

BV 2000 drilling device



With two-way pivotable articulated arm and 20mm standard collar.

Once the device is clamped, it can be guided very precisely both sideways and vertically across the entire working area. It always remains vertically aligned. This means that, e.g. drill holes are always exactly perpendicular to the work piece surface! Preselectable drill depth using depth control with easy-to-read scale. After drilling, an adjustable spring automatically pulls the device back into its top rest position. Flat-milled, solid base plate with 200 x 200mm usable table area and two continuous T-slots. Stable drill column (Ø 45mm, 500mm long).

The standard 20mm collar enables the precise clamping of the drilling devices, such as the precision drill/grinder FBS 240/E, professional drill/grinder IB/E, long-neck straight drill/grinder LB/E, MICROMOT 50, 50/E and 50/EF.

NO 20 002

Note:

Professional drill/grinder IB/E and step clamps are not included in the package.

Protective device for hand-operated MICROMOT machines with standard 20mm collar

For work with saw blades, cutting discs, milling bits, grinding tools, steel brushes and polishing tools. Maximum useable tool diameter 22mm. Easy to assemble.



NO 28 944

Edge milling attachment KAVO

For all machines with MICROMOT standard 20mm collar.

For chamfering and bevelling inside and outside edges of wood, plastic and metal work pieces. Also suited for glass and ceramics when using suitable accessories.

A 20mm flange on the KAVO enables stationary use in conjunction with the universal holder UHZ. Cylindrical milling bits up to a maximum 10mm diameter can be used in the central position (45°). The angle can be adjusted on both sides by 15°. For bevels from 30° to 60°.

Differently shaped milling bits can also manufacture round edges, hollow edges, chamfers for seals (example: ball-milling bit for O-ring seals).

For hand-held MICROMOT machines with 20mm standard collar, such as the precision drill/grinder FBS 240/E, professional drill/grinder IB/E, long-neck straight drill/grinder LB/E, MICROMOT 50, 50/E and 50/EF.

NO 28 612



Precision parallel limit stop. Adjustable, for different chamfering widths and depths.



The parallel limit stop is removed when working on round or curved work pieces. The remaining cylinder is used as limit stop.

Glass working



4-piece glass working set.

2 diamond grinding bits and 2 silicon carbide grinding bits. For engraving, grinding or frosting glass. Diamond bit 1: ball \varnothing 1.0mm, diamond bit 2: ball \varnothing 1.8mm, silicon carbide bit cone 3/2 x 5mm, and bullet 2/2.5 x 7mm. All shafts \varnothing 2.35mm.
NO 28 920

Modeller's set



13-piece set for model makers.

For cutting, grading, milling, polishing and drilling. 1 fine milling bit each of 2.3mm ball shape and cylinder shape. One white corundum grinding bit each of 5.0mm ball shape and cone shape. One micro drill each of 1.0mm and 2.3mm. 5 separating discs \varnothing 22mm. One \varnothing 22mm saw blade and \varnothing 2.35mm arbor.
NO 28 910

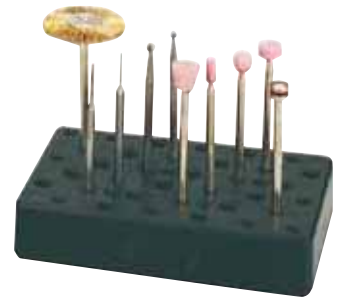
Complete polishing set



10-piece complete polishing set

For polishing metal, glass, precious metals, porcelain and plastic. Consisting of 3 felt polishing bits (cylinder, cone and wheel shapes), 3 silicon polishing bits (bullet, cylinder and disc shape), cotton polishing disc, chamois buffing wheel and polishing paste. Includes 2.35 x 44mm arbor.
NO 28 285

Holder for bits and cutters



Holder for bits and cutters

For the clean storage of micro drills, grinding bits, brushes and other rotating tools with shaft diameters of 2.35 - 3.2mm. Without bits and cutters.

NO 28 359 2 pieces

Drill chuck or collet?

Drill chucks provide more convenience to quickly change the tools when working with shafts of varying diameters (e.g. HSS drills as per DIN 338). However, because of their technical setup, they have a few drawbacks compared to collets: Less clamping force and higher concentricity tolerances. If high precision is necessary, then working with MICROMOT steel collets is a must (also refer to the note on page 4).

MICROMOT steel collet set



Triple slit and hardened. 1 each of 1.0 – 1.5 – 2.0 – 2.4, – 3.0 and 3.2mm. With clamping nut and holder for storage (see note at left).
NO 28 940

Three-jaw steel drill chuck



For all prepared MICROMOT devices. Advantageous when working with different shafts. Capacity 0.3 - 3.2mm.
NO 28 941

Rasp cutter with wolfram carbide burrs



Unrivalled for sculpting, cleaning and smoothing wood and fibre glass.

Extremely sharp and easy to handle: The material can be removed with control and without physical effort. High stability and easy to clean with a Bunsen burner. Also for use on rubber, foam and silicone. Rpm range: 5.000 – 20,000. Shafts \varnothing 3.2mm. Not for use on metal!

- Ball nose cylinder 7,5 x 12 mm** **NO 29 060**
- Cone 8 x 12mm** **NO 29 062**
- Taper 4 x 19mm** **NO 29 064**



Note:

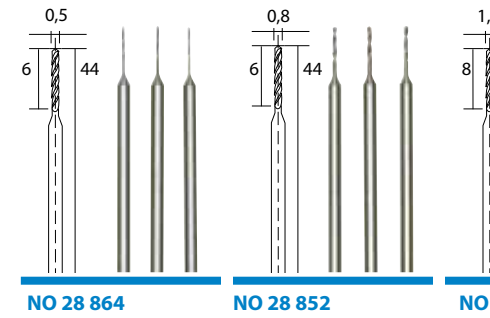
Ideal for wood cutters: a rasp disc made of the same material in combination with the MICROMOT long neck angle grinder LWS. See page 6.

Bits and cutters for MICROMOT drills and mills of industrial and dental quality

Rotational speed for spiral drills of HSS and tungsten carbide in rpm												
Drill Ø	Wood		Aluminium		Brass		Steel		Stainless Steel		Plastics	
	HSS	TC	HSS	TC	HSS	TC	HSS	TC	HSS	TC	HSS	TC
0,5	20000	23000	35000	60000	25000	40000	15000	30000	9000	22000	19000	33000
1,0	12000	17000	22000	45000	15000	25000	8000	18000	5000	10000	11000	20000
1,5	9000	12000	14000	30000	10000	15000	5500	13000	3500	9000	8000	15000
2,0	7000	9000	11000	23000	8000	12000	4000	9000	3000	8000	6000	10000
2,5	6000	7000	9000	19000	6000	10000	3500	7500	2500	7000	5000	8000
3,0	5000	6000	7500	15000	5000	8000	3000	6500	2000	6000	4000	7000
3,5	4000	5000	6000	13000	4500	7000	2500	5500	1500	4500	3500	6000
4,0	3000	4500	5500	10000	4000	6000	2000	4500	1000	3000	3000	5000

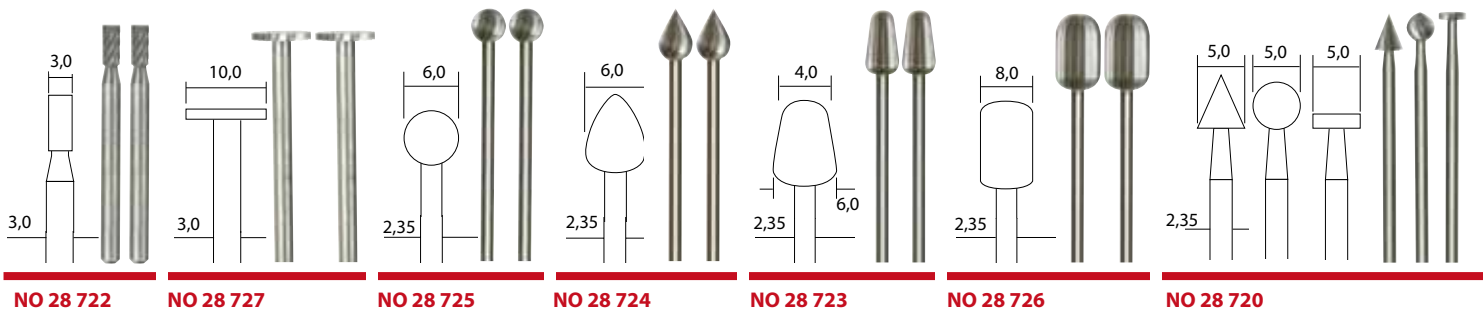
The specified rotational speeds are approximate values for spiral drills made of HSS and tungsten carbide. They must be appropriate for the material of the workpiece. The use of coolant is recommended for aluminium, brass, steel and stainless steel. Plastic can be cooled with compressed air to prevent the drilling chips from fusing. The hardness of derived timber products varies distinctly, therefore only an approximate value can be specified. The harder the wood, the lower the rotational speed!

