Tools with character!

Edition 2017
**Feel, see and enjoy the quality!**

To users all over the world PROXXON means advanced, competitive, high quality technology. PROXXON individually test each product before it leaves the factory to ensure it arrives to you in immaculate condition. Our exclusive distributor for the North American market, Prox-Tech, Inc. has a wealth of experience and extensive knowledge of our line and is happy to help you with any questions you may have.

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Our website [www.proxxon.com/us](http://www.proxxon.com/us) offers an instructional video for the articles marked with this symbol. Come have a look!
Performance at its best! The torque makes the difference! The smart alternative with keyless chuck.

The Precision Rotary Tool FBS 115/E – with soft grip two-component housing for comfortable handling and optimal control.

1001 uses for drilling, milling, grinding, polishing, brushing, de-burring, rust removal, engraving, carving and cutting. A special motor technology (no replacing of brushes necessary) with full-wave electronic speed control allows for powerful operation with constant torque, even at low speeds! This feature is especially important when micro-drilling, brushing and polishing on delicate materials (e.g. plastics, etc.).

The extremely balanced motor, which makes the tool run smoothly and vibration-free, as well as low weight and the improved ergonomic design with the soft-grip two-component material allow for optimal control while working. The spindle runs in a precision ball bearing. A button locks the spindle for an easy exchange of bits. The keyless precision chuck allows for quick exchange of all accessories with shanks from 0.3 – 3.2mm (Ø1/64" to Ø1/8"). The tool’s 20mm (4/5") standard collar makes it fit easily into all other useful MICROMOT accessories, such as drill stands and vices, making this Precision Rotary Tool even more versatile.

Technical data:
- Speed: 5,000 – 20,000rpm
- Keyless Chuck: for shanks from 0.3 – 3.2mm (1/64" – 1/8")
- Max Power: 100W (1/8hp)
- Volts: 110 – 120V AC, 60 Hz
- Length: 220mm with chuck (8 1/2")
- Weight: 450g (1 lbs)

NO 38 472

Complete with 43 high quality bits and cutters in a durable plastic case.

NOTE:
The FBS 115/E may also be optionally fitted with MICROMOT steel collets (see page 4).
This high-revving motor has full-wave electronic speed control capable of producing variable speeds between 5,000 and 20,000rpm and is usable for extended periods at a time producing an exceptional power/weight ratio. The streamlined die-cast aluminum head provides a stable housing for the ground steel spindle. It runs in a double ball bearing assembly, minimizing play (max. runout 0.001”).

The tool comes with six high concentricity collets sized 1, 1.5, 2, 2.4, 3 and 3.2mm (1/32”, 1/16”, 5/64”, 3/32”, 7/64” and 1/8”) along with a collet nut as well as a selection of 34 industrial quality bits and cutters with shanks Ø 2.3mm (3/32”).

**Technical data:**
- **Speed:** 5,000 – 20,000rpm
- **Volts:** 110 – 120V AC, 60Hz
- **Max Power:** 100W (1/8hp)
- **Length:** 230mm (9”)
- **Weight:** 500g (1.2 lb)

**NOTE:** The collet makes a big difference!

1. **MICROMOT steel collets** are hardened and have a high, consistent flexibility so that they maintain their accuracy, even if used regularly.

2. The triple slit collet offers a substantially better load bearing surface than the easier to produce four-slit type. This is especially important for cutters with small shank diameters.

**NOTE:** Quality, triple-slit hardened steel collets are ideal for optimum concentricity and tightening force. Furthermore, bits and cutters may be fitted close to the chuck. This is especially important when sanding, routing and milling as side play is minimized.
The long slim die-cast head makes these sanders preeminently versatile!

**Longneck Angle Grinder LHW/E**

This light, compact and user-friendly unit is the real alternative to pneumatic tools for grinding, deburring, roughing, finishing – wherever working in tight spaces. It is also great for paint and rust removal, cutting small components and sharpening tools. The powerful permanent magnet motor has a high lifetime and performs with high torque.

**Technical data:**
- Volts: 110 – 120V AC, 60 Hz,
- Max. Power: 100W (1/8hp)
- Speed: 3,300 – 13,000rpm
- Length: 290mm (11 13/32")
- Weight: 550g (1.2 lbs)
- Disc: Ø 50mm (2”), bore: 10mm (13/32”)

Complete with one aluminum-oxide grinding disc (60 grit), one flap disc (100 grit) and one aluminum-oxide cut-off wheel.

