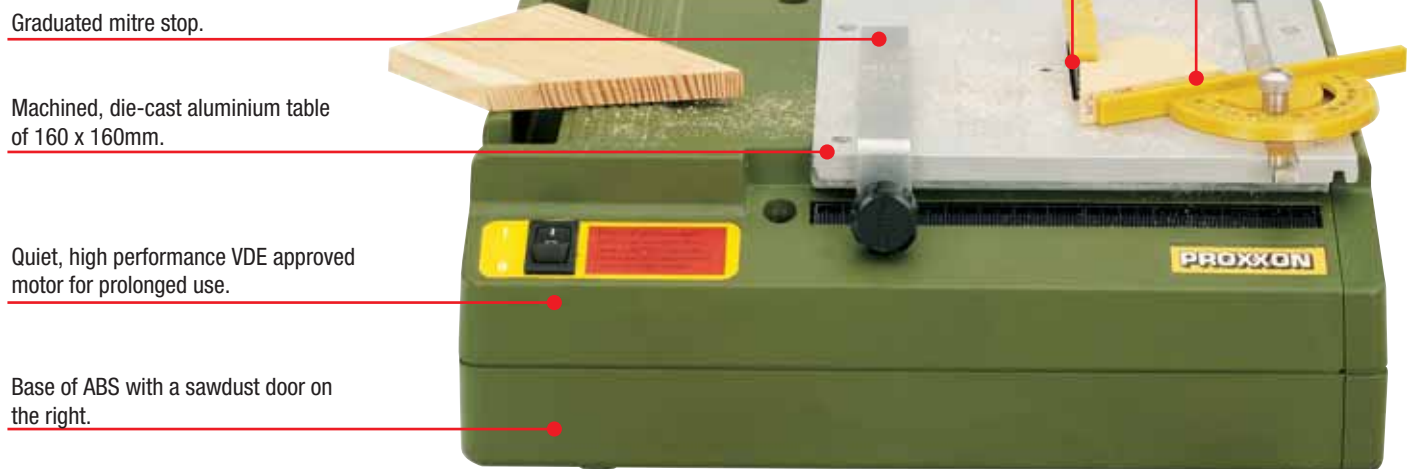


50mm  $\varnothing$  x 1,1mm (10mm bore). 20 teeth. For extremely clean cuts of balsa, plywood. Can also be used for cutting PC cards and POLYCARBONATE.

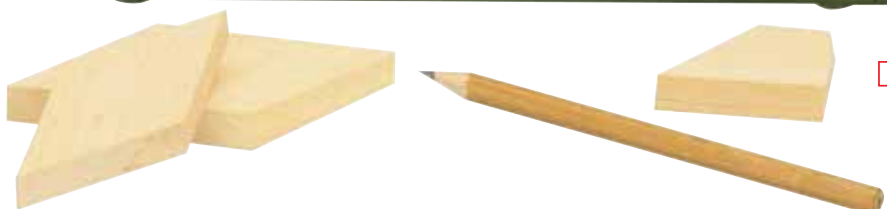
**NO 28 017**

Super-cut blade 58mm diameter, 80 teeth, individually set and sharpened, is included.

Adjustable fence with scale.



*Very important when sawing: use our vacuum cleaner adaptor for a cleaner work environment.*



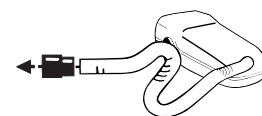


*Cuts aluminium, wood, PC cards and plastics with standard fret saw blades. With electronically controllable stroke rate.*

## Scroll saw DS 230/E

Adjustable head (patent EP 09783341) offers many advantages (see description below).  
DM/040788.

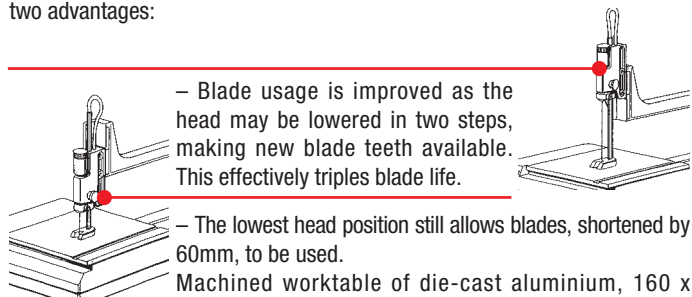
**Note:**  
Please also see the scroll saw DSH/E (page 36).  
The new blade clamping system enables the use of the saw blades (without pin) described below.



Use the vacuum cleaner adaptor to keep your work area cleaner.

**The ideal machine for that delicate project: model building, toy making and precision work.**

Cuts soft wood up to 40mm, hard wood up to approx. 10mm, plastic (including PC cards) up to approx. 4mm and non-ferrous metals up to 2mm. Very stable ribbed die-cast aluminium saw frame with 300mm throat. Blade guide with integrated blower. Height adjustable head (3 positions) offering two advantages:



– Blade usage is improved as the head may be lowered in two steps, making new blade teeth available. This effectively triples blade life.

– The lowest head position still allows blades, shortened by 60mm, to be used.

Machined worktable of die-cast aluminium, 160 x 160mm. ABS plastic body with side sliding panel for removal of saw dust. VDE approved 220 – 240V motor (85W) for pro-longed, low noise performance. Quiet, wear-resistant toothed belt drive running in a ball bearing. Electronically controllable stroke rate from approx. 150 – 2,500/min. Adjustable mitre fence and stop with scale.

NO 27 088

### Super-Cut scroll saw blades

High quality steel for extended use and prolonged cutting capacity in hard and soft woods, plastic, Perspex and soft non-ferrous metal. Standard version (without pin).

**Hard and soft woods, plastic, Perspex and soft non-ferrous metal.**

#### Coarse-toothed blades (14 teeth per 25mm):

NO 28 110 130 x 1.50 x 0.48mm 6 pieces

#### Standard-toothed blades (17 teeth per 25mm):

NO 28 108 130 x 1.20 x 0.38 mm 6 pieces

#### Fine-toothed blades (25 teeth per 25mm):

NO 28 107 130 x 0,77 x 0.30 mm 6 pieces

#### Hard materials such as steel and PERTINAX.

#### Fine-toothed blades (28 teeth per 25mm):

NO 28 104 130 x 1.10 x 0.50 mm 6 pieces

#### Very fine-toothed blades (41 teeth per 25mm):

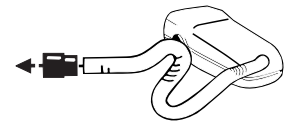
NO 28 106 130 x 0.74 x 0.36 mm 6 pieces

*For 50mm discs and brushes.*  
*With electronic speed control from 8 to 24m/sec.*

## Grinding and polishing machine SP/E



*The dust collector and vacuum cleaner adaptor can be used.*



**The slim housing facilitates the grinding of long workpieces and includes an adapter to connect a vacuum cleaner to the unit.**

The tool rests and eye guards are both adjustable. A spindle lock eases the changing of wheels and discs. Supplied with a 50 x 13mm corundum (grade N) and silicon carbide (soft compound) wheel for general grinding/sharpening and hard materials respectively. The right hand spindle accepts the polishing arbor, which is supplied as standard equipment.



### Technical data:

220 - 240 V. 3,000 - 9,000rpm. Wheels 50 x 13 x 12.7mm. Grinding speed 8 - 24m/sec. Weight approx. 1,200g. Size approx. 250 x 130 x 100mm.

**NO 28 030**

### Polishing set

Steel wire brush for de-rusting and cleaning steel and non-ferrous metals. Brass wire brush to polish non-ferrous metals and precious metals. Felt wheel is used on painted surfaces and the chamois and cotton wheels provide a high gloss finish on non-ferrous metals and precious metals.



**NO 28 312** Complete set

### Spare discs for the SP/E and BSG 220 (50 x 13mm)

**Corundum** (grade N) with 12.7mm bore

**NO 28 308**

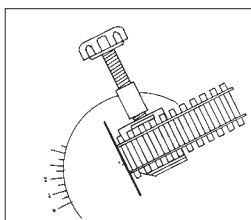
**Silicon carbide** with 12.7mm bore. Soft compound for very hard materials.

**NO 28 310**

## Cut off saw KG 50

*Accurately cuts small items of metal, wood and plastic.*

Table moveable through 45°, allowing mitre cuts. Workpiece is fastened tightly and accurately by means of the integrated clamping device. Clamp jaws 27mm wide and maximum workpiece diameter 20mm. Depth of cut to 13mm. A special slot is provided to clamp HO model tracks. The fence accepts lengths up to 140mm. Five ceramic cutting discs 50 x 1.0 x 10mm are also included suitable for cutting steel, non-ferrous metals as well as wooden or plastic rods.



**Technical Data:** 220 - 240V. 85W. 50/60Hz. Peripheral speed 20m/sec. Weight approx. 1.5kg.

**NO 27 150**

### Replacement cutting discs

Made of ceramic compound: 50% aluminium oxide and 50% silicon carbide. Suitable for cutting steel, non-ferrous metal as well as small wood and ceramic bars.

**NO 28 152**





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

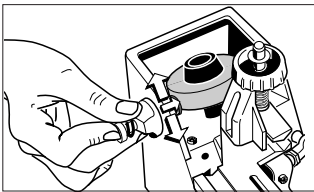
## Drill sharpener BSG 220



**Note:**

The Proxxon Drill Sharpener comes complete with full instructions to ensure even a novice can sharpen drill bits. These instructions will help get good results every time.

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:**

Corundum grinding disc size 50 x 13mm. 220 -240V, 85W. 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 32.

**NO 21 200**

### Adaptors for sharpening of small drill bits

These adaptors extend the BSG 220's range to cover 1.5 - 3mm. One each adaptor for sizes 1.5 - 1.6 - 2.0 - 2.4 - 2.5 and 3.0mm. Neatly packed in a wooden box with sliding lid.



**NO 21 232**

## Vacuum cleaner controller AS/E

*Switches your dust extractor or vacuum cleaner on and off.*

The controller supplies the power tool (either portable or stationary) and vacuum cleaner with power. It switches on the vacuum cleaner while the power tool is operational. Once the power tool is switched off, a 3 second run-down period ensures the workplace is properly vacuumed. Additional

switch positions switch the vacuum cleaner on or off permanently. Usable with power tools of 25 - 500W and vacuum cleaners of up to 1,500W.

**NO 27 032**



**Tip:**  
Using a wooden block can easily position your extraction to where you are working.

## Bench drill machine TBM 220



**Note:**  
The optional MICRO compound table to shown is described on page 18.



Fully adjustable depth gauge.

Machine vice MS 4 made of die-cast zinc is an invaluable accessory and is described in detail on page 19.