HSS drill bits



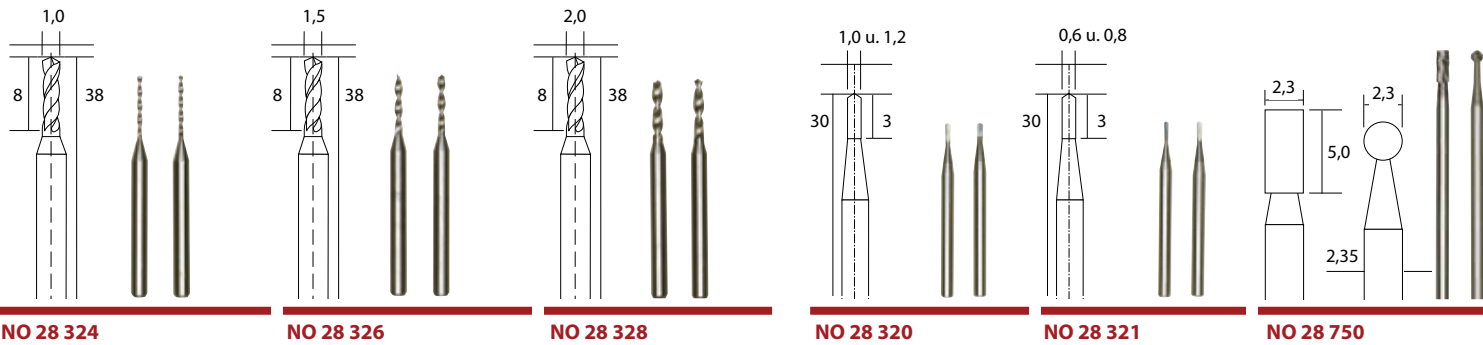
HSS drill bits Selected steel quality. Purpose-made manufactured from a one-piece blank. High hardness for metals, plastic, PC cards and wood. Work speeds: shanks 2.35mm.

Milling bits



Wolfram vanadium steel milling bits Selected wolfram vanadium steel. Purpose-made stable construction with head and shaft out of a single blank. The precise flutes and optimal hand precision work. For use on hard and soft woods, non-ferrous and precious metals, as well as plastics and plaster of Paris. All shafts Ø 2.35 or 3.0mm. Ideal for milling, routing and fitting of the milling bits we recommend the use of MICROMOT steel collets as described above.

Tungsten carbide drills and milling bits

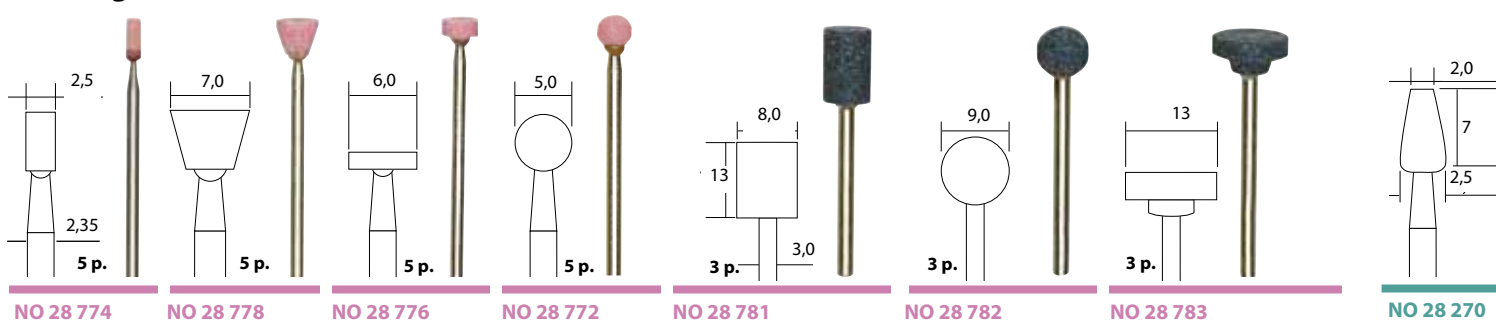


Tungsten carbide drills Made of wear-resistant tungsten carbide. For drilling glass, semiprecious stones, porcelain, ceramics, marble and other hard stones. The hard stones are subdivided according to the degree of hardness from 1 - 10. Tungsten carbide can be used up to hardness degree 6. Drilling hard stones with a hardness degree of more than 6 calls for the use of diamond tools. Shaft Ø 3.0mm. With ideal cutting angle of 6°.

Tungsten carbide milling drills (spear drills) For drilling, milling and cutting fibre glass or PER-TINAX circuit boards. Also for drilling pearls and similar. Shaft Ø 2.35mm.

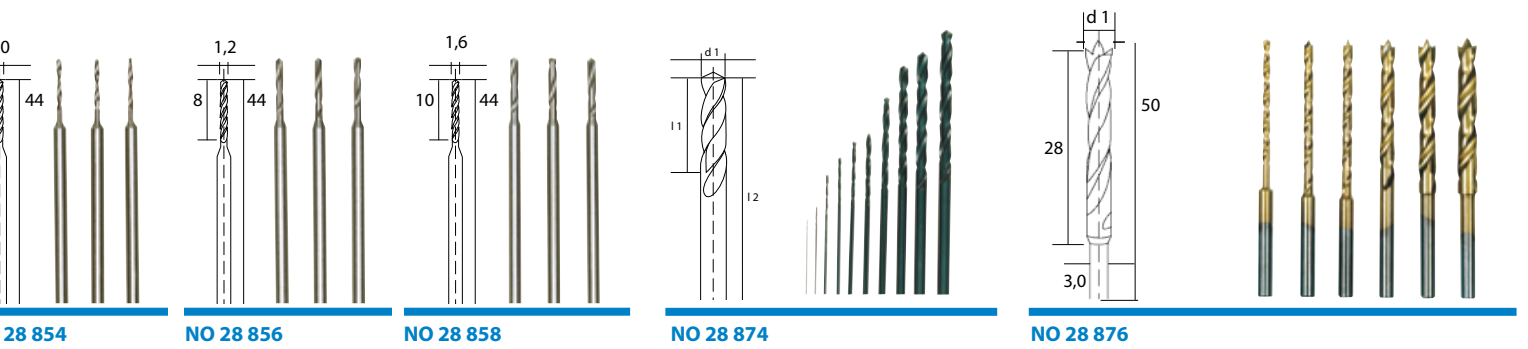
Tungsten carbide millers Made of wear-resistant highly polished material. For milling of PC cards. Shafts Ø 3.0mm.

Grinding bits



High quality corundum grinding bits. Bits and sets of fine, high quality materials of consistent hardness. Various shapes for the widest possible range of applications. For grinding and chiselling hard materials such as cast iron, cast steel, malleable cast iron as well as hard metal alloys and refined steel. Accurately dimensioned shafts of Ø 2.35 or 3.0mm ensure maximum concentricity. **Grinding rule:** soft materials = hard grinding bits; hard materials = soft grinding bits!

Silicon carbide frosting of glass, iron and other h...

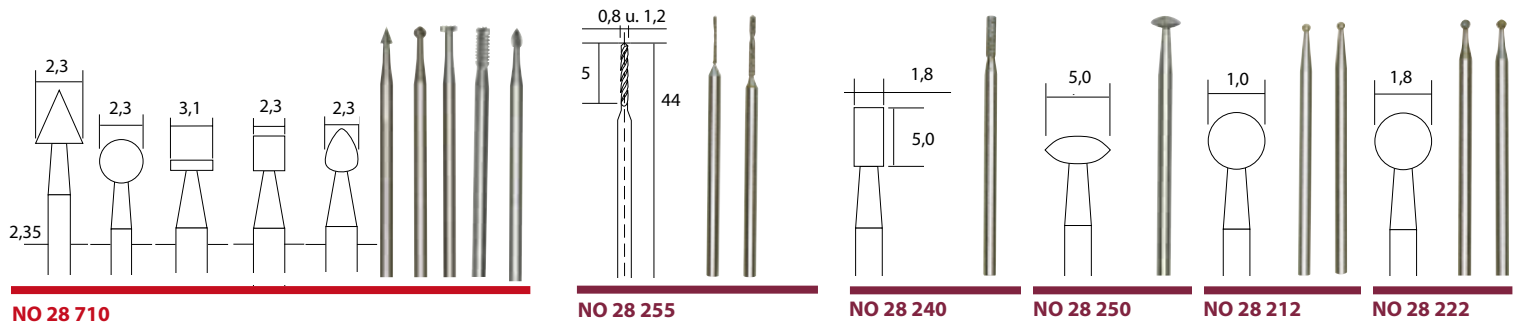


stable construction with high concentricity. Shaft and bit are manu- optimum life expectancy and elasticity. For drilling metal, non-ferrous soft materials approx. 8,000rpm, hard materials approx. 3,000rpm. Ø

HSS twist drill set to DIN 338 One each of 0.3-0.5-0.8-1.0-1.2-1.5-2.0-2.5-3.0-3.2mm diameter. For drilling non-ferrous metals, steel, high-quality steel. 10 pieces.

HSS twist drill set with centring pin ø 1.5 - 2.0 - 2.5 - 3.0 - 3.5 - 4.0 mm. For precision tapping of wood and plastics; also non-ferrous metal, steel and stainless steel sheets. Titanium coating reduces friction and increases service life. Shaft ø 3mm, 6-piece set.