**NO 38 544**

**Flap Disc for LHW /E**
The flap disc is made from aluminum-oxide with a high stock removal rate and is ideal for grinding and smoothing of cast iron, gray cast iron, stainless steel, steel, non-ferrous metal, wood and plastic.

**NO 28 590** (100 grit)

**Corundum Bound Cut-Off Wheel for LHW /E**
Ideal for cutting steel, non-ferrous metals, smaller plastic and wooden bars.

**NO 28 155** 5 pieces

**Corundum Grinding Disc for LHW /E**
Ideal for grinding, deburring, sharpening, rust removal and roughing of steel and non-ferrous metal.

**NO 28 585** (60 grit)

**Silicon-Carbide Grinding Disc for LHW /E**
Ideal for grinding, deburring, sharpening, rust removal and roughing of stone, glass, ceramics and other very hard materials.

**NO 28 587** (60 grit)

**Disc with tungsten carbide burrs**
Carving wheel with needle-like tungsten carbide teeth. Ideal for carving and sculpting, roughing and finishing in wood plastics and fiberglass. Smooth cutting and excellent control. Maximum RPM 15,000.
Do not use on metal.

**NO 29 050**
For precision square excavations, HSS plunge saw blades are available with an 8 and 14mm width of cut.

**Delta sander OZI/E**

Oscillating motion far better than conventional orbital motion. Hence suitable for cutting and precision carving.

Small yet efficient sander!
For grinding surfaces in very tight spots, e.g. corners, sides and in-accessible areas. The oscillating motion ensures quiet operation and also facilitates cutting. Insert and file! The variable speed facility ensures the correct speed for every material. Special, balanced, low noise DC motor with high life expectancy. Main housing of glass-fibre reinforced POLYAMIDE. Supplied with an HSS plunge saw blade (width 14mm) for square precision cuts in wood, plastics and aluminium as well as 10 each sanding pads of 80, 150 and 240 grit. In an attractive case, as described on the right.

Technical data:
- Volts: 110 – 120V AC, 60Hz
- Max. Power: 100W (1/8hp)
- Speed: 5,000 – 12,000 oscillations/min.
- Length: 230mm (9”)
- Weight: 550g (1.2 lbs)
- Sanding plate dimensions: 65 x 65 x 65mm (2 1/2” x 2 1/2” x 2 1/2”)

NO 38 520

The OZI/E cuts in areas where a rotating saw blade can no longer be used (in this case using the HSS separation blade, see page 7).

This set comes in an attractive storage case of high-grade PP complete with 4 sheets of sandpaper (2 x 80 grit, 1 x 150 grit, 1 x 240 grit).

For precision square excavations, HSS plunge saw blades are available with an 8 and 14mm width of cut.
Sanding pads for OZI/E

High durability aluminium oxide pads. Deposited on special backing paper. Hook & loop type.

<table>
<thead>
<tr>
<th>No</th>
<th>Grit</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 891</td>
<td>80</td>
<td>25 pieces</td>
</tr>
<tr>
<td>28 893</td>
<td>150</td>
<td>25 pieces</td>
</tr>
<tr>
<td>28 895</td>
<td>240</td>
<td>25 pieces</td>
</tr>
</tbody>
</table>

HSS cutting blade for OZI/E

Oscillates, making it ideal for cutting metal, wood, PC cards, plastics, plaster of Paris and many other materials. The segment cut facilitates exact cutting right into corners.

Ø 65mm (2 1/2”), 160 teeth

<table>
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<tr>
<th>No</th>
<th>Diameter</th>
<th>Teeth</th>
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</thead>
<tbody>
<tr>
<td>28 890</td>
<td>65mm</td>
<td>160</td>
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Diamond cutting blade for OZI/E

Operation as described above for the HSS blade. Cuts marble, bricks, dry wall and many other materials. Ideal for interior finishing and sanitary and electrical installation.