**Machined worktop of high quality, ribbed die-cast aluminium (220 x 120mm). Adjustable fence with scale.** Solid, hard-chromed steel column, 340mm high, 20mm diameter. Super stable die-cast head with VDE approved 220 - 240V motor. Very quiet and of long life expectancy type. Power transmission by aluminium pulleys and flat belt. Three spindle speeds (triple torque at low speeds). Feed lever with adjustable depth scale.

### Technical data:

220 – 240V 85W. 50 – 60Hz. Spindle speeds of 1,800, 4,700 and 8,500 rpm. Extremely high rotational accuracy, 30mm feed. Throat depth (column to drill spindle) 140mm. Six triple slit precision collets for shaft sizes 1.0 – 1.5 – 2.0 – 2.4 – 3.0 – 3.2mm are included. 3/8" thread. Weight 3.3kg.

**NO 28 128**

### RÖHM-Chuck

For drill shank sizes 0.5 to 6.0mm. Max. speed 10,000rpm. Industrial quality with extra high speed accuracy. With 3/8" thread for MICROMOT bench drill TBM 220.

**NO 28 122**



### Dividing head for MICRO miller MF 70 and MICRO compound table KT 70

This accessory is used to drill off-set holes, holes with equal spacing as well as milling key surfaces in 4 sided, 6 sided, etc materials. Graduated on the base. The chuck jaws may be reversed to yield 1.5 - 32mm (inside) and 12 - 65mm (outside) and bore of 11mm. This through hole allows long items to be clamped vertically in the chuck. Mounting holes to secure the unit vertically or horizontally are provided. T-nuts, complying with the MICROMOT norm, as well as mounting screws are included for mounting on the MICRO miller MF 70 and MICRO compound table KT 70. Size 72 x 64 x 38mm. Supplied in wooden box with sliding lid.



**NO 24 264**



*Small and beautiful: the accurate miller for lab technicians, optician, jeweller, electronic/model builder.*

## MICRO miller MF 70

### Tungsten milling cutters

Two flute cutters and a fishtail profile ensure cutting to the centre, allowing boring. Usable on grey cast iron, hardened cast iron, steel, cast steel, brass, aluminium, glass even plastics and carbon fibre. One each of 1.0 – 2.0 and 3.0mm. 3.0mm shaft diameter. Can also be ordered separately.



**NO 27 116**      3 pieces

Now supplied complete with stepped clamp blocks of steel. These are shown on page 18 (offered separately).

Table of stable aluminium. Both axes are fitted with adjustable dovetail slides.

MICROMOT steel collets, triple slit and hardened, from 1.0 to 3.2mm.

### For work with extremely small cutters.

Base of grey cast iron. Including both vertical column and compound table of treated, quality aluminium. All axes are play-free and have adjustable gibs. Headstock of die-cast aluminium contains the 24 pole special (balanced) motor is super stable even at high operating speeds. This stability facilitates the use of the finest cutters. The triple slit, hardened steel MICROMOT collets cover 1.0 – 1.5 – 2.0 – 2.35 – 3.0 – 3.2mm. The table is fitted with 3 T-slots of the 12 x 6 x 5mm MICROMOT norm. An adjustable ruler scale eases the positioning of the workpiece. All handwheels are zero adjustable with 1 revolution = 1.0mm, 1 division = 0.05mm.

#### Technical data:

220 - 240V, 100W, 50/60Hz. Spindle speeds 5,000 - 20,000rpm. Table 200 x 70mm with X- Y travel of 134 and 46mm respectively, with vertical travel 80mm. Footprint size 130 x 225mm and overall height 370mm. Weight approx. 7kg. The clamping blocks depicted are included too, but not the workpiece!

**NO 27 110**

Handwheels with zero adjustable scales, 1 revolution = 1.0mm, 1 division = 0.05mm.



Continuously variable speed from 5,000 – 20,000rpm, perfect for even the smallest milling cutter.

Cutter clamping in MICROMOT system collets.



Stable cast iron base.

## Precision steel vise PM 40

**Milled from Steel for precision. Completely angular.**

Jaw width 46mm, clamping capacity 34mm. Total length 70mm. Especially suited for filigree and accurate working with the MICRO miller MF 70 or the compound table KT 70. Sliding blocks and fixing screws included. Comes in a wooden box.

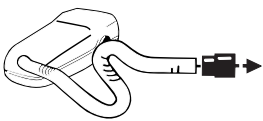


**NO 24 260**



*Super-quiet! With electronic speed control from 200 – 1,400 strokes per minute. Smooth cuts without the need to finish.*

**Scroll saw  
DSH/E**



The DSH/E and DSH are fitted with a vacuum system adaptor, used to keep the working area dust-free.



Simple quick release lever for quick blade changes (essential when cutting internally).

**Note:**  
Scroll saw DS 230/E, which is the ideal machine for delicate projects, is offered on page 31.

**The perfect machine model building, toy repairs, puzzles, architectural work, prototypes and for tool and die making. scroll saw blades without pin ends.**

Super cutting capacity (wood 50mm, plastics 30mm, non-ferrous metals 10mm) and yet runs with only a hum. Perspex, PC cards, foam, rubber, leather and cork are easily cut.

Free moving blade chucks accept both pin and plain end blades. The slender overarm facilitates a clear view of the workpiece. The photo (fig. 1) shows the superb quick change lever, used especially with internal cuts.

Air blower with adjustable nozzle provides clear visibility of workpiece and cutting line. Machine base of cast iron with rubber feet for vibration-free operation and stability, may also be screwed down. The sturdy table 360 x 270mm tilts up to 45° for mitre sawing (fig. 2). Channel for the connection of a vacuum cleaner. Complete with 5 each coarse and fine blades.

**Other technical data:**

220 - 240V. 50/60Hz. The special motor draws 200W and the electronic speed control yields constant speeds under load from 200 to 1,400/min. Stroke 19mm. 400mm throat with 50mm maximum depth of cut or 25mm at 45° table tilt. Length 53cm, height 30cm, width 27cm. Weight approx. 20kg.

**NO 27 090**

**2-speed scroll saw DSH**



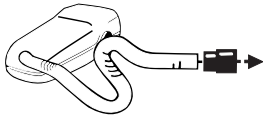
Technology, range, cutting power and other properties as described on the left for the DSH/E, but without continuous number of strokes adjustment and without a quick action saw blade arrangement (chuck lever, T-screw) on the overarm. A somewhat narrower table (360 x 180mm, instead of 360 x 270mm).

**Technical data:**

220 – 240 V. Powerful brushless 2-speed motor (205 W), stroke 990 or 1,500/minute, to choice. Stroke 19mm. 400mm throat with 50mm maximum depth of cut or 25mm at 45° table tilt. Length 53cm, height 30cm, width 27cm. Weight approx. 20kg.

**NO 28 092**

**MICRO shaper MT 300**



The MT 300 is fitted with a dust collection channel and vacuum adaptor.



**For standard scroll saw blades with pin ends as well as for**

**Standard scroll saw blades with pin ends. 127mm:**



**Coarse pin end blades (10 TPI):** ideal for cutting soft and hard wood, plastics as well as soft and above all also thicker material.

**NO 28 740** 127 x 2.61 x 0.51 mm 6 blades

**Fine pin end blades (18 TPI):** ideal for cutting thin materials, soft and hard wood as well as plastics.

**NO 28 742** 127 x 1.86 x 0.24 mm 6 blades

**Very fine pin end blades (25 TPI):** ideal for cutting non-ferrous metals, PC cards, plastics, perspex and wood.

**NO 28 744** 127 x 1.76 x 0.25 mm 6 blades

**'Super-cut' scroll saw blades without pins. 130mm.**



**For cutting soft and hard woods, plastics, Perspex, soft non-ferrous metals:**

**Coarse-toothed blades (14 TPI):**

**NO 28 110** 130 x 1.50 x 0.48 mm 6 blades

**Normal toothed blades, (17 TPI):**

**NO 28 108** 130 x 1.20 x 0.38 mm 6 blades

**Fine-toothed blades (25 TPI):**

**NO 28 107** 130 x 0.77 x 0.30 mm 6 blades

**For hard metals like iron or PERTINAX:**

**Fine toothed blades (28 TPI):**

**NO 28 104** 130 x 1.10 x 0.50 mm 6 blades

**Extremely fine toothed blades (41 TPI):**

**NO 28 106** 130 x 0.74 x 0.36 mm 6 blades

**Spiral blade. 125mm long with plain ends (without pins).**



These blades cut all directions and obviate the turning of the workpiece (advantageous, especially with bigger workpieces). A 1.5 mm hole is required. Ideal for plastic, hard and soft woods.

**NO 28 746** 125 x 1.2 mm 6 blades

**Used to profile, slot, route, chamfer, trim and cut.**

Also used for precision details on sides and long sections, e.g. doors, flaps and housing components.

Powerful, dust protected motor with toothed belt drive. Double ball bearing spindle. Cutters fitted in triple slit collets (1 each 2.4 - 3.0 and 3.2mm) are supplied.

Cutter height adjusted by means of handwheel, zero adjustable with 1 revolution = 1.0mm and 1 division = 0.05mm. Stable aluminium table with mitre gauge and parallel fence, as well as cutter guard and hold-down. Housing of ABS. Adaptor for vacuum cleaner, fits standard household appliances.

**Technical data:**

220 – 240V. 100W. 50/60Hz, 25,000rpm. Table 300 x 150mm. Weight approx. 2.0kg.

**NO 27 050**

**Wood router cutter set, 10 pieces**

A set with one each of the single cutters, neatly arranged in a wooden box.

**NO 29 020**



**Note:**

These wood router cutters can be ordered separately. See the description on page 27.

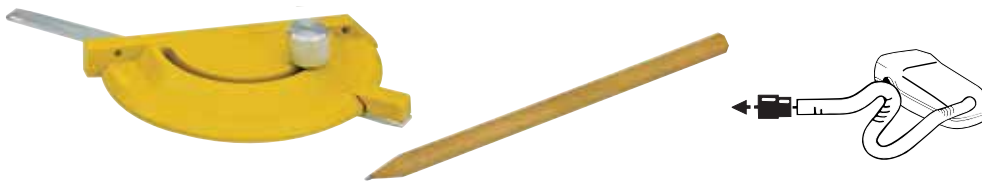


Accurate, straight cuts are easy. Standard with height adjustment and 45° tilting saw blade.

## Table saw FKS/E



**Note:**  
The smaller bench circular saw KS 230 is described on page 30.



The FKS/E is fitted with a dust extractor adaptor, to keep the working area dust-free.

The ideal machine for straight, mitre and compound cuts. Usable on all wood types, non-ferrous metals, plastics (ABS, perspex, PC cards, foam) as well as rubber, cork and many other materials.