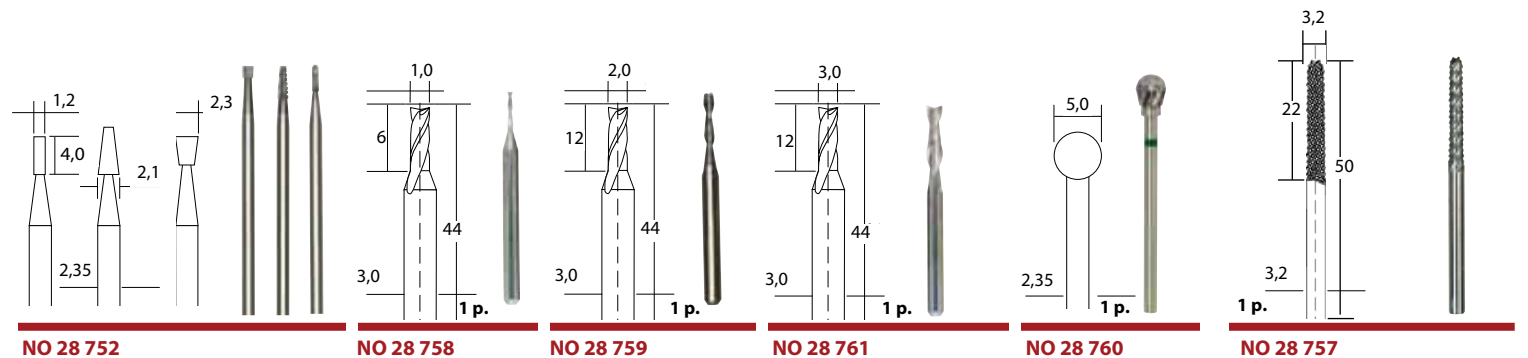
Diamond tools



imal concentricity ensure best life expectancy. Ideal for free- cutting, shaping, profiling and slotting. For clean and powerful

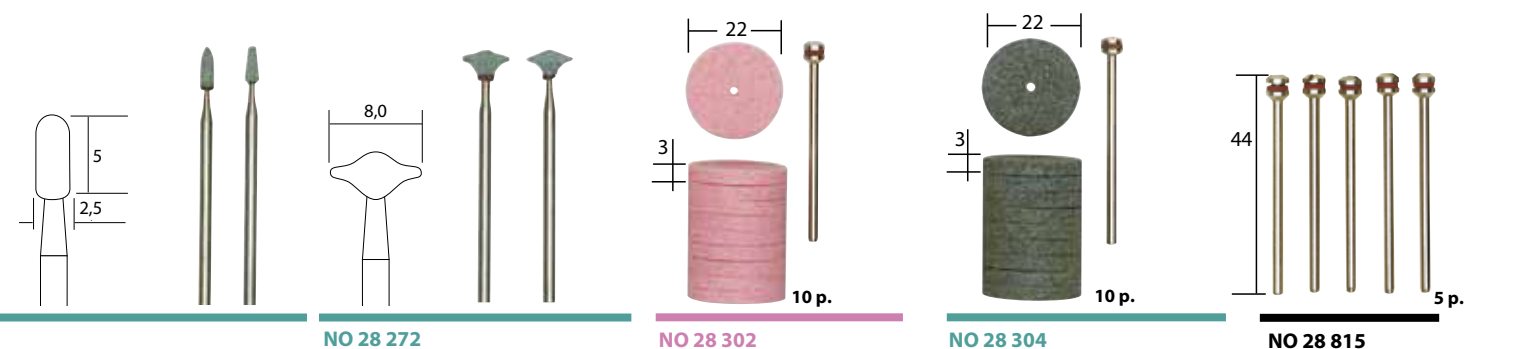
Diamond twist drills For drilling holes in (semi) precious stones, etc. Shaft Ø 2.35mm.

Diamond grinding bits With consistently even coating of diamond dust. Bodies and shafts made from stainless steel. Used for grinding, engraving and chiselling steel (even chrome-cobalt alloy), glass, ceramics, porcelain and plastics. All shafts Ø 2.35mm.



compressed fine-granular tungsten. Used for vibration-free milling of high accuracy dimensions. It is advisable to secure workpieces milling steel, cast steel, non-ferrous metals, plastics and extremely hard materials. May be used for technical work, for engraving and mill- or 2.35mm. Here also we recommend the use of MICROMOT steel collets.

Rasp cutter For cutting and milling tiles, stoneware, wood and plastics. Spare cutter for FEX.



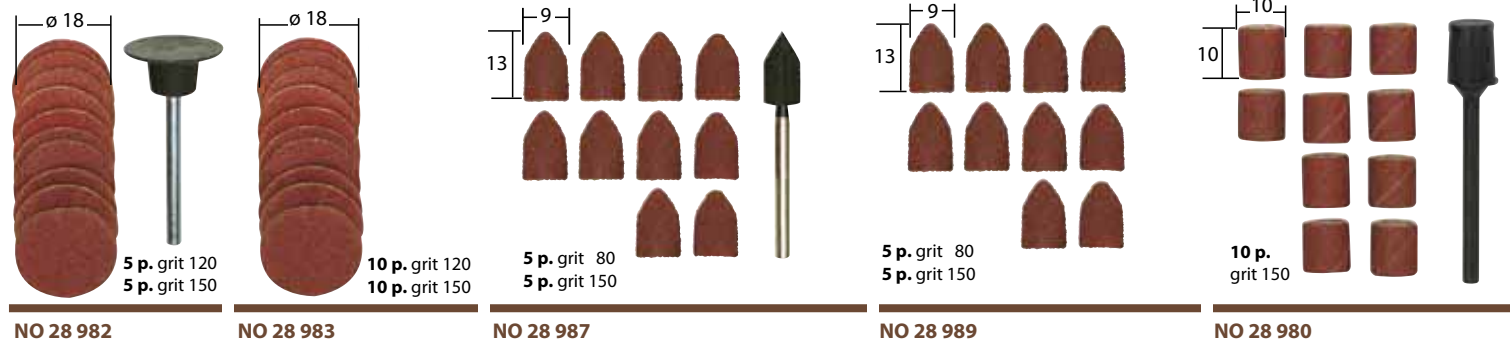
grinding bits Fine particles of consistent hardness for engraving and , ceramics and stellites. Also for grinding tungsten carbide, chilled cast ard steel alloys. Shafts Ø 2.35mm.

High quality corundum and silicon carbide grinding wheels Wheels for free-hand and stationary grinding, sharpening, de-burring and smoothing of various metals and materials.

Spare arbors Shaft 2.35 x 44mm.

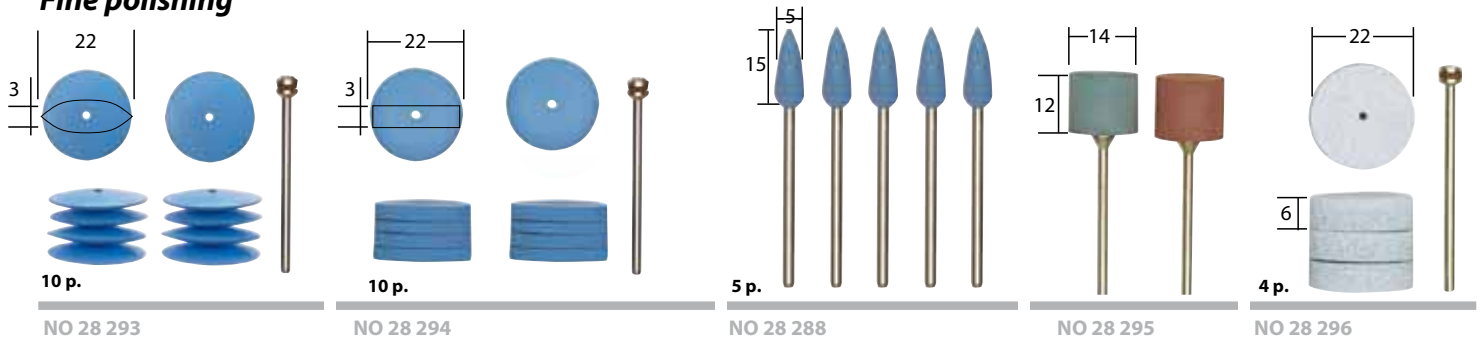
Selected cutting, sanding and polishing bits for professional use and long life

Sanding



Sanding discs, caps and bands are made of standard corundum. The sanding compounds have a tough consistency and different grits for preliminary and refinishing work. Especially suitable for polishing of malleable cast iron, grey cast iron, stainless steel, steel, non-ferrous metals, wood and plastic. Can also be used for chamfering. Adapt the rotational speed to the material. The caps and bands can also be used for refinishing radii and grooves. Shaft \varnothing 3.0.

Fine polishing



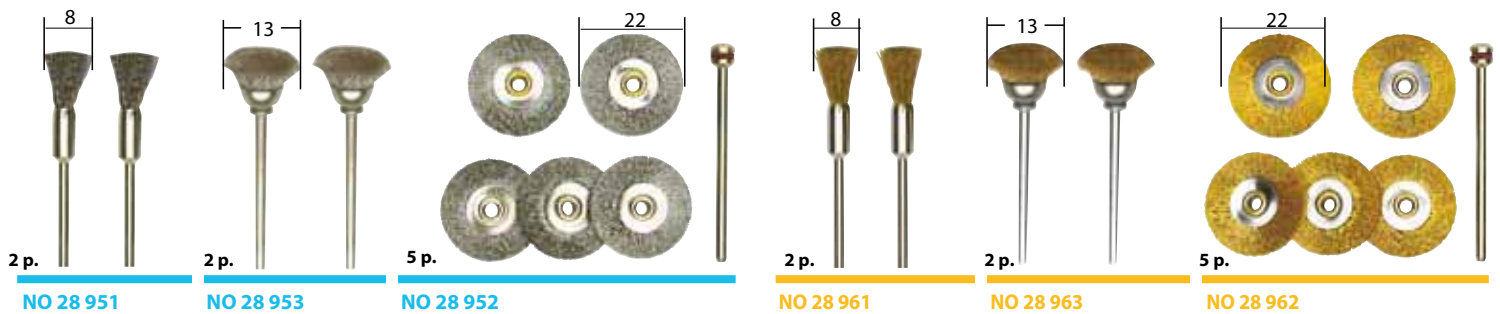
Flexible silicon discs, wheels and bullets

Used for surface smoothing and polishing of precious metals, non-ferrous metals, high-grade metals, glass, porcelain, wood, rubber and plastic. The bullets are very suitable for working tough-to-reach insides. Shafts of \varnothing 2.35mm.