<table>
<thead>
<tr>
<th>No</th>
<th>Diameter</th>
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<tbody>
<tr>
<td>28 8902</td>
<td>65mm (2 1/2”)</td>
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</tbody>
</table>

HSS plunge saw blades for OZI/E

For exact square excavations and other forms. For making hatchways and windows in ship and aircraft models. Cuts wood, ply-wood, plastics and aluminium. Max. plunge depth 16mm (5/8”). Saw blade width 8mm (5/16”) Saw blade width 14mm (35/64”)

<table>
<thead>
<tr>
<th>No</th>
<th>Width</th>
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<tbody>
<tr>
<td>28 897</td>
<td>8mm</td>
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<tr>
<td>28 898</td>
<td>14mm</td>
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</tbody>
</table>

Super jig saw STS/E

Technical data:
- Volts: 110 – 120V AC, 60Hz
- Speed: 2,000 – 4,500 strokes/min
- Max power: 100W (1/8hp)
- Overall length: 230mm (9”)
- Weight: 700g (1.54 lbs)

This tool offers fantastic cutting capacity with the footplate adjustable up to 45 degrees for mitre cuts. The gear head is made of die-cast aluminum. The stroke speed is variable by means of full wave electronic speed control. Ideal for tight curves in wood (up to 12mm/1/2”), non-ferrous metals (up to 3mm/1/8”) and plastics.

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<tr>
<th>No</th>
<th>Diameter</th>
<th>Teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>38 530</td>
<td>65mm</td>
<td>160</td>
</tr>
</tbody>
</table>

Jig Saw Blades. Special steel.

Pitch of 1.5mm (1/16”), teeth ground & set. Usable on hard & soft woods, plywood, fiberglass reinforced sheets as well as various plastics. Ideal for tight curves and clean cuts. For use with jig saws STS 12/E and STS/E.

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<thead>
<tr>
<th>No</th>
<th>Diameter</th>
<th>Teeth</th>
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<tbody>
<tr>
<td>28 054</td>
<td>65mm</td>
<td>160</td>
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</table>

Jig Saw Blades. HSS.

Tooth pitch of 1.06mm (3/64”), with teeth set & ground. Usable on metals, aluminium and softer alloys, fiberglass, Plexiglass and insulating materials. For use with jig saws STS 12/E and STS/E.

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<td>28 056</td>
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MICROMOT Tool Clamp – For stationary use of MICROMOT hand-held tools.

Whenever working free hand is difficult or dangerous, here is the solution for the stationary use of MICROMOT hand-held tools. With a tough fiberglass reinforced construction, this tool clamp perfectly fits around the body of our hand-held tools with aluminum-die cast head such as Professional Rotary Tool IBS/E (38 481), Longneck Angle Grinder LHW (38 547), Belt Sander BS/E (38 536) and Detail Sander OZI/E (38 520) as well as our Jig Saws STS 12/E (28 534) and STS/E (38 530).

The tool clamp is easily clamped via two flaps in a vice (we recommend our Precision Vice FMS 75 or Precision Vice with Clamp FMZ).
Precision equipment for sanding.  

**Belt Sander BS/E**

A light, compact and user-friendly unit that makes sanding in tight spaces more convenient. Used in modeling, sculpturing, tool- and die-making or the automotive sector. The belt sander has a speed control for variable speeds from 225 – 450m/min. (12 – 25 ft/s), which enables work on many different materials, such as wood, metal or plastic. It can be used for grinding and enlarging small openings, grinding in notches, regrinding moulds or polishing (flat surfaces).

It is also great for deburring, rounding edges or removing paint. Recentering or tilting the belt is easily done with a screwdriver.

**Technical data:**

- Volts: 110 – 120V AC, 60Hz
- Max. Power: 100W (1/8hp)
- Belt Speed: 225 – 450m/min (12 – 25 ft/s)
- Length: 350mm (13 3/4”)
- Weight: 650g (1.4 lbs)
- Belt Size: 330 x 10mm (13” x 13/32”)

Comes with two 80 grit and two 180 grit sanding belts. NO 38 536

**Replacement Sanding Belts for Belt Sander BS/E**

Made from high-quality aluminum-oxide on tough, woven, light-weight cloth backing. For sanding metal, non-ferrous metal, wood and plastic.

| NO 28 581 | 180 grit | set of 5 |
| NO 28 582 | 120 grit | set of 5 |
| NO 28 583 | 80 grit  | set of 5 |

**Silicon Carbide Sanding Belt**

for use on glass, ceramics, brass, steel and cast iron.