Even the smallest items may be cut cleanly, obviating subsequent finishing: a table indicates the recommended speeds for various materials. Very stable construction with load bearing parts of die-cast aluminium. Machined aluminium top measures 295 x 240mm. A mitre slot and fence are provided. An extension wing is housed integrally and pulled out to increase effective table width to 500mm. Drive is effected via a special, quiet motor with optibelt toothed belt. The blade arbor runs in a ball bearing and is fitted with a tungsten carbide blade (80 x 1.5 x 10mm (24 tooth. No 28 734) as standard. Depth of cut is adjustable from 1 – 22mm and the blade may be tilted through 45°.

### Technical data:

220 – 240V, 50/60Hz. Electronic speed control, with feedback effect, for speeds of 4,400 – 6,800rpm. Overall size: 300 x 262 x 170mm (without extension wing). Weight approx. 5.2kg. Table size: 295 x 240mm. Depth of cut: 1 – 22mm, uses all blades 50 - 85mm diameter with 10mm bore.

**NO 28 070**



### Dado head set

The dado set consists of a guard and tungsten saw blade. Ø 50 x 2 x 10mm. Used to cut slots (dados) in drawers, picture frames, etc. Slot depth max. 8mm. Easy set-up.

**NO 28 736**

**Super cut**  
Ø 85 x 0.5 x 10mm. 80 teeth. Use on hard and soft woods, plastics.

**NO 28 731**

**Tungsten carbide tipped**  
Ø 80 x 1.5 x 10mm. 36 teeth. Use to cut balsa, plywood, hard and soft woods, POLYCARBONATE, plastic, aluminium and PC cards.

**NO 28 732**

**Tungsten carbide tipped**  
Ø 80 x 1.5 x 10mm. 24 teeth. Use on aluminium, hard wood, laminates, plastics.

**NO 28 734**

**Diamond coated**  
Ø 85 x 0.7 x 10mm. Use on stone and tiles.

**NO 28 735**



*The smallest and cutest in the world:  
40 x 80mm capacity!*

## **Thicknesser DH 40**

**Load bearing components are all made of die-cast aluminium, with milled seats for bearings and spindles.** These characteristics are essential for vibration-free, smooth thicknessing of hard and soft woods. The result: a high-grade, very smooth surface.

The triple spindled table is made from die-cast aluminium and milled to close tolerances. The handwheel (zero adjustable) allows adjustments to 0.1mm. Auto feed is fitted as standard, as well as an anti-kickback device. The infeed roller is rifled and spring loaded to assist in feeding uneven materials. The out-feed roller is rubber coated to prevent marking the newly planed wood.

The cutter block is fitted with two HSS knives. The on/off switch is dust protected and fitted with a no-volt release.

### **Technical data:**

220 – 240V. 200W. 50/60Hz. Thicknessing to 80mm wide and 40mm thick. Maximum depth of cut 0.8mm. Cutter speed 6,000rpm and feed rate 4.8 m/min. Table length 232mm. Overall machine dimensions 280 x 230 x 235mm. Weight approx. 8kg.

**NO 27 040**

### **Note:**

*Minute splinters can influence the usefulness of planed wood. Precision is even more important when working in miniature. The thicknesser DH 40 allows clean thicknessing as from 1.0mm material (in combination with an under-layer and double-sided adhesive tape).*



### **Spare blades**

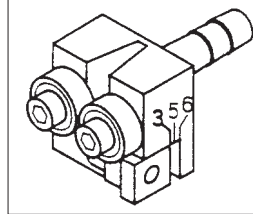
For thicknesser DH 40. Made of HSS. Length 82mm.

**NO 27 042** 1 pair

**MICRO bandsaw MBS 240/E**



**Solid, ribbed die-cast aluminium housing (not a tubular or sheet metal construction).** Double ball bearing aluminium pulleys. Sturdy, machined table with slot for mitre gauge as well as coolant trough. Triple ball bearing system with blade guides. Adjustable for different widths of saw blades and with feed pipe for coolant when used with the diamond blade. Table tilts through 45° for accurate mitre sawing. Low noise 220V motor (high quality, for quiet, prolonged use) with optibelt toothed belt. Electronically controlled speed for exceptionally accurate cutting (no subsequent finishing necessary).



A table indicates the recommended speed for practically all materials. The blade size (5.0 x 0.4mm) is ideal for fine work, allowing cutting of small radii.

**Technical data:**  
220 – 240V. Blade speed adjustment from 180 to 330m/min (feedback effect). Throat 150mm, maximum height 80mm. Table 200 x 200mm (tiltable from 0° to 45°). One blade 1,065 x 5.0 x 0.4mm (14 TPI) is included.  
**NO 27 172**

| PROXXON MBS 240/E      |       |        |     |                       |          |               |           |            |      |           |            |
|------------------------|-------|--------|-----|-----------------------|----------|---------------|-----------|------------|------|-----------|------------|
| Diamantiertes Sägeband |       |        |     |                       |          | Stahlsägeband |           |            |      |           |            |
| Strom. Verbrauch       | Fluss | Kupfer | Alu | Stahl (Härtematerial) | Werkzeug | Nickel        | Acrylglas | Polystyrol | PMMA | Aluminium | Regelstufe |
|                        |       |        |     |                       |          |               |           |            |      |           | 6          |
|                        |       |        |     |                       |          |               |           |            |      |           | 5          |
|                        |       |        |     |                       |          |               |           |            |      |           | 4          |
|                        |       |        |     |                       |          |               |           |            |      |           | 3          |
|                        |       |        |     |                       |          |               |           |            |      |           | 2          |
|                        |       |        |     |                       |          |               |           |            |      |           | 1          |

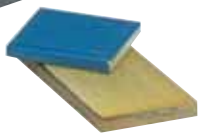
**Blade guides separately** (see figure above)  
Triple ball bearing system with feed pipe for coolant when used with the diamond blade. Can also be used in conjunction with normal blades.  
**NO 28 187**

**Blades for MBS 240/E**  
Swedish steel. 1,065 x 5.0 x 0.4mm. Fine toothed (24 TPI).  
For steel and brass.  
**NO 28 174**

**As above,** but coarse toothed (14 TPI).  
For wood and plastics.  
**NO 28 176**

**As above,** but of special tempered steel, with induction-hardened teeth. Extra narrow for tight curves (1,065 x 3.5 x 0.5mm). Coarse toothed (14 TPI). For aluminium and plastic.  
**NO 28 180**

**Diamond blade for MBS 240/E**  
For cutting stone, ceramics, glass and PC cards. 1,065 x 3.0 x 0.3mm. Must be used in conjunction with coolant system!  
**NO 28 186**



**Note:**  
TPI stands for the number of teeth per inch (25mm) per band saw blade.





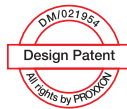
*With adjustable grinding speeds between 250 and 750rpm.  
Ideal for wet sanding.*

## Disc sander TG 250/E



Coolant system for wet sanding of glass, stone, tiles and steel.

250mm-sanding disc machined with diamond tools. Double ball bearing.



**Sands long edges, end sections, radii, mitres, and, by turning the workpiece over – accurate flat surfaces at right angles.**

Used on soft and hard woods, non-ferrous metals, steel, plastics (perspex and PC cards), cork and rubber. A simple chart indicates the recommended speeds on different materials.

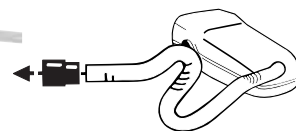
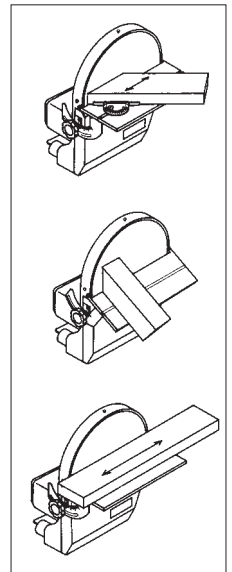
### Sturdy construction:

Main body of ribbed die-cast aluminium (not a steel tube or sheet metal construction). Machined backing disc, driven by a twin ball bearing spindle. Self-adhesive sanding discs fix firmly and can be replaced quickly. A dust collection adaptor for attaching a vacuum cleaner or dust extractor is included.

### Technical data:

220 – 240V with drive via optibelt toothed belt (reduction ratio 7.3:1). Electronic speed control approx. 250 – 750m/min. Disc diameter 250mm. Maximum sanding height 135mm, table 275 x 105mm (tilts 15° in, 45° out). Overall size without table 330 x 280 x 230mm. Complete with mitre gauge and 2 each sanding discs of 80 grit and 240 grit.

**NO 28 060**



*The band saw and disc sander are equipped with vacuum cleaner adaptors: work in a clean, dust-free environment.*



### Self-adhesive corundum sanding discs for TG 250/E

Industrial quality. For sanding soft and hard woods, laminates, non-ferrous metals, steel, plastics, cork, rubber and minerals. Ø 250mm.

|                  |          |         |
|------------------|----------|---------|
| <b>NO 28 970</b> | 80 grit  | 5 discs |
| <b>NO 28 972</b> | 150 grit | 5 discs |
| <b>NO 28 974</b> | 240 grit | 5 discs |

**Accessories for wet sanding and cutting of glass, stone and tiles in conjunction with bandsaw MBS 240/E and disc sander TG 250/E.**

### Coolant container

Made of plastic. With stop cock and regulator. 100cm tubing as well as 2 nipples for the MBS 240/E table and mounting bracket (incl. screws). Holds 1 litre.

**NO 28 188**

### Coolant collection tray

Size 420 x 310 x 15mm. Includes gasket for sealing the fixing holes of the machine. With 50cm discharge tube and nipple for the band saw table. The tray is not drilled and may be used on other machines too.

**NO 28 189**

### Self-adhesive silicon carbide sanding discs for TG 250/E

For sanding non-ferrous metals, steel, glass, PC cards, plastics and ceramics. May also be used with the coolant option. Ø 250mm.

|                  |          |         |
|------------------|----------|---------|
| <b>NO 28 976</b> | 320 grit | 5 discs |
|------------------|----------|---------|

### Self-adhesive silicone film for quick change of sanding discs (Ø 250mm)

The film is attached to the sanding disc of the TG 250/E. The silicone surface allows that the attached sanding discs can easily be removed after completion of the work. Four square silicone films for re-using the used sanding discs are included.