Flexible polishing pad set

Especially suitable for working gold, platinum, silver as well as for tool making and castings. Shafts of \varnothing 2.35mm.

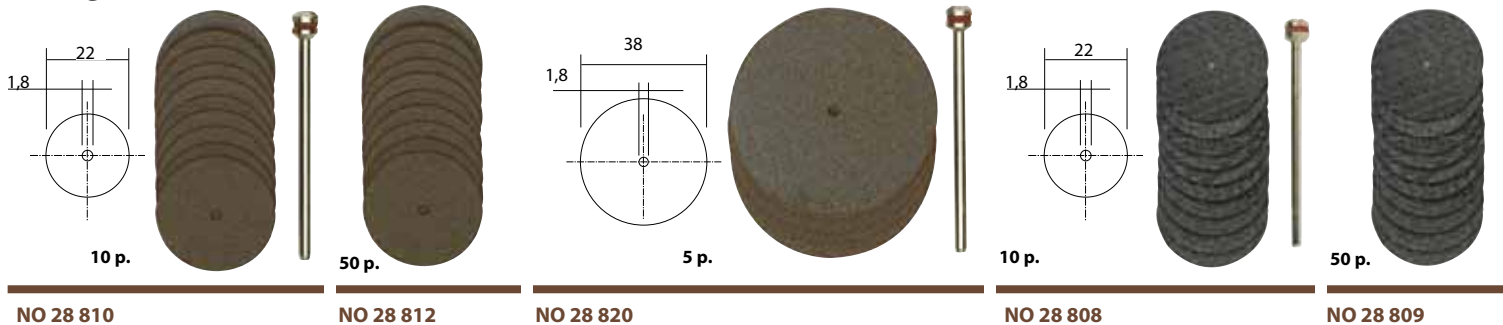
Cleaning, polishing



Steel brushes, cups and wheels High quality components for best operation. For cleaning, removing rust, sanding, frosting, roughening, rounding-off, etc. of metal, cast iron, plastic, stone and wood. Shaft of \varnothing 2.35mm.

Brass brushes, cups and wheels Ideal for working on brass, brass alloys, copper, precious metals, semiprecious stones, plastic and wood. For cleaning of electronic components and circuit boards. Shaft of \varnothing 2.35mm.

Cutting discs



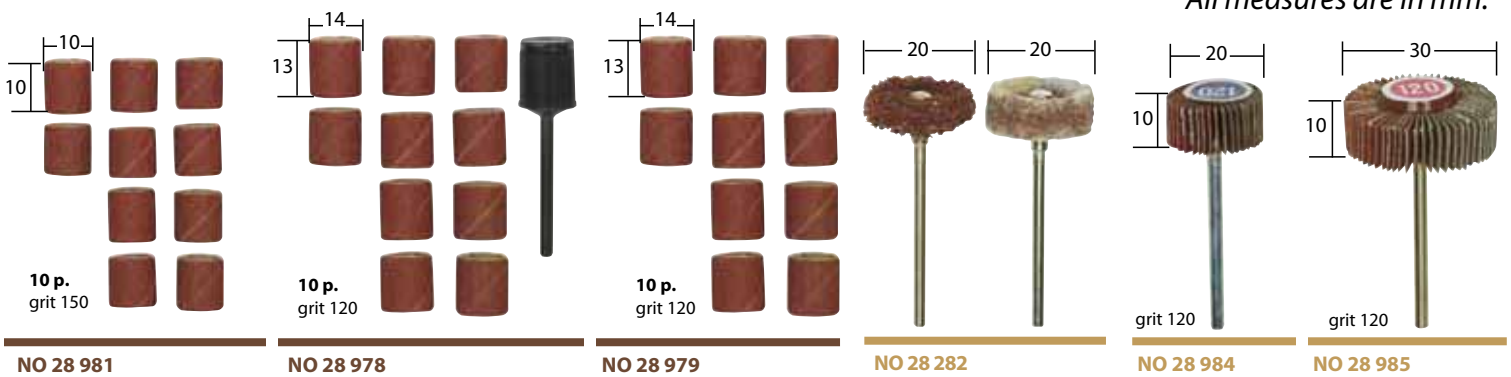
Corundum cutting discs

Discs made of a special compound of diameter 22 or 38 x 0.7mm. Used to part alloys and metals, stainless steels and non-ferrous metals. Can also be used for cutting wood and plastic. Shaft of \varnothing 2.35mm.

Aluminium oxide cutting discs with reinforcement

The cutting discs are available in \varnothing 22 x 0.8mm and \varnothing 38 x 1.0mm. Will cut alloyed, standard and stainless steels, non-ferrous metal.

Best life expectancy!



Note:

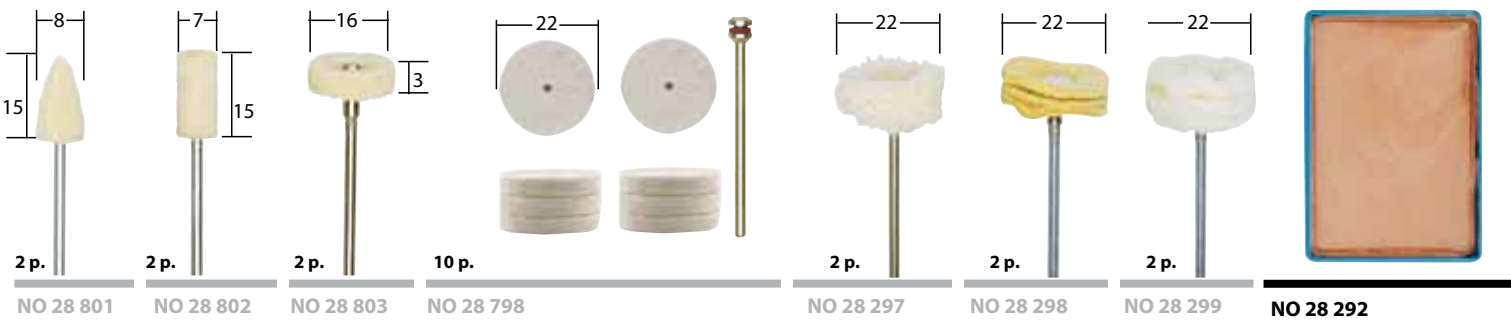
All measures are in mm.

extreme toughness. Different versions for different application areas. For sanding, smoothing and the material to be sanded. Steel high, wood medium and plastic low rotational speed. Sanding

Nylon fleece brushes for cleaning, frosting and sanding steel, stainless steel, non-ferrous metals, etc. Shaft \varnothing 2.35.

Flapwheels of standard corundum are elastic and adapt to the contours of the work piece being processed. For machining inaccessible spots. Shaft \varnothing 3.0.

High polishing



Felt polishers and felt discs.

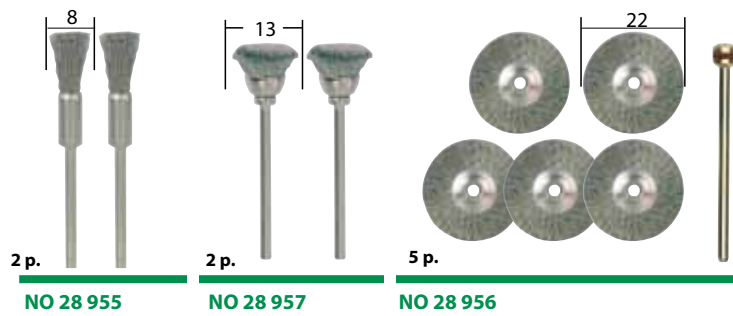
For preliminary and high burnish polishing of metal, gold, silver, brass and aluminium with the use of polishing paste. Also for final polishing in mould and die-making. Shaft \varnothing 2.35. Work with a lower rotational speed when polishing. Soften hard polishing paste with oil or heat up lightly.

Cotton, chamois and felt polishers

For high burnish polishing of metal, gold, silver, non-ferrous metals, brass, aluminium, ceramics and porcelain with the use of polishing paste. Also for reconditioning painted woods and plastics. Shaft \varnothing 2.35.

Polishing paste

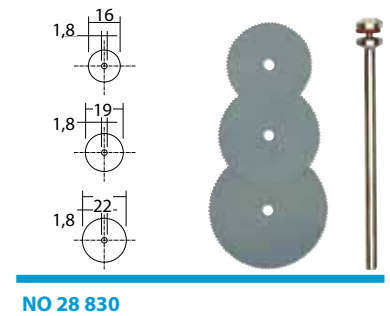
Absolutely essential for polishing metal and plastic.



Stainless steel brushes, cups and wheels For cleaning, brushing and cleansing stainless steel. Remove cinders and scales on stainless steel welding seams and soldering points. Can also be used on aluminium and non-ferrous heavy metal. Shaft \varnothing 2.35.