| NO 28 579 | 180 grit | set of 5 |

**Footswitch FS**

This attachment frees your hands for easy on/off operation. To be used for all machines with a maximum power consumption of 500W (5/8hp). The switch has a housing of glass-fiber-reinforced nylon. The connecting cord is 250cm (3ft. 21”) in length and the output cord is 50cm (19.5”). Ideal for both portable and stationary machines. If you are working with our 12V hand-held machines, the Footswitch FS is connected to the transformer.

| NO 38 700 |

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The belt arm itself is adjustable within an angle of 60° by the push of a button on the head.
Angle Polisher WP/E

For perfect surfaces even in tight spots: For finishing of blank surfaces, cleaning, rust removal, for the „finishing touches“ after varnishing.

Balanced specialty motor, powerful, quiet and long-lasting. Quiet planetary gear in die-cast aluminium housing and continuously variable speed control (full-wave electronics) for low and constant speeds even during high contact pressure.

Main housing of fiber-glass reinforced POLYAMIDE with soft component. Securely stored in stylish case made of high-grade polypropylene with original equipment for immediate use. Rubber backing disc with hook and loop fastening, polishing sponge (medium hard), lambswool polishing disc, polishing felt for metals and non-ferrous metals (medium hard), 12 sanding discs 2000 grit and NIGRIN polishing compound (75ml) as well as a microfibre cloth.

Technical data:
110 – 120V. 50Hz. 100W (1/8 hp). 800 – 2,500rpm Length 270mm (10.6”). Weight 720g (1.6 lbs). Insulated to class 2.
NO 38 660

Accessories for the angle polisher WP/E

**Rubber backing disc**
For use with polishing sponge, lambswool polishing disc, felt disc, sanding discs and sanding fleece. With hook and loop fastening. Ø 50mm (2”).
NO 28 548 1 piece

**Polishing sponge (blue = medium hard)**
For applying the polishing compound to painted and metal surfaces with subsequent polishing. With hook and loop fastening. Ø 50 x 25mm (2” x 1”).
NO 28 662 2 pieces

**Lambswool polishing disc**
Of high quality, dense lambswool for polishing scratch-proof paints. With hook and loop fastening. Ø 50mm (2”).
NO 28 664 2 pieces

**Polishing felt, medium hard**
For polishing metals (e.g. stainless steel, brass and copper). With hook and loop fastening. Ø 50mm (2”).
NO 28 666 2 pieces

**Super-fine sanding discs 2000 grit**
Of silicon carbide. For adding finishing touches to paint or removing varnish runs and inclusions. With hook and loop fastening. Ø 50mm (2”).
NO 28 670 12 pieces

**Microfibre cloth**
For final cleaning of polished surfaces. Finely meshed and without seam. 20 x 20cm (8” x 8”).
NO 28 678 2 pieces

Packed in storage case, including extensive original equipment for immediate use.
For the carving of all types of wood. For the restoration of furniture and for the restoration of antiques. For linocuts and precision paint removal.

It is also possible to process plaster. Special, balanced, low noise DC motor with extreme high life expectancy. Gear head made of die-cast aluminum. Main housing of fiberglass reinforced POLYAMIDE. Three high-grade Japanese knife inserts made from bimetal (U-form, V-form ad flat blade) are included.

**Technical data:**
- Speed: 10,000 cuts/min.
- Max. Power: 50W (1/10 hp)
- Volts: 110 – 120V AC, 60Hz
- Overall length: 230mm (9") w/o knife
- Weight: 680g (1.5 lbs)

**Replacement Carving Blades**
High quality laminated steel (bi-metal) blades in V shape, large and small gouge, flat with straight and rounded cutting edge. All 5 to a set. For carving and detailing wood (all types), plaster of Paris, gas concrete, linoleum. Also for removing fine layers of paint or finish.

**Profiled Sharpening Stone**
Pure oilstone for a razor sharp cutting edge. With pre-profiled surface for easy sharpening and reshaping all carving knives in the PROXXON program (see above). Approx. dimensions 100 x 63 x 15mm (4" x 2 1/2" x 5/8").

**Note:**
The new wolfram carbide rasp plate is ideal for woodcarvers and as a supplement for a motorised carving machine (material as described earlier) in connection with our LHW/E Long-neck Angle Grinder. Details on page 5.
MICROMOT AC voltage adapters - safe and efficient power sources for hand held 12 volt PROXXON machines, with practical tool rest.