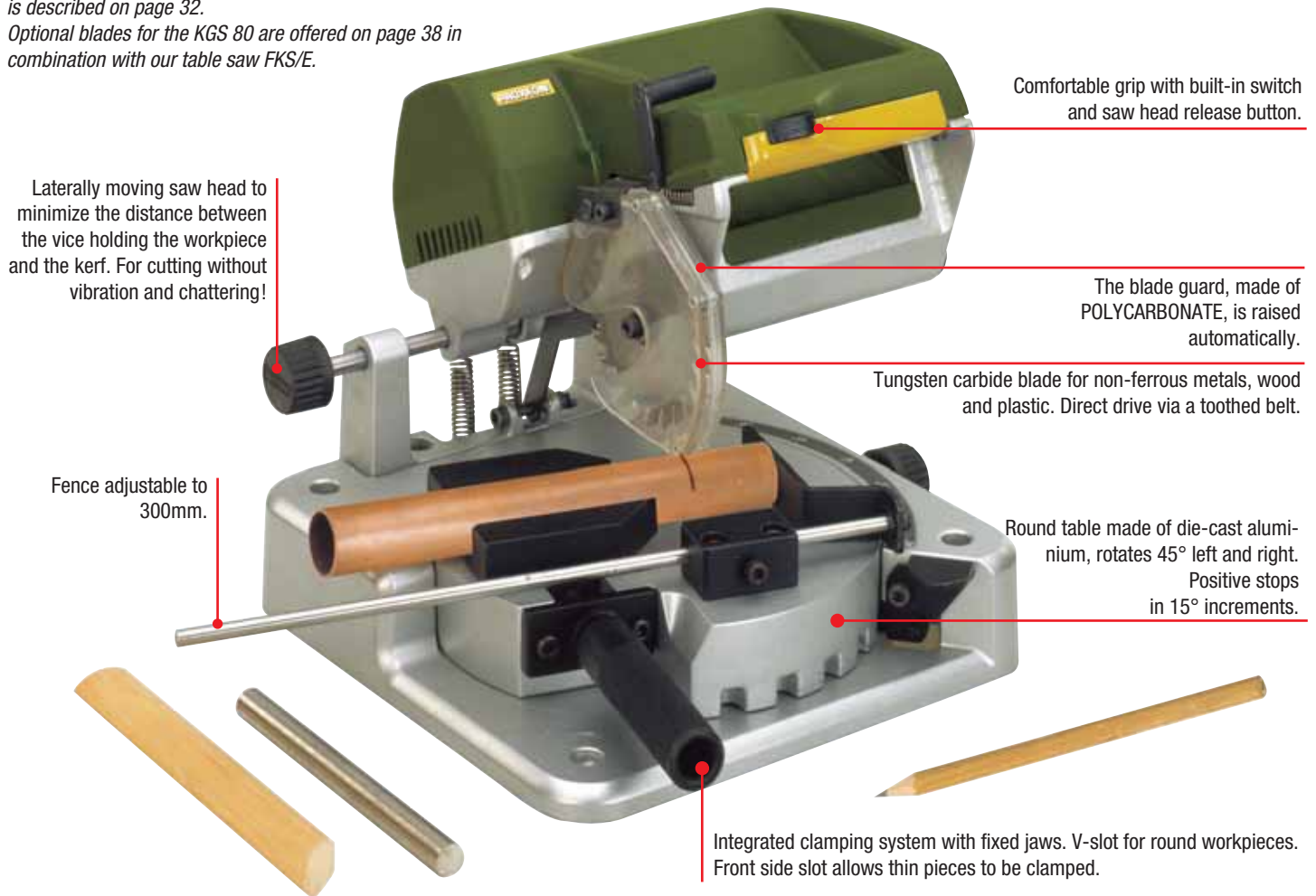
**NO 28 968**

## Cut off/mitre saw KGS 80

**Note:**

Cut off saw KG 50 – the baby among the KGS 80 cut off/mitre saws (weighs only 1.5 instead of 6.0kg) – is described on page 32.

Optional blades for the KGS 80 are offered on page 38 in combination with our table saw FKS/E.



**This machine is ideal for mitre cuts: the round worktable with clamped work piece rotates, not the headstock!**

The laterally moving headstock (patent DP 103.18.479.1) eliminates any possibility of the blade and clamping system colliding. The minimum spacing between the kerf and clamping system ensures cutting with a minimum of chatter and vibration!

The fence and 45° mitre capability ensure identical lengths for picture frames. Powerful, quiet DC motor. Power transmission takes place via a toothed belt. The tungsten tipped saw blade (80 x 1.6 x 10mm, 24 teeth) cuts non-ferrous metals, wood and plastic.

**Other technical data:**

220 – 240V. 200W. 50/60 Hz. 6,000/min. Base with round table of highly stable, die-cast aluminium, with CNC milled fittings and slides. Table size 230 x 230mm. Weight 6kg. Consult the table for cutting capacities.

**NO 27 160**

| Cutting capacity at 90°<br>(right angle cut) |                                |                             | Cutting capacity at 45°<br>(mitre cut) |                                |                           |
|--|--------------------------------|-----------------------------|--|--------------------------------|---------------------------|
| Material size<br>(in mm)                     | Max. material<br>width (in mm) | Round materi-<br>al (in mm) | Material size<br>(in mm)               | Max. material<br>width (in mm) | Round material<br>(in mm) |
| 10   | 65                             |                             | 5                                      | 36                             |                           |
| 18   | 50                             |                             | 10                                     | 30                             |                           |
| 21   | 40                             |                             | 15                                     | 25                             |                           |
| 25   | 25                             | Ø max. 25                   | 20                                     | 18                             | Ø max. 20                 |

**Cutting disc with reinforcement, 80 x 1.0 x 10mm**



Corundum compound, used for cutting steel, non-ferrous metal, plastic and wood.

**NO 28 729**

**Tungsten tipped crosscut saw blade, 80 x 1.6 x 10mm, 36 tpi**



The high tooth count yields clean cuts when cutting a variety of materials, e.g. balsa, plywood, soft wood and PC cards. May also be used on hard wood, POLYCARBONATE, plastic and aluminium. Fits the table saw FKS/E as well.

**NO 28 732**

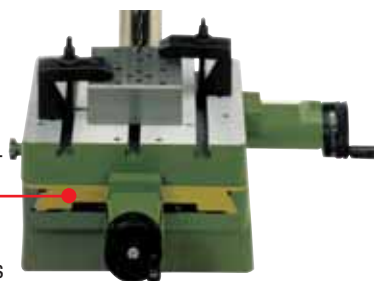
## Drill press TBH

Made of highly stable die-cast iron parts with CNC milled fittings and slides.

The height adjustment is easily altered by means of the headstock crank and lock lever. The table features a ribbed base, milled work area with T-slots. Powerful, long life 220 - 240V motor. The quill is driven via a poly-V belt and three step pulleys. This yields a torque multiplication of as much as 6x at the lowest speed.



Practical depth gauge with adjustable depth stop. Sliding quill for delicate works. Drill spindle with precision bearing. Spindle head with 1/2" thread accepts the RÖHM chuck (industrial quality), as well as the optional collets.



Ideal also for jig boring with the compound table KT 150 (page 54).

### Technical data:

220 – 240V motor with spindle speeds 1,080, 2,400 and 4,500rpm. Quill travel 63mm, headstock travel via the crank 70mm. Throat of 140mm. Maximum drill bit size 10mm, which is also the capability in steel. The optional collets offer a capability to 6mm. Useable table size 200 x 200mm. Column 45 x 500mm. Weight 10kg.

**NO 28 124**

### Collet set for drill press TBH

Triple slit and hardened. One each of 2.35 – 3.0 – 3.2 – 4.0 – 5.0 and 6.0mm. Also includes the collet closure nut (M17). Neatly packed in wooden box with sliding lid.

**NO 28 200**

### T-nut set for PRIMUS vises

Two T-nuts and cap screws with washers. Used on the drill table of BFB 2000, KT 150 and drill press TBH.

**NO 20 394**

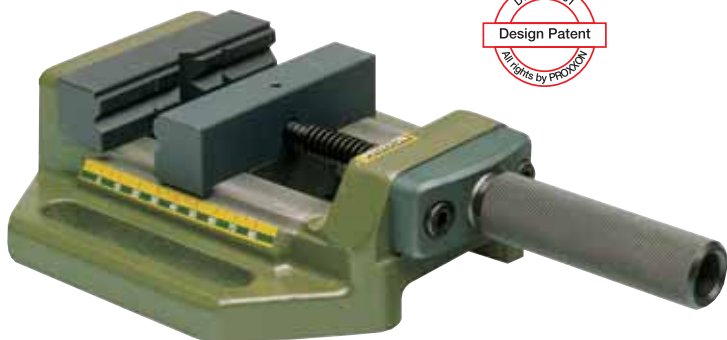
### Note:

The smaller version of the TBH – the bench drill machine TBM 220 – is described on page 34.



*The height adjustment is easily altered by means of the headstock crank and lock lever.*

## Smooth-running precision vises. Ease of operation and accuracy.



### PRIMUS 75

Base made of special cast iron with CNC machined ways. Fitted with interchangeable, hardened jaws. Both jaws are slotted at the top, facilitating gripping of flat work pieces. The feed screw features a rolled thread which ensures ease of movement even with high axial loads. Jaw width of 75mm, opening to 65mm. Distance between centres of fixing slots is 100mm. Slot size 80 x 11mm. Weight 2.5kg.

**NO 20 392**

### PRIMUS 100

Jaw width of 100mm, opening to 75mm. Distance between centres of fixing slots is 135mm. Slot size 105 x 15mm. Weight 5.0kg. Other details as for the PRIMUS 75.

**NO 20 402**



## Lathe PD 230/E

Usable on materials such as steel, brass and aluminium and plastic. Complete with automatic feed, thread cutting capability, headstock chuck, live centre and top slide for taper turning. Used to part, machine stock and cut tapers. The numerous optional accessories allow one to drill, mill and slot.



Gear casing with table showing the appropriate speed for the material and diameter.

Combination of three speeds (attained by swapping drive belt position) and electronic speed control yield speeds of 100 to 3,000rpm.

Enclosed lead screw for automatic feed of 0.05 or 0.1mm/revolution.

Cast iron bed with ground prism for tool rest and tailstock ensures minimal deflection, even at high loads.

### Technical data:

Centre distance of 230mm, swing 52mm. Height over cross slide 28mm. Cross slide travel 60mm and top slide 45mm. Steel tool holder accepts 8 x 8mm cutters. The MK1 (short) spindle has a 10.5mm bore. It runs in precision ball bearings, yielding an accuracy of 0.01mm with-out chuck. The thread cutting capability covers the most important pitches of 0.5 – 0.625 – 0.7 – 0.75 – 0.8 – 1.0 – 1.25 and 1.5mm. Spindle speeds are changed by means of a belt and offers 300, 900 and 3,000rpm.