Note:
Permit the brushes to work only with gentle contact pressure and at the recommended rotational speed! If the pressure is too high, the individual wires will be bent too strongly and afterwards straighten up again due to the centrifugal force. This excessive flexural fatigue stress of the wires on their seating promotes the notch effect. They are prone to breakage!

Cutting wood



Cutting blades made of spring steel 0.1mm thick. For plastic, wood and non-ferrous metal. Shaft \varnothing 2.35. For free-hand work, we recommend using the protective device 28 944 on page 20.

Cutting ceramics



Diamond cutting discs

Only 0.6mm thick. For cutting and sanding of porcelain, ceramics, glass fibre boards, plastic and non-ferrous metals. Shaft of \varnothing 2.35mm.

Diamond-coated cutting discs with cooling holes

For cutting, grinding and deburring. Same application as described on the left. Less heating up due to cooling holes. No burn marks! Shaft \varnothing 2.35.

Nearly unbreakable, making them usable to remove stock. s and even wood and plastic. Arbor shaft of \varnothing 2.35mm.

For shrinking sleeves (many devices available on the market are simply too large) and 1000 kinds of other applications.

MICRO Heat gun MH 550



Small, robust and powerful. Complete with 3 additional nozzles.

For shrinking sleeves, shaping and welding plastics, soldering and de-soldering of electronic components. For removing layers of paint and varnish without aggressive chemicals (pickling agents). For drying and accelerating curing processes (adhesives, paints). For applying and removing films (stickers). For browning wood.

Housing of glass fibre reinforced POLYAMIDE with soft components in the grip area and footprints for stationary use. A powerful heating element ensures a consistent temperature in 2 stages with an air flow of approx. 180l/min. Installed thermostat as security against overheating. Main nozzle and spare nozzles of rust-proof steel.

Technical Data:

220 – 240V. 500W. Air temperature in Stage 1: 350°C. Stage 2: 550°C. Air volume approx. 180l/min. Weight approx. 500g.

NO 27 130

MICROFLAME burner MFB/E

Used for soldering, de-soldering, brazing, heating of workpieces, tinning.

Individually controllable gas and air supply. Super fine flame shape with temperature attaining 1,200 °C. Ideal for precision work. Fitted with an electronic piezo crystal lighter.



The tank contents of 50ml is sufficient for approximately 60 minutes operation with normal flame. Rechargeable with standard butane cartridges used for lighters.

NO 28 146

Soldering iron LG 12

With thermostat for precisely set 250°C. Therefore ideal for soldering electronic components.

Lightweight and handy. Short heating time. Switch with latch. Soldering point lighting for adequate views even in casings and difficult-to-access areas. Replaceable soldering tip (available in stores). With spiral cable and standard MICROMOT jack plug for connection to all MICROMOT mains adapters (min. 1.0A).

Technical Data:

12 – 18V. 1.0A. Constant soldering tip temperature of 250°C.

NO 28 140



Replacement soldering tip

For LG 12. Easy to replace by loosening the clamping screw.

NO 28 141



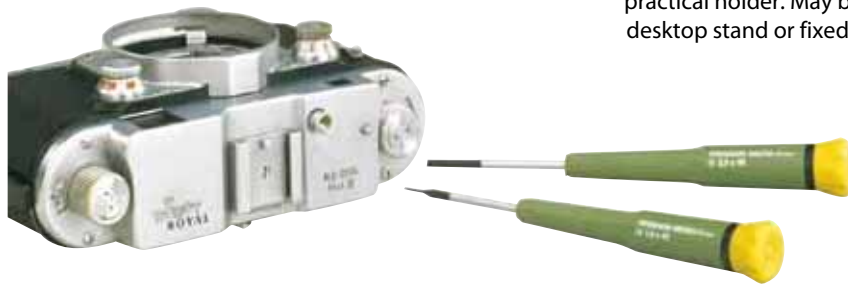
Precision screwdriver for electronic engineers, camera builders, watchmakers, jewellers, precision engineers and model makers.

MICRO-screwdrivers

Shafts of high alloy nickel-chrome-molybdenum (SAE 8660) for maximum hardness and toughness. Chromed with brinelled tip. The ergonomically formed plastic handles are oil and impact resistant. The revolving top and finger mould improve ease of use.

- ⊖ Slot: 1.0 x 40, 2.0 x 40, 3.0 x 40
- ⊕ Philips: PH 0-3 x 40, PH 0 x 40, PH 1-2 x 40
- ⊛ Torx: T 5 x 40, T 6 x 40, T 8 x 40, T 10 x 40, T 15 x 40
- ⊙ Allan-key: 1.5 x 40, 2.0 x 40, 2.5 x 40, 3.0 x 40

NO 28 148 15 pieces in a stand



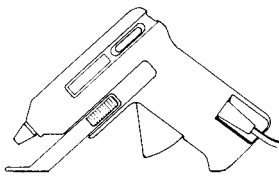
Fixed place for each item in the practical holder. May be used as desktop stand or fixed to a wall.



Note:

It is important to use the MICRO screwdrivers with care and feel. The brute force associated with larger screwdrivers is best left for other tools. The revolving top and finger mould improve ease of use.

MICROMOT glue gun HKP 220



Quick and reliable gluing of metal, wood, plastic (including Plexiglass), glass, ceramics, stoneware, cardboard, leather, polystyrene foams and textiles. Depending on the material and on the adhesive quantity applied, the adhesive sets after about 30 seconds, allowing positional corrections within this period of time

(impossible with instant glues).

The 7mm glue sticks are perfect for delicate work such as model building, toy and jewellery making, dried flower arrangements, etc. Sensitive mechanical feed ensures correct glue quantity delivery. Integral stand positions gun on worktop when not in use. Short heating time.

Technical data:

220 – 240V. PTC controlled element for exact temperature of 200 °C. Four glue sticks 7 x 100mm and 3 interchangeable metal nozzles are included in the set.

NO 28 192

Replacement glue sticks for HKP 220

For metal, wood, plastic, ceramics, cardboard, leather, polystyrene foams and textiles. Ø 7mm. Length 100mm. Colourless.

NO 28 194 12 pieces



Including 3 interchangeable metal nozzles.

Hot wire cutter THERMOCUT 12/E



12
VOLT

Cutting wires (285 x 0.85mm) can be shaped by hand or tongs to manufacture any profile.

Extendable wire fixing for maximum extension of 200mm.

Cutting temperature infinitely variable.

Pivotable fixing element at top.

Polarity-protected system plug for MICROMOT mains adapters.



Note:
Styrofoam is an inexpensive material and very environmentally friendly as compared to other materials; it can be easily cut through with a hot wire. This material is sold in standard sheet sizes of 50 x 100cm and thicknesses of 2 to 16cm at almost all DIY centres and hardware stores.

*Also for cutting free in thick Styrofoam sheets for Diorama model railway construction.
For the manufacture of any profile.*



Note:
With a bit of practice, creating landscapes even for finished railroads and streets is easy. It is also no problem to make corrections to model landscapes.

Other application areas:

Architecture modelling, prototype construction, for designers, decorators, or for fine work on construction insulation. And of course for classical model building.

Stable frame with pivotable fixing element at top and extendable lower wire fixing. Maximum total extension 200mm. Maximum work piece height 150mm.

Cutting wire temperature infinitely variable. With a little practice, you can achieve optimum cuts depending on the material density and thickness. Usually at medium temperatures and without too much pressure. Heat-up time 1 second. Complete with five deformable cutting wires 285 x 0.85mm. For suitable mains adapter see page 17.

Technical data:

12V. 60W. 50/60Hz. Cutting wire temperature controllable from approx. 150 - 350 °C. We recommend MICROMOT mains adapters as of a capacity of 2.0A for operation.

NO 27 082

Replacement cutting wire

For the THERMOCUT 12/E. Easy to bend, therefore ideal for modelling.

NO 28 082

10 pieces



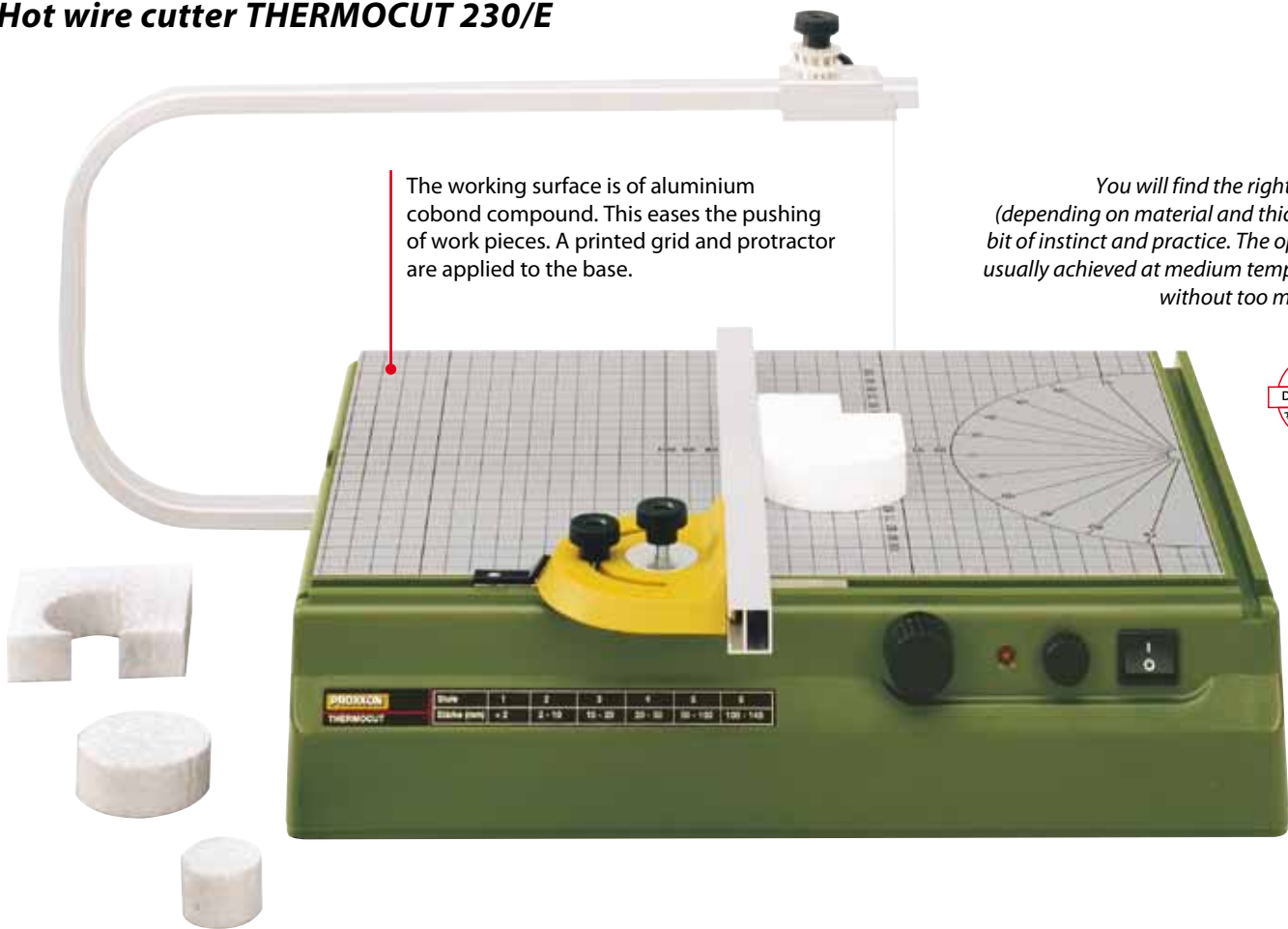
Used to cut styrofoam and thermoplastic materials, both freehand and with stencils.

Hot wire cutter THERMOCUT 230/E



The working surface is of aluminium cobond compound. This eases the pushing of work pieces. A printed grid and protractor are applied to the base.

Note:
You will find the right temperature (depending on material and thickness) with a bit of instinct and practice. The optimum cut is usually achieved at medium temperatures and without too much pressure.



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.

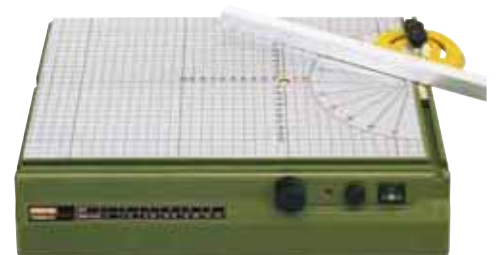
Other technical data:
220 – 240V, 50/60Hz. Transformer secondary max. 10V, 1A. Cutting wire temperature with 0.2mm diameter is variable between approx. 100 and 200 °C. Weight approx. 3kg. Insulated to class 2 requirements.

NO 27 080

Spare cutting wire

Used on the THERMOCUT 230/E 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 tape, it serves as a fixed centre.



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, 100W, 50/60Hz. Variable speed control covering between 1,000 and 5,000rpm. Headstock spindle bore of 10mm. Tailstock 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).

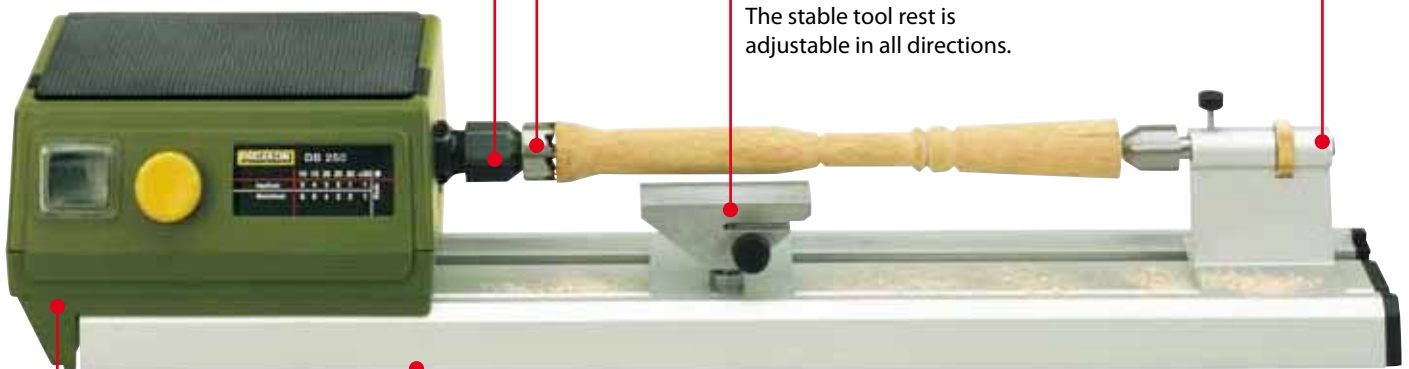


Ball bearing spindle is bored through at 10mm. For series production of small parts.

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

A high quality set with the most frequently used turning tools: gouge, skew, parting tool, beading tool and scraper. 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 steel 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





MICRO shaper MP 300

For profiling, slotting, milling, chamfering, trimming and separating. Also enables precise machining of sides and long

sections (for model building, e.g. for doors, flaps and housing parts).

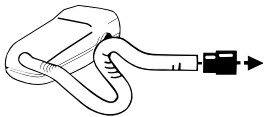
Powerful dust-protected motor with toothed belt drive. Double ball-bearing spindle. Tool holder with triple slitted precision collets (includes 3 pieces for 2.4 - 3.0 and 3.2mm).

Technical data:

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

Milling cutter height adjustment by hand wheel and scale ring adjustable to 0 (1 revolution = 1.0, 1 graduation line = 0.05mm). Stable aluminium table with longitudinal and angle stop as well as cutter guard and hold-down. Housing of ABS. Adapter for vacuum cleaner fits standard household vacuum cleaners.

NO 27 050



The MP 300 is fitted with a dust collection channel and vacuum adapter.



Tungsten carbide wood router cutters

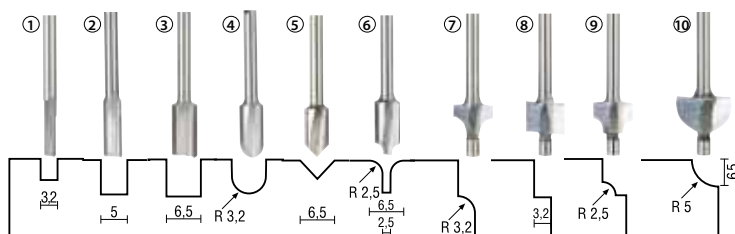
For cutting hard wood, fibreboard and plastic. Clean relief grinding for good work results and surface quality. High stability. For manufacturing slots, sections, radii and other profiles. For crafting picture frames. Shafts 3.2mm.

10-piece wood router cutter set

1 piece each of the cutters offered here. Neatly packed in wooden box.

- | | |
|--|-----------|
| ① slot cutter \varnothing 3.2mm | NO 29 024 |
| ② slot cutter \varnothing 5.0mm | NO 29 026 |
| ③ slot cutter \varnothing 6.5mm | NO 29 028 |
| ④ Rounding over cutter \varnothing 6.4mm | NO 29 030 |
| ⑤ V-slot cutter \varnothing 6.5mm | NO 29 032 |
| ⑥ Combi cutter 6.5/2.5mm | NO 29 034 |
| ⑦ Core box bit R 3.2mm | NO 29 036 |
| ⑧ Rebating cutter 6.4mm | NO 29 038 |
| ⑨ Edge cutter with pin 5.0mm | NO 29 040 |
| ⑩ Half round cutter \varnothing 13mm | NO 29 042 |

NO 29 020



Attention:

The wood router cutters offered here may only be used with working devices that have a safety mechanism. For example, MICRO router MOF (page 11) or MICRO shaper MP 300.



For perfect straight cuts in wood, non-ferrous metals, plastic and PC cards.

Bench circular saw KS 230

The 'Super-Cut' saw blade (Ø 58mm) cuts soft wood up to a thickness of 8mm.

Low noise and persevering AC motor with high life expectancy. Power transmission by toothed belt ensures the right blade speed for the job with approx. a doubling of torque. Cutting performance in wood up to 8mm, plastics (also PERTINAX printed circuit boards) up to approx. 3mm, non-ferrous metals up to approx. 1.5mm. Even fibreglass reinforced PC cards can be cut by using a carbide saw blade. Adjustable mitre fence with scale. Angle stop with degree graduation. Flat-milled worktop of die-cast aluminium (160 x 160mm).

Technical Data:

220 – 240V. 85 W. 5,000rpm. Weight approx 1.8kg.

NO 27 006

Diamond blade. 50mm diameter (10mm bore).



With 0.5mm layer of class 'D107' diamond for cutting ceramics, porcelain, tiles, stone as well as PC cards.

NO 28 012

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

Saw blade made of high-alloy special steel. 50mm diameter (10mm bore).