The electronic speed control further extends the speed range down from

100rpm (which is important when cutting threads) to 3,000rpm. The automatic feed offers 0.05 or 0.1mm per revolution. The tailstock spindle has a MK1 (short) bore and 30mm travel. The quiet 220 - 240V motor is fitted with a forward/reverse switch. The three jaw chuck offers 2 – 35mm capacity (internal jaws) and 24 – 68mm (external jaws). The handwheels are fitted with zero adjustable scales. One revolution equals 1mm feed (40 divisions) and hence 0.025mm/division. Weight approx. 10kg and dimensions approx. 530 x 250 x 150mm.

**NO 24 004**

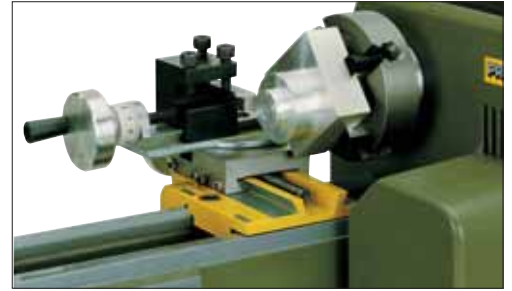
## Accessories for the lathe PD 230/E (also compatible with its predecessor PD 210).



**Collet set covering 2.0 – 10mm for concentric accuracy better than 0.02mm.**

For accurate use on round components. The collets are mounted in the place of the headstock chuck. Eight collets (one each 2.0 - 2.5 - 3.0 - 4.0 - 5.0 - 6.0 - 8.0 and 10mm) are included.

Supplied in a wooden box with sliding lid.  
**NO 24 042**



**Four jaw chuck.** The 4 jaws are adjusted independently, thus clamping unsymmetrical pieces, ovals, squares and odd-shaped work pieces. Capacity of 80mm.

**NO 24 030**

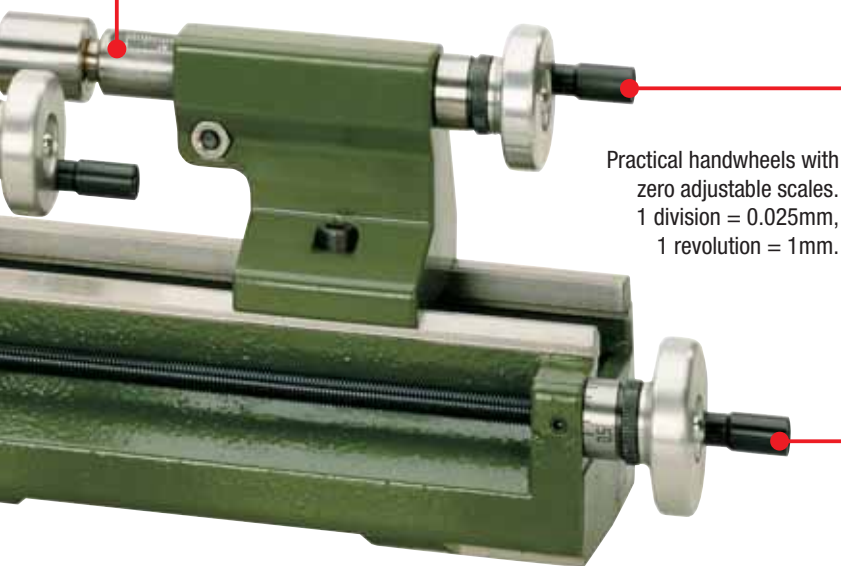


**Centre turning attachment. Used for highest accuracy with high rotational precision.**

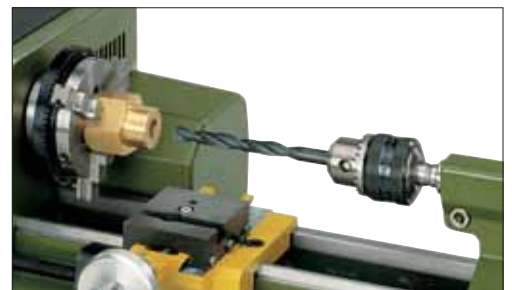
One face plate, 2 fixed MK 1 (short) centres and 1 drive dog are included. Supplied in wooden box with sliding lid.

**NO 24 070**

MK 1 live centre included as standard.



Practical handwheels with zero adjustable scales.  
1 division = 0.025mm,  
1 revolution = 1mm.



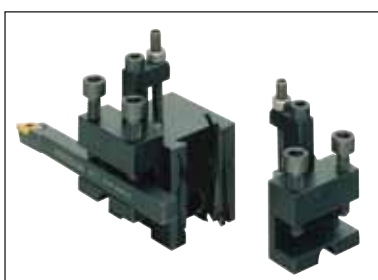
**Gear chuck**

Capacity to 10mm, with key and MK1, for tailstock.

**NO 24 020**

As above, but with 10mm arbor. for mill/drill unit.

**NO 24 110**



**Quick change tool post for PD 230/E**

**Easy to use!**

Enables quick tool changes and easy height adjustments. Including 2 tool holders for lathe tools up to 10 x 10mm.

**NO 24 022**

**Additional quick change tool holder (separately)**

Can be used with the above mentioned quick change tool post.

**NO 24 024**

piece



**Fixed steady**

Used when turning long, slender pieces, capacity up to 40mm (Ø). Also used when the tailstock cannot be utilised.

**NO 24 080**

**Splash guard and chip collecting tray for PD 230/E**



Made from 1.5 mm thick sheet metal, powder coated. Bevelled edges at the front and back allow slight cleaning. Mounting hole and raised base to secure lathe are pre-drilled. Length 495mm, width 215mm, height 150mm. The depicted lathe is not included in the offer.

**NO 24 006**



**Dividing attachment TA 230**  
**For lathe PD 230/E, micro miller PF 230 and FF 230**

Facilitates the machining of gear teeth and non-concentric patterns. 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 and 48. The spindle of the attachment is identical to that of the lathe PD 230/E. The 3 (can be ordered separately under No 24 028, see below) and 4 jaw chuck (No 24 030, see page 45) may therefore be fitted to it as well (the chuck is an optional accessory). May be fitted to the lathe's cross slide or to the bed. Supplied in a wooden box with sliding lid. The 3 jaw chuck depicted here is not included in the offer.

**NO 24 131**

**Self-centering 3 jaw chuck**

Identical to the chuck of lathe PD 230/E. Radius 2 – 68mm (with reversing chucks). Body of steel. Suitable for lathe PD 230/E and the above described dividing attachment No 24 131.

**NO 24 028**

**Mill/drill head PF 230**

**Converts the lathe PD 230/E into a complete machining centre.**

Set includes column (35 x 400mm), mounting bracket and bolts. The mounting position on the PD 230/E is already milled. The lathe's top slide is replaced with the table (supplied) of 110 x 70mm, with 3 T-slots 12 x 6 x 6mm. The lathe now functions as a compound table, with X-Y travel being longitudinally and cross-wise respectively. The mill/drill head is identical to the micro miller FF 230 (see page 47). Three collets of sizes 6, 8 and 10mm are included.

**NO 24 104**





*A small, high accuracy machining system to mill, drill and bore.*

## 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 norm of 12 x 6 x 5mm.

### Other technical data:

220 – 240V. 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-Y- travel is 170 x 65mm. Maximum height 180mm and depth 130mm. Overall height approx. 500mm. Weight approx. 17.0kg.

**NO 24 108**

The clamps (not included) are described on page 53.

### Note:

For more lathe and milling accessories and bits and cutters, see pages 52/53.

### 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.

## Compound table KT 230

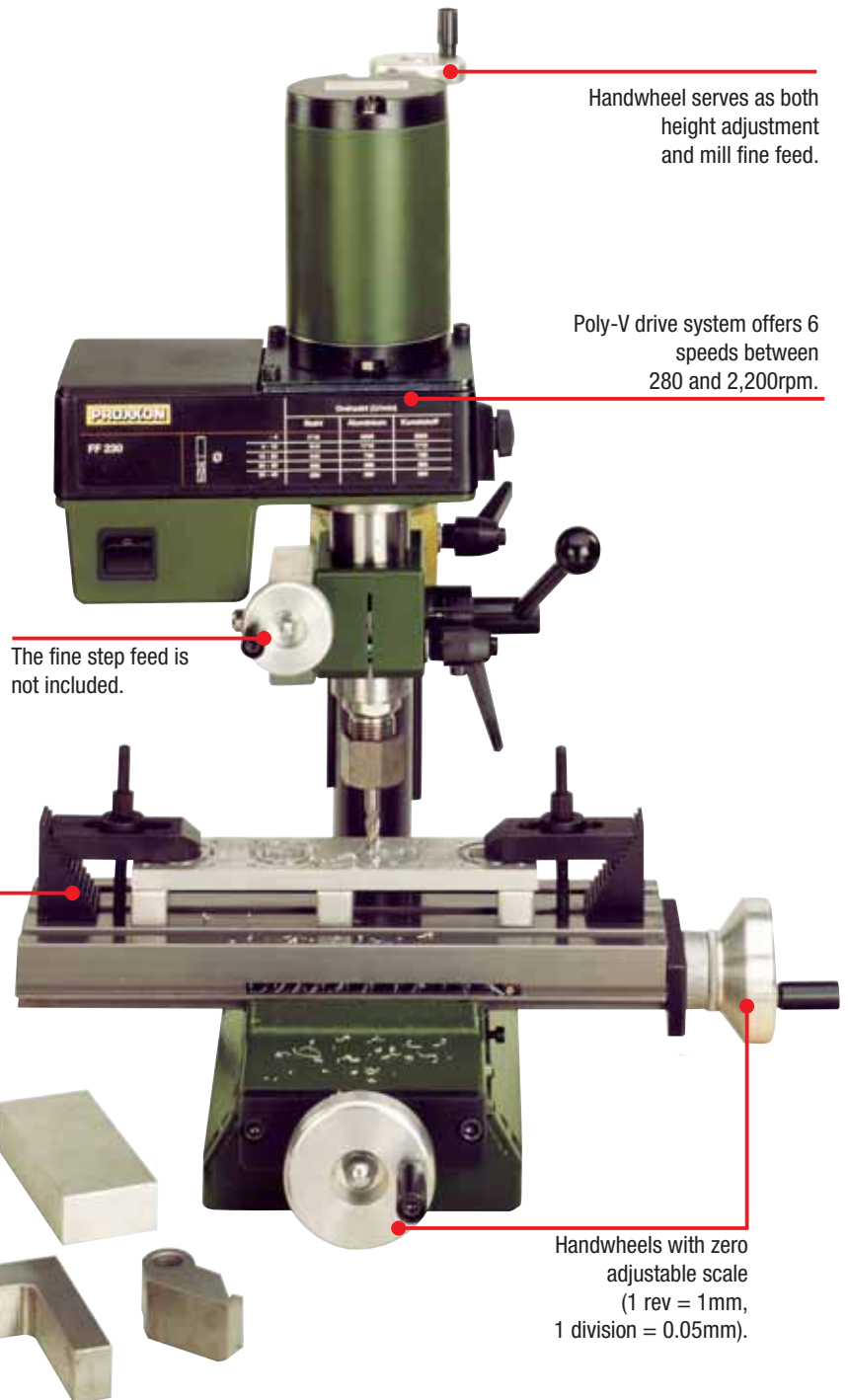
As described above, but excluding headstock and column. 35mm bore. Fits the PF 230 and PF 210. Weight approx. 11 kg.

**NO 24 106**

## Five piece collet set for PF 230 and FF 230

Includes 1 each of 2.4 - 3.0 - 3.2 - 4.0 and 5.0mm, for milling cutters. Supplied in a wooden box with sliding lid.

**NO 24 144**



Handwheel serves as both height adjustment and mill fine feed.

Poly-V drive system offers 6 speeds between 280 and 2,200rpm.

The fine step feed is not included.

Handwheels with zero adjustable scale (1 rev = 1mm, 1 division = 0.05mm).

## Fine feed for milling machine PF 230 and 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**

**Note:**  
Accessories and insertion tools for the PD 400 system, see pages 50-53.



Complete with change gears to cut threads (in 19 steps from 0.2 to 3.0mm). Clearly positioned and easy to change.

Main switch with auto-start protection and emergency off.

RÖHM precision feed (Ø 100mm).

Powerful capacitor motor with 550W output power.

Selector for auto-feed.

Switch for clockwise, off and counter-clockwise rotation.

Apron handwheel.

Quick-change tool post with 2 holders (with stop and height adjustability).



**Lathe PD 400 is the heart of a multifunctional and expandable system and is unequalled in its class!**

Ideal for straight and cross cuts, taper turning, internal and external thread cutting, slotting, etc. Useable on materials such as steel, non-ferrous metals, aluminium and alloys. Negligible tolerances even under heavy loads. The wide range of accessories complements the lathe's functions. The bed is already equipped with a milled and tapped surface for securing mill/drill PF 400.

**Technical data:**

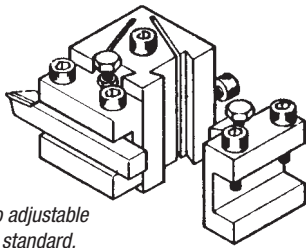
Distance between centres 400 mm and cross slide travel 85mm, over the top slide is 116mm. Solid, ribbed bed is made from quality cast iron with ground and hardened ways. Oversized spindle with 2 adjustable taper bearings, MK3 taper and 20.5mm bore. Run-out, without chuck, 5/1,000mm. Includes the precision 3 jaw chuck, 100mm diameter.

Six spindle speeds are provided via belt drive: stage 1: 80, 330, 1,400rpm and stage 2: 160, 660, 2,800rpm. Powerful, quiet motor with 550W power output. All adjusting wheels fitted with scales that may be zeroed.

One division = 0.05mm. The auto feed has speeds of 0.07 or 0.14mm/rev. An integrated gearbox, for LH and RH threads, with change gears provides 19 metric pitches: 0.2 - 0.25 - 0.3 - 0.35 - 0.4 - 0.45 - 0.5 - 0.6 - 0.7 - 0.75 - 0.8 - 0.9 - 1.0 - 1.25 - 1.5 - 1.75 - 2.0 - 2.5 - 3.0mm. Imperial threads of 10 - 48 TPI are also possible.

A rotating centre MK 2 and tailstock chuck of 10mm capacity. B12 taper, are included. Lead screw with acme thread 12 x 1.5., top slide 52mm and adjustable to turn tapers, with graduations up to 45°. Tailstock with MK 2, 24mm diameter and 40mm travel (with graduations). Overall size approx. 900 x 400 x 300mm





A tool holder with two adjustable inserts is included as standard.

**Tool post**

Including two holders. Provides quick tool changes with easy height adjustment.  
NO 24 415

**Individual quick-change holder**

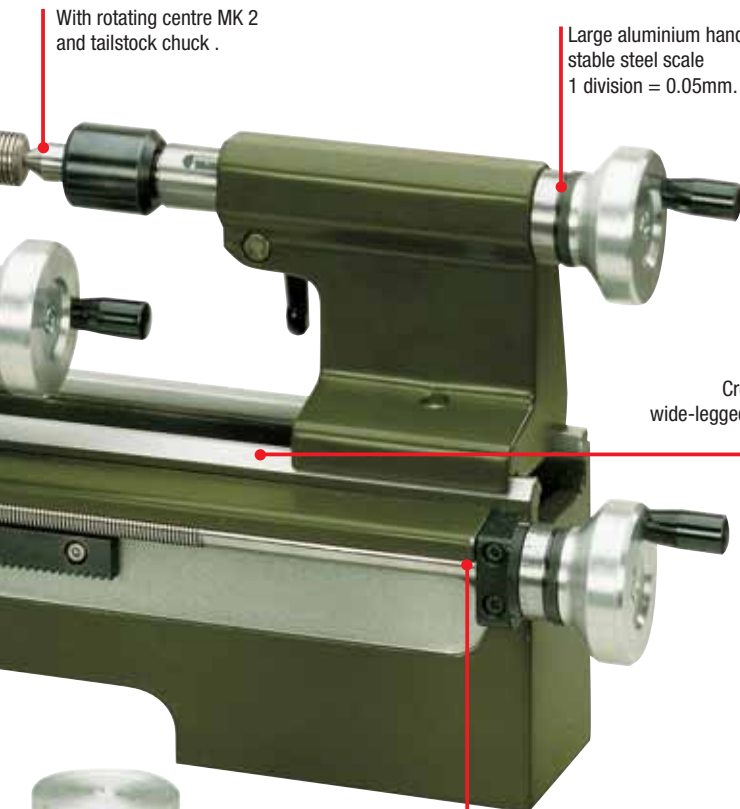
Fits the tool post of PD 400.  
NO 24 416



**4 jaw chuck with independent jaws**

Used to mount irregularly and asymmetrically shaped objects. Each jaw is adjusted individually and centering is thus achieved manually. Hardened, reversible jaws. Chuck diameter 100mm.

NO 24 410



With rotating centre MK 2 and tailstock chuck .

Large aluminium handwheels and adjustable steel scale  
1 division = 0.05mm.

Cross-braced cast iron bed, wide-legged shape, and prism slides for apron and tailstock.



**4 jaw chuck, self-centering**

The jaws are not independently adjustable, i.e. they are self-centering. High accuracy. Chuck diameter 100mm.

NO 24 408



Protected lead screw with 12 x 1.5 Acme thread.

**Note:**

*Lathe PD 400 is now also available in CNC version with spindles running in ball bearings, stepping motor, control unit and easy to use WINDOWS compatible software. A special brochure is available. Feel free to ask for a copy.*

(L x W x H). Weight approx. 45kg. Uses cutting tools 10 x 10mm.



NO 24 400

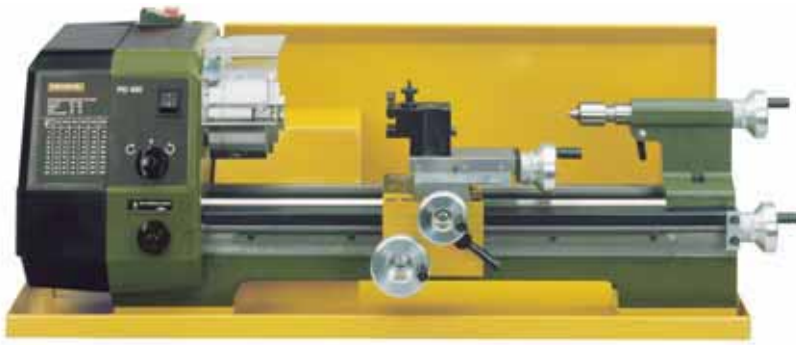


**Faceplate and clamps**

This accessory is used in the place of the standard chuck and mounts larger and asymmetrical workpieces. Diameter of 150mm, with 2 through T-slots, as well as mounting clamps.

NO 24 412

*Carefully thought-out accessories for the PD 400 lathe system solve milling and turning problems.*



**Splash guard and chip collecting tray for lathe PD 400**

Made from 1.5mm steel plate, powder coated. A welded cover protects the motor. Mounting holes and raised base to secure the lathe are pre-drilled. Seeping through of coolant is impossible. Length 800 x width 270 x height 290mm.

**NO 24 402**



**Fixed steady**

Used on the PD 400 when turning long, slender work. Fitted directly to the bed-ways and is used when the tailstock support is inadequate. Maximum  $\varnothing$  50mm.

**NO 24 404**



**Travelling steady**

Fitted to the carriage of the lathe. Indispensable when turning long, slender pieces. Maximum  $\varnothing$  50mm.

**NO 24 406**



**Collet set**

For accurate use on round components. One each 2.0 – 3.0 – 4.0 – 5.0 – 6.0 – 8.0 – 10, 12 and 14mm are included. Concentric accuracy better than 0,002mm, much better than a chuck. One soft collet for making a custom size yourself. The included collet attachment is mounted in the place of the headstock chuck. Supplied in a wooden box.

**NO 24 419**

Collets only

**Mill/drill PF 400**

Kit also includes the mounting flange and screws (the mounting surface on the PD 400 is already machined). Identical to the MICRO miller FF 400 (page 51), except that no compound table is supplied. Instead, a work surface of steel (150 x 110mm), with 3 milled T-slots for the standard T-nuts, is supplied. Two screws secure the work surface to the cross slide.

**NO 24 304**



**Centre turning accessory for the PD 400**

Ideal when turning with highest possible accuracy. Supplied with 2 dead centres (MK2 and MK3), drive/face plate with 30mm bore as well as reducing bushes 30/20mm and 30/15mm. A threaded drive pin screws into the headstock flange and the drive plate.