Alloy holding a high proportion of tungsten, vanadium and molybdenum for an even structure, high hardness and long lifetime. Fine-toothed. For very fine cuts in non-ferrous metals (aluminium, brass, copper). Also suitable for cutting compound materials like PC cards, and sawing wood and plastics.

NO 28 020

Tungsten tipped saw blades



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

NO 28 016



50mm Ø 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

Note:

You will find the larger version of the circular saw KS 230 (type FET) on page 42.

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

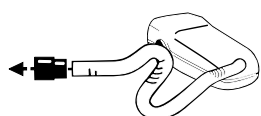
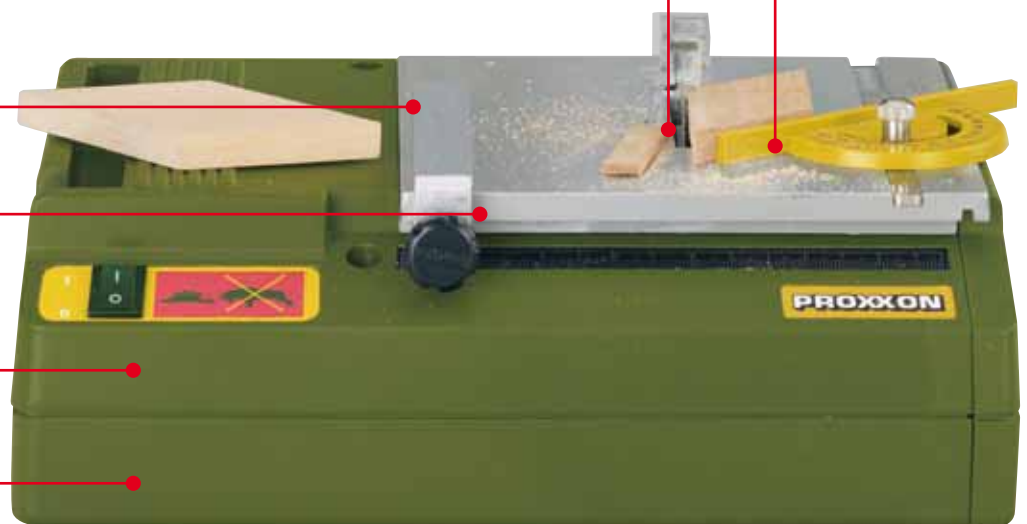
Adjustable fence with scale.

Graduated mitre stop.

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

Motor: low noise and persevering for prolonged use.

Base of ABS with a sawdust door on the right.



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





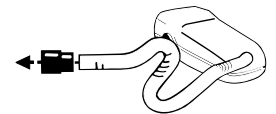
Cuts aluminium, wood, PC cards and plastics with standard scroll saw blades. With electronically controllable stroke rate.

Scroll saw DS 230/E



Adjustable head (patent EP 09783341) offers many advantages (see below).

Note:
You will find our larger scroll saw models DS 460 and DSH on pages 46 and 47.

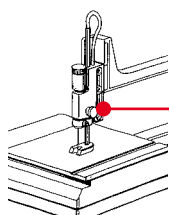


Use the vacuum cleaner adapter to keep your work area cleaner.

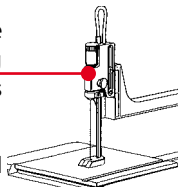
The ideal machine for the delicate job: model building, toy making and precision mechanics. With electronic speed control.

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.



Low noise and persevering AC motor with high life expectancy. Quiet and wear-resistant drive via toothed belts. Adjustable mitre fence and angle stop with scale. Includes 5 saw blades (3 coarse-toothed and 2 fine-toothed).

Technical Data:

220 – 240V. 85W. Electronically controllable stroke rate from 150 - 2,500rpm. Weight approx 2kg.

NO 27 088

'Super-Cut' scroll saw blades. High quality steel for extended use and prolonged cutting capacity. 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 0.38mm 6 pieces

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

NO 28 107 130 x 0.77 x 0.30mm 6 pieces

Hard materials such as steel and PERTINAX.

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

NO 28 104 130 x 1.10 x 0.50mm 6 pieces

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

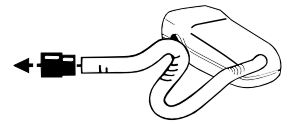
NO 28 106 130 x 0.74 x 0.36mm 6 pieces

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 adapter 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.



Size approx. 250 x 130 x 100mm.
NO 28 030

Technical data:

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

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)

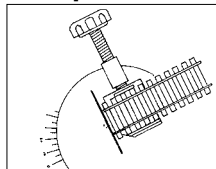
Corundum (grade N) with 12.7mm bore
NO 28 308

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



Note:
You will find the larger version of the KG 50, our Cut off/mitre saw KGS 80, on page 45!



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

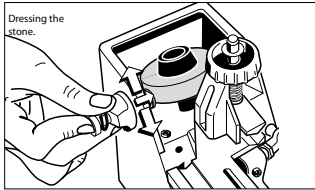
Drill sharpener BSG 220



Note:
The PROXXON Drill Sharpener comes complete with full instructions to ensure even a novice can sharpen drill bits. These instructions will help to 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 34.

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 – 2.0 – 2.4 – 2.5 and 3.0mm. Neatly packed in a wooden box with sliding lid.



NO 21 232

MICRO compressor MK 240. Complete with airbrush AB 100.

Note:
This set-up is only suitable for airbrush work! Only watercolours, graining colours, pigment colours and temperas can be processed (no oil paints, synthetic resin paints or other paints that need to be thinned with solvents).



A practical product combination for model builders, for working with templates, and for technical illustrations.

Low-noise running. With 200cm air hose for connection to the airbrush AB 100. This has a single-action function and an adjustable nozzle which makes it easy to operate even for beginners. Two paint containers are included.

Technical data of the compressor:
220 – 240V. 85W. Air flow rate 12l/min. Air pressure max. 2.0bar. Size 140 x 120 x 95mm. Weight 1,300g. Only suitable for airbrush work!

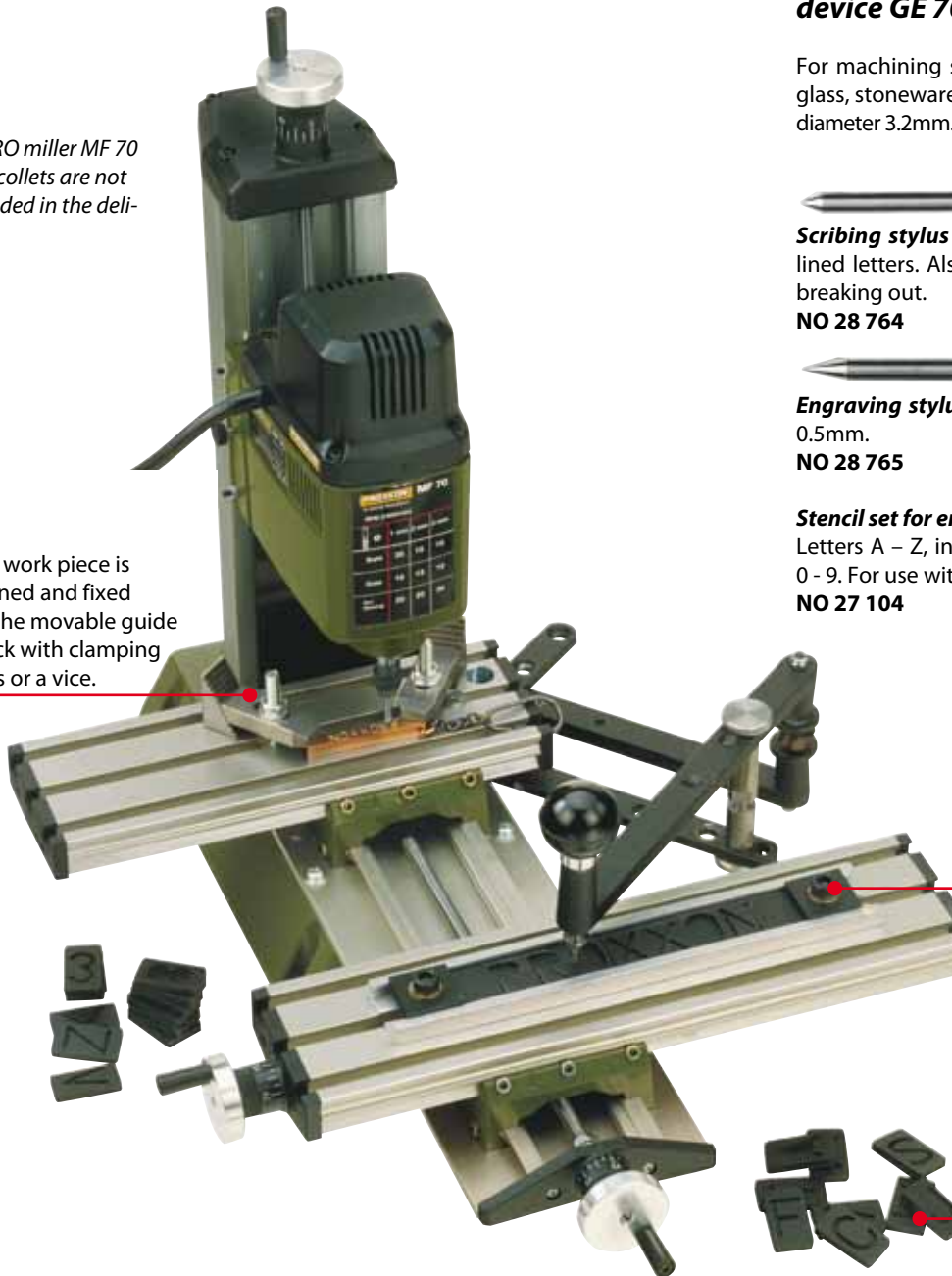
NO 27 120

Engraving device GE 70



MICRO miller MF 70 and collets are not included in the delivery.