**NO 24 414**

**Gear tooth chuck (10mm) with adaptor**

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



**NO 24 110**



*Micro miler for precision work to 0.05mm accuracy!  
Quiet, looking good and multifunctional.*

## MICRO miller FF 400

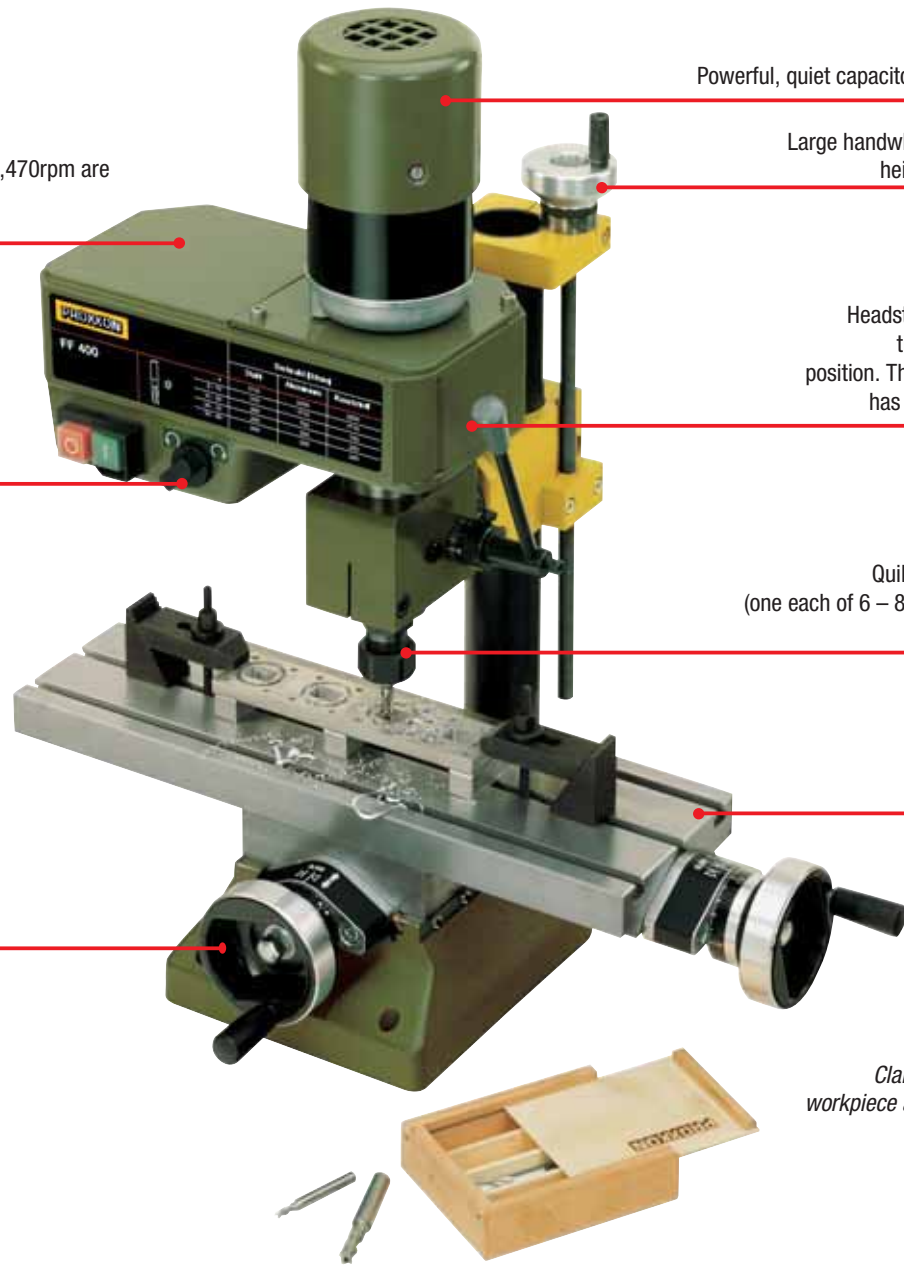
6 spindle speeds from 140 – 2,470rpm are achieved by means of a poly-V belt and pulleys.

Switch for CW or CCW rotation.

Large handwheels with adjustable scales.  
1 rev = 2.0mm,  
1 coarse division = 0.1mm,  
1 fine division = 0.02mm.

### Important!

Both the headstock and spindle can be locked in position when milling.



Powerful, quiet capacitor motor (400W).

Large handwheel and dial for height adjustment.

Headstock with scale, tilts and locks in position. The lockable quill has a 30mm travel.

Quill accepts collets (one each of 6 – 8 – 10 and 12mm are included).

Machined table (400 x 125mm), with 3 T-slots.

Clamps, cutters and workpiece are not included.

**The headstock swivels through 360° indicated on a scale.** The lockable quill has a travel of 30mm (via the handle and scale) and the throat distance is 100mm. Six spindle speeds of between 140 and 2,470rpm are achieved by means of pulleys and a poly-V belt. Cutting tools are secured in the 6, 8, 10 and 12mm collets provided. The headstock height is adjusted via the handwheel and dial (1 rev = 2.0mm) The solid, milled compound table has 3 T-slots for the 8 standard T-nuts.

### Other technical data:

220 – 240V, 400W, 50/60Hz. Spindle speeds of 140, 310, 480, 730, 1,140 and 2,470rpm. Column 45 x 500mm and table 400 x 125mm. X and Y travel amount to 225 and 80mm respectively.

Footprint size 370 x 350mm. Overall height approx. 600mm. Weight approx. 47kg. Complete with KT 400.

**NO 24 308**

### Five piece collet set for millers PF 400 and FF 400

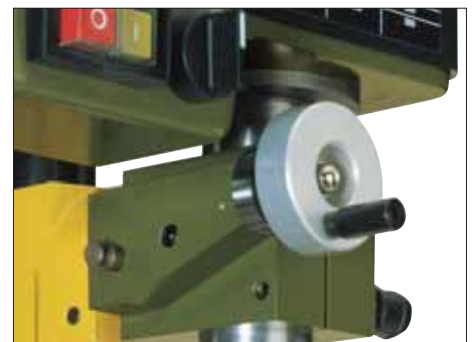
Includes 1 each of diameter 2.4 - 3.0 - 3.2 - 4.0 und 5.0mm, for milling cutters. Supplied in wooden box.

**NO 24 252**

### Compound table KT 400

As described above but excluding the column and headstock. The 45mm bore also fits the precision drill stand BFB 2000. Weight 23kg.

**NO 24 303**



### Fine feed for accurate adjustments

Quick and easy to install. The clutch system enables feed via either the drill handle or the handwheel.

The handwheel has 0.025 graduations and may be set to zero. 1 division = 0.05mm.

**NO 24 254**



*Nearly all the components are supplied in sturdy wooden boxes.*



**Universal dividing table UT 400**

**Facilitates the manufacture of odd-shaped objects.**

The table may be fixed horizontally or vertically. Drive takes place via the worm drive and in its 360° travel yields nearly all the divisions below 100. Supplied with 4 index plates: 27/42, 33/40, 34/39 and 36/38. Used to manufacture sprockets, gearboxes and drives, ratchets, cams, etc. The faceplate is not included. The taper is identical to the head spindle of the lathe. Supplied in wooden box with sliding lid.



**NO 24 421**

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



**Made of steel 30 x 10 x 65 mm.** This holder allows mounting of our rotary tool LB/E or IB/E to the tool post of the lathes PD 230/E and PD 400 for grinding or polishing purposes. MICROMOT collar size Ø 20mm. Shaft 8 x 10mm for tool holders PD 230/E and PD 400.

**NO 24 098**

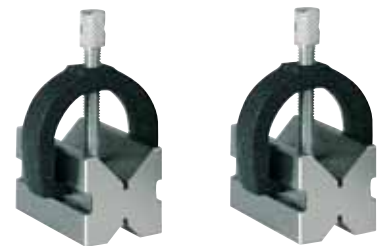
**Die holder for round dies, threads**  
**M 3 to M 10**



**Sizes: M 3 – 4 – 5 – 6 – 8 – 10.** The straight shaft fits the holder Ø 10mm when mounted in the tailstock of the PD 230/E or PD 400. The holder is held by hand while cutting the threads. Comes in a wooden box.

**NO 24 082**

**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

**Lathe practice for model makers**

An interesting book by Tilman Wallroth, in which all important lathe components and working stages are dealt with in a practical manner. Included are many easily understood examples, clear and informative illustrations and many tips for use. Highly scientific advice was deliberately omitted. 230 pages, written without reference to trademarks. German only!



**NO 24 999**

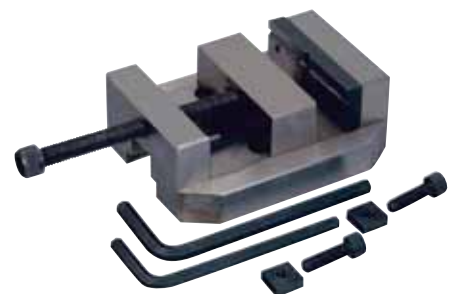
**Radius cutting attachment**



**Usable on both the PD 230 and PD 400 systems** is mounted on the cross slide in place of the tool holder. Cuts convex and concave shapes to depth of 1.0mm in steel as well as in non-ferrous metals and plastics. Radii or 3/4" spheres of diameter up to max. 32mm are possible Comes with one finishing cutter 8 x 8 X 80mm in a wooden box with sliding lid.

**NO 24 061**

**Precision vise**

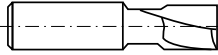


**Milled in steel.** May be used on its side and back. Jaw width of 60 mm, clamping capacity 42mm. Complete with securing bolts and packed in a wooden box with sliding lid.

**NO 24 255**

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

All cutters with 6mm shaft. Cutters of Ø 2, 3, 4 and 5mm.

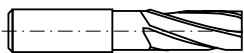


Double fluted according to DIN 327. Made of HSS. Supplied in wooden box with sliding lid.

**NO 24 610**

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

4 cutters Ø 6, 7, 8 and 10mm. Four flute design according

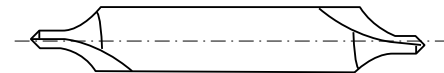


to DIN 844. Shafts 6.0 and 10.0mm respectively. Made of HSS.

Supplied in wooden box with sliding lid.

**NO 24 620**

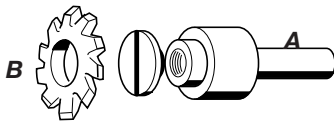
### Three piece centre drill set



Made of HSS steel. Din 333 (type A) 60°. Complete set centre drills with sizes of 2.0 - 2.5 and 3.15mm.

**NO 24 630**

### Arbor (A)



For HSS gear cutters. 16mm-fitting. Cylindrical shaft Ø 10mm.

**NO 24 425**

### HSS gear cutters (B)

Module 0.5 x 40mm outside diameter. 16mm bore.