The work piece is aligned and fixed on the movable guide block with clamping jaws or a vice.



Solid carbide stylus for use with engraving device GE 70

For machining steel, cast steel, non-ferrous metals, plastics, glass, stoneware and tiles. Nose angle 60° for high stability. Shaft diameter 3.2mm. Not suitable for freehand work.



Scribing stylus for forming thin lines and engraving fine-lined letters. Also for scribing printed circuit boards for later breaking out.

NO 28 764



Engraving stylus for V-shaped letters. Letter width at base 0.5mm.

NO 28 765

Stencil set for engraving device GE 70

Letters A – Z, incl. hyphen, full stop and slash. Also numbers 0 - 9. For use with guide bar of the GE 70.

NO 27 104

Accurate letter templates fixed in a guide bar. Template contours are precisely followed using the guide marker (ball handle).

Note:

It is also equally easy to manufacture miniature, individual shapes, engravings, cut-outs and outline shapes, even in series, using self-made templates or commercially available templates (plants, animals, coats of arms).

A practical accessory for the MF 70. To be fitted in place of the compound table for engraving.

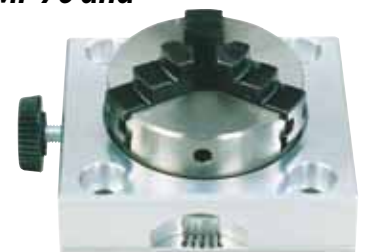
The lettering to be milled is scaled down during transfer. The transfer ratio can be fixed at 2:1, 3:1, 4:1 or 5:1 by simply adjusting two screws. Guide bar (template holder) holds a maximum of 14 letters. Complete with two sets of letters from A to Z, full stop and hyphen (total 52 items), two sets of numbers from 0 to 9 (20 items), fixing screws for the MF 70 base and a comprehensive instruction manual.

NO 27 102

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

For machining circular work pieces, manufacturing off-set holes and milled out portions, milling key surfaces, four-sided, six-sided materials, etc. Absolute accurate division due to nonius at the base body. With reversed chuck jaws: Capacity inside 1.5 to 32mm, outside 12 to 65mm. Bore of 11mm (for processing longer spindles in a vertical position). With fastening bores for horizontal and vertical mounting and suitable slot nuts and fastening screws for mounting to the MICRO miller MF 70 and the MICRO compound table KT 70. Size 72 x 64 x 38mm. 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

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



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 and even plastics and carbon fibre. One each of 1.0 – 2.0 and 3.0mm shaft diameter. Can also be ordered separately (see page 23).



NO 27 116 3 pieces

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.

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.

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 which 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

Precision steel vice PM 40

Milled from steel for precision. Completely angular.

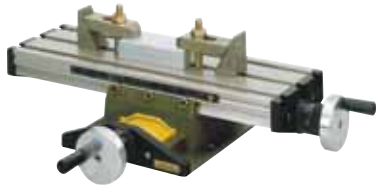
Jaw width 46mm, clamping capacity 34mm. Total length 70mm. Especially suited for filigree and accurate working with the MICRO miller MF 70 or the compound table KT 70. Sliding blocks and fixing screws included. Comes in a wooden box.

NO 24 260



*For precision work: even 0.5mm holes may be drilled.
With three step pulleys for easy speed change.*

Bench drill machine TBM 220



The optional MICRO compound table KT 70 is described on page 18.

3 spindle speeds by shifting the flat belt for more than the triple torque in the lower rotational speed range.

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

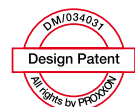
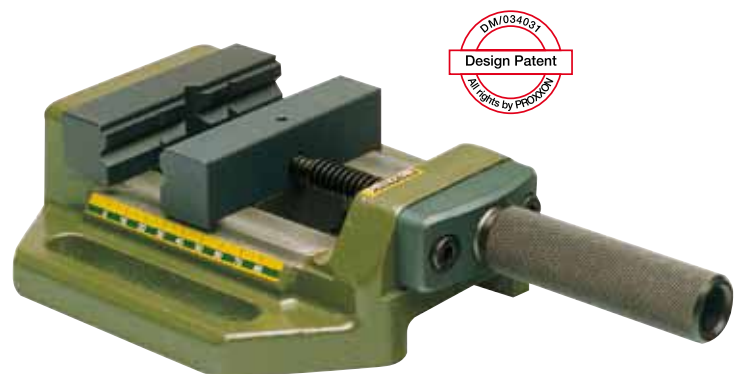
RÖHM-Chuck

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



Precision machine vices





Sublime precision tool. Ideal for the lab, workshop and delicate operations.

Bench drill press TBH

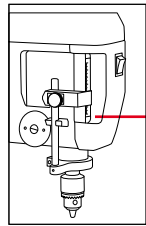


Ideal for jig boring with the compound table KT 150 (page 58).

Note:

Table and arm of the table drilling machine offered here are made of die-cast aluminium. A refined, rust-proof and statically very solid material. Fittings and feeds are machined on our highly modern CNC-controlled machines (milled, line-bored, lathed, etc.).

Practical height adjustment via toothed rack with easy to operate crank.



Powerful, long-lasting direct current motor. Spindle drive via triple belt pulley with the advantage of roughly 6 times the torque in the lower rotational speed range.

Practical drill depth indicator with adjustable limit stop. Drill spindle with precision bearing. Spindle head with 1/2" thread for the corresponding RÖHM chuck (industrial quality). Spindle with additional fit for steel collets NO 28 200.

Technical data:

220 – 240 Volt. Spindle rotational speeds 1,080 – 2,400 and 4,500rpm. Sliding sleeve stroke 63mm. Height adjustment via crank 70mm. Throat 140mm. Usable table surface 200 x 200mm. Column 45 x 500mm. Tool holder up to 10mm. Drilling performance in steel 10mm. Weight approx. 10kg.

NO 28 124

Stable, strongly ribbed plane-milled worktable with two T-slots.



Practical height adjustment via toothed rack with side crank.



Ease of operation. With precise jaw guide:

PRIMUS 75

Base body made of special cast iron with CNC-machined guides. Interchangeable gripping jaws. Flat-milled working surface. Spindles with rolled trapezoid thread for ease of operation even during high axial load. Width of jaws 75mm. Jaw opening 65mm. Distance from long slot centre to long slot centre 100mm. Long slots 80 x 11mm. Weight 2.5kg.

NO 20 392

PRIMUS 100

Width of jaws 100mm. Jaw opening 75mm. Distance from long slot centre to long slot centre 135mm. Long slots 105 x 15mm. Weight 5.0kg. Other details as for the PRIMUS 75.

NO 20 402

Collet set for drill press TBH

Triple slit and hardened. 1 each of 2.35 – 3.0 – 3.2 – 4.0 - 5.0 and 6.0 mm. With collet closure nut (M 17)

Neatly packed in wooden box with sliding lid.

NO 28 200

T-nut set for PRIMUS vices

2 T-nuts, screws and the necessary accessories. For fixing to the drill tables of: BFB 2000, KT 150 and bench drill press TBH.

NO 20 394

Disc sander TG 125/E



With associated horizontal C-clamp (with table), but can also be fixed vertically quickly and safely (to sharpen tools).



Suction channel with adapter to connect a vacuum cleaner.



Sanding disc (125mm). Self-adhesive sanding discs can be easily removed after use.

Table tilting through 50° downwards and 10° upwards. With angle stop. With C-clamp for horizontal and vertical fixing (see figure above).

For all wood types, steel, non-ferrous metals, precious metals, plastics (also Plexiglas and fibreglass).

Powerful drive and vibration-free running thanks to balanced DC motor. Housing of glass-fibre reinforced POLYAMIDE. Aluminium table tilting through 50° downwards, 10° upwards. With angle stop. Sanding disc with affixed silicone film. This surface ensures easy removal of self-adhesive sandpaper. Two additional square silicone films allow for easy storage after use and thus reuse as necessary. Machine can be secured horizontally (with table) on the workbench, but also quickly and safely in vertical position.

Suction channel with union to connect a vacuum cleaner for dust-free working. Each with 2 sanding discs grit 80, grit 150 and grit 240.

Technical data:

220 – 240V. 140W. 50/60Hz. Adjustable grinding speed of approx. 250 – 800m/min (corresponds to 1,150 – 3,600rpm). Sanding disc Ø 125mm. Table 98 x 140mm. Sanding height 62.5mm. Size 300 x 140 x 160mm. Weight approx. 3kg.

NO 27 060

Self-adhesive white corundum sanding discs for TG 125/E

Industrial quality. For sanding soft and hard woods, chip-boards, fibre boards, non-ferrous metals, steel, plastics, cork, rubber and minerals. Ø 125mm. One quadratic silicone film for storage and reuse of used sanding discs is included.

NO 28 160	80 grit	5 pieces
NO 28 162	150 grit	5 pieces
NO 28 164	240 grit	5 pieces

Note:

For dust-free work we recommend our Compact Workshop vacuum cleaner CW-matic (see page 42) with integrated automatic switching unit: Vacuum runs during grinding, switching your tool off stops the vacuuming with a run-on time of 5 seconds.