**NO 24 426 No 1** (12-13 teeth)

**NO 24 427 No 2** (14-16 teeth)

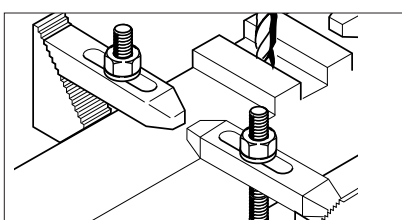
**NO 24 428 No 3** (17-20 teeth)

**NO 24 429 No 4** (21-25 teeth)

**NO 24 430 No 5** (26-34 teeth)

**NO 24 431 No 6** (35-54 teeth)

### Step clamp set, milled steel

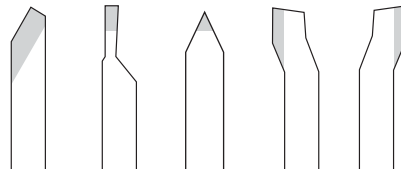


Consists of 2 step blocks and 2 clamps, 2 nuts, 2 T slot nuts (B = 7mm, E = 12mm, D = 4mm, C = 7.2mm). Secures objects to approx. 35mm

thick. May be used with PD 230/E, PF/FF 230, PD 400, PF/FF 400, face plate 24 412 and KT 150. Supplied in wooden box with sliding lid. For description of the 'smaller' version No 24 256, see page 18.

**NO 24 257**

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



#### Five piece set

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

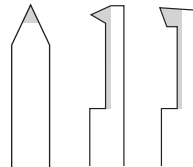
8 x 8 x 80mm (for PD 230/E).

**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. Supplied in wooden box with sliding lid.

8 x 8 x 80mm (for PD 230/E).

**NO 24 540**

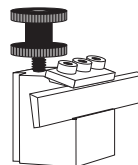
10 x 10 x 80mm (for PD 400)

**NO 24 552**

### 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.



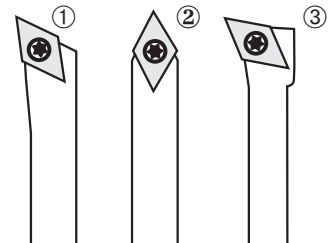
**NO 24 417**

### Spare tool for parting tool holder

As described above.

**NO 24 554**

### Cutter set with tungsten inserts for PD 230/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)

**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 95 mm. The cutters are held by a tool holder that mounts to the tool post of either the PD 230/E or PD 400.

Comes in a wooden box.

**NO 24 520**

### Edge finder set



Used for fast and accurate location of starting point of workpieces with respect to the machine spindle on milling machines. Size 6 x 6 x 50mm and 6 x 5 x 75mm.

Neatly packed in a wooden box.

**NO 24 434**

**Mill/drill system BFW 40/E, with controller for speeds of 900 – 6,000rpm.**

The triple ball bearing armature provides direct drive (no gearing). This yields virtually vibration-free operation and extremely high spindle accuracy.

Die-cast aluminium head with spindle neck of 43mm (European standard). Large, easy to use switch with emergency function. Chart indicates optimum speeds for milling and drilling of various materials.

**Other technical data:**

Control unit with full wave electronics for 220 – 240V, 40VDC secondary voltage. Power consumption up to max. 250W.

Spindle speed infinitely variable between 900 and 6,000rpm. Complete with triple slit, hardened collets covering 2.35 – 3.0 – 3.2 – 4.0 – 5.0 and 6.0mm. as well as 2 spanners.



NO 20 165

**Die-cast aluminium compound table KT 150**

With precision milled dovetail slides, thus also suitable for metal work. For routing, milling, slotting of steel, non-ferrous metal, plastic and wood. Each slide provided with locking screws. Dovetail fittings/gib strips adjustable to eliminate play. Feed adjustments by means of 2 handwheels with adjustable, graduated dials (one revolution = 2 mm, one graduation = 0.05mm). Machined table, 3 T-slots for fastening machine vices and clamping kits.

Fence supplied with pre-drilled positioning holes, including 45°, fastening screws and clamp used for routing. Table 200 x 200mm. Maximum travel 150 x 150mm. Overall height 75mm. Weight 4.9kg. The clamp shoes right in the illustration are not included.



NO 20 150

**Note:**  
The motor operates at 40V, supplied from the power pack/controller. At this level, the control characteristics are ideal and yield high torque, even at lower speeds. (The compound table, drill stand and step clamps are not included.)



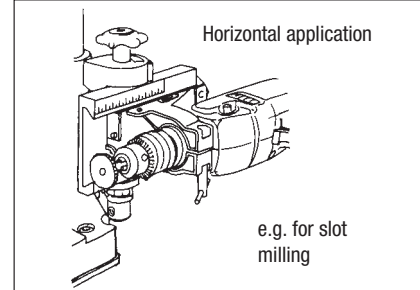
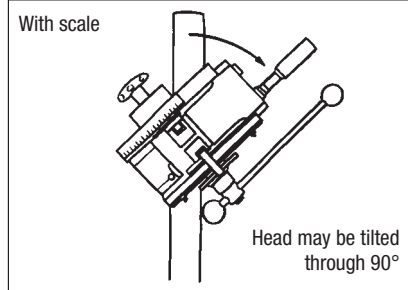
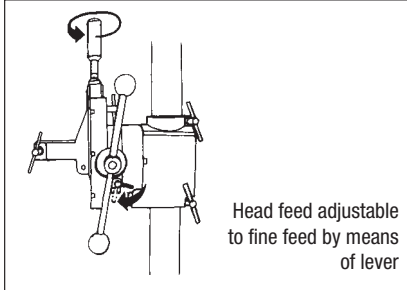
BFB 2000, see page 55



High strength precision die-cast aluminium,  
with precision milled dovetail slides.

### Mill/drill unit BFB 2000

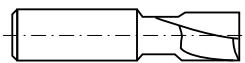
For standard drills with 43mm spindle neck.



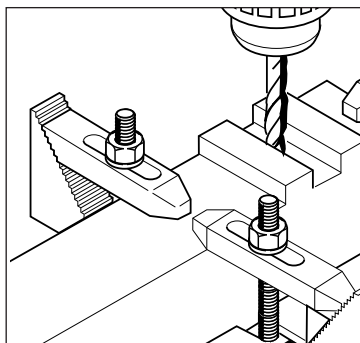
Head with precision milled dovetail slide and may be tilted through 90° to give all-round versatility: diagonal drilling, versatile without need of special milling bits, milling diagonal slots. Fine feed selectable, allowing fine head feed for milling. With dial and depth scale. Geared rack and pinion feed for effortless drilling. 45mm diameter drill column, 500mm long. Approx. 140mm throat (column outside to tool centre). 65mm stroke. Machined, solid base plate approx. 200 x 200mm. All drills with standard 43mm spindle collars may be utilised directly: BOSCH, AEG, FEIN, METABO, KRESS, BLACK & DECKER, SKIL. Weight approx. 6.5kg.  
**NO 20 000**

### HSS milling cutter set (2 - 5mm) Ideal for mill/drill system BFW 40/E

HSS, all with 6 mm cylindrical shaft. Consists of cutters of 2, 3, 4 and 5mm diameter. Double fluted, according to DIN 327. Made of HSS. Supplied in wooden box with sliding lid.  
**NO 24 610**



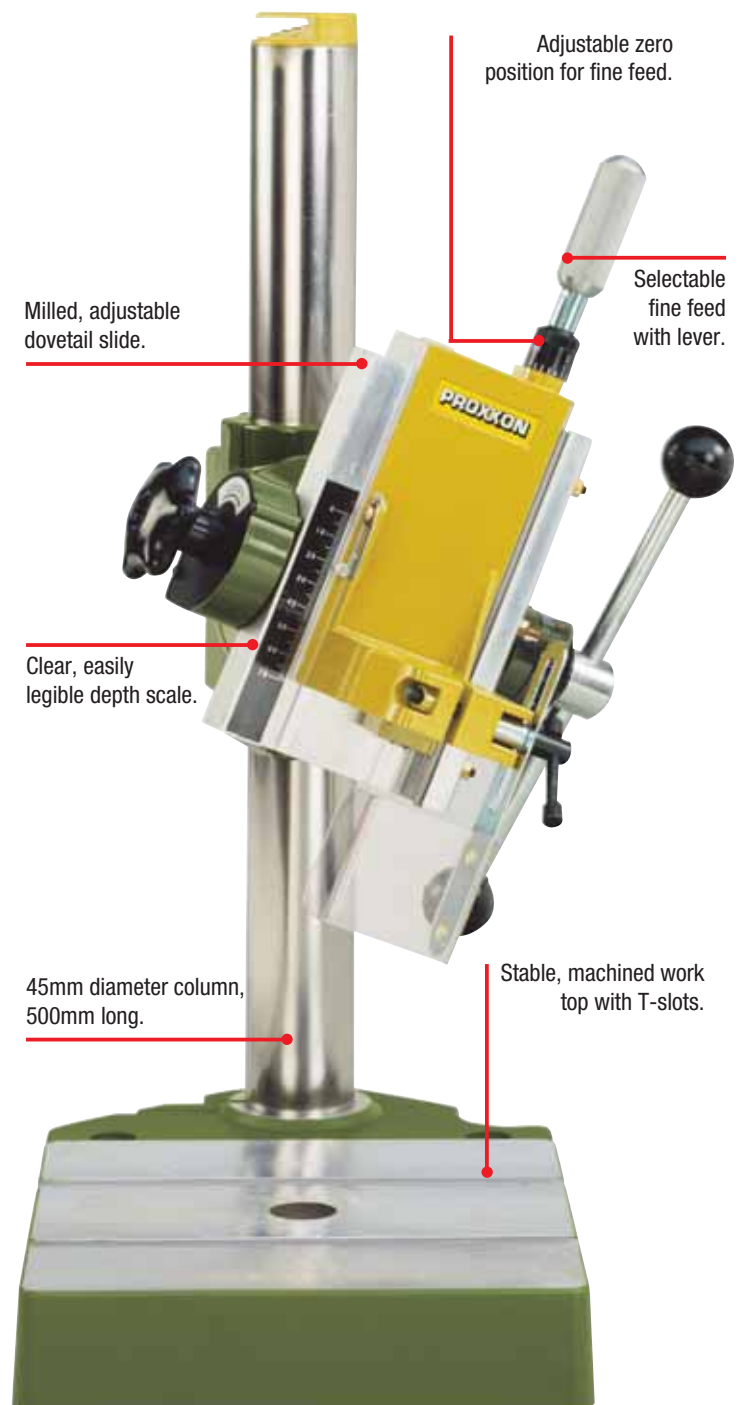
### Steel step clamp set



Consists of 2 step blocks and 2 clamps, 2 nuts, 2 T-slot nuts. For securing objects to approx. 35 mm high. May be used with compound table KT 150 and millers PF 400 and FF 400. Neatly packed in a wooden box with sliding lid.

**NO 24 257**

For more accessories, see page 53!



PROXXON GmbH  
Im Spanischen 18 – 24  
D-54518 Niersbach/Germany

Tel. +49-6575-78-0  
Fax +49-6575-78-105  
e-mail: [export@proxxon.com](mailto:export@proxxon.com)  
[www.proxxon.com](http://www.proxxon.com)