**MICROMOT AC Adapter NG 2/S**

Very compact design. Noryl casing (heat resistant - a necessity for transformer enclosures). Capacity 2A at 16 Volt open circuit - and 12 Volt under load = 24VA (DC). Primary supply 110 – 120V. Polarized socket for MICROMOT plug. Red LED indicates readiness for use. PTC (Positive temperature coefficient) element prevents overload, plugged in tool will not automatically restart. After cooling down, the AC wall plug should briefly be unplugged to reset the adapter. Modern design with holes for storing bits. Foldable tool rest provides a secure place for keeping the MICROMOT tool ready for use.

**MICROMOT AC Adapter NG 5/E**

This workstation with electronic speed control comes in a compact Noryl casing (the material is heat resistant, recommended for transformers) and has a capacity of 4.5A at 16V no load and 12 Volt under load = 60VA (DC). Primary supply at 110 – 120V. The thyristor electronic control (with feedback) allows for optimum tool speed and high torque at low speeds.

The workstation offers three polarized sockets for MICROMOT machines, so that three different tools can be plugged in at a time. In addition the unit features one pair of sockets for standard banana plugs with 4mm (5/32") diameter. It provides a master switch for turning off the transformer without needing to unplug. The red LED indicates “ready”. A PTC (positive temperature coefficient) element guarantees protection against overload, the plugged in machine will not restart automatically.

After cooling down, the AC wall plug should briefly be unplugged to reset the adapter. The unit comes in a very compact and practical design with storage holes for insert bits and cutters with shafts of 2.35 and 3mm (3/32" and 7/64"). The foldable tool rest keeps the MICROMOT tool ready for being used and standing by safely.

These transformers are the optimal power source for these fine PROXXON tools:

- MICROMOT 50, 50/E and 50/EF (page 12)
- Pen Sander PS 13 (page 15)
- Jig Saw STS 12/E (page 14)
- Engraving Tool GG 12 (page 13)
- Precision Drill Grinder FBS 12/EF (page 14)

**NOTE**

Power consumption of portable machine tools is measured according to the internationally accepted ICE-60745-1 specification. The current drawn is measured, not the power consumption with a hot motor just before stalling. In practice, this condition seldom appears, if ever. All PROXXON AC adapters are suitably dimensioned for the recommended purposes.

Tool and accessories not included.
MICROMOT 50 and 50/E

These two lightweight high precision tools in a pen style design (Ø only 3.5mm (1 3/8")) are ergonomically formed to allow comfortable handling and optimal control. Their quietness and effortless, vibration-free drive via the special permanent magnet motor, the ground spindle and collar bearing all contribute to the ergonomic design. An efficient cooling system facilitates extended use under various load conditions. Both tools are useable on any workable material e.g. steel, precious metals, wood, glass, ceramics, plastics, precious stones. They are ideal for model builders, woodcarvers, jewelers, opticians, artists, dental technicians, tool and die makers, etc.

Rotary Tool MICROMOT 50/E

A specially balanced motor makes this tool run very smoothly at variable speeds from 5,000 – 20,000rpm (no load). It comes with 6 high precision triple slit steel collets in sizes 1 – 1.5 – 2 – 2.4 – 3 and 3.2mm (1/32" – 1/16" – 5/64" – 3/32" – 7/64" and 1/8") which ensure accurate clamping of the bits for highest concentricity and the precision you need for finest work pieces. Weight: 230g (1.2 lbs), length: 220mm (8 21/32"). Low voltage for optimal safety, 12V DC, max 40W input. As power supply source we recommend MICROMOT transformers of at least 1A.

NO 28 500

MICROMOT 50/EF

With quick-action chuck. Practical for use with multiple shank diameters.

Slim, easily handled and light. Quick-action chuck and electronic revolutions adjustment, with feedback effect (high torque at low rpm’s). Specialty balanced, low noise DC motor with high life expectancy. A transformer is required for operation. We recommend MICROMOT network devices from 1A.

NO 28 512

MICROMOT extension cord

300cm (10 feet).

For all 12V machines. Plug and wall-socket reverse polarity-protected.

NO 28 992

Technical data:

Direct voltage 12 – 18V. Power absorption up to 40W input. 5,000 – 20,000/min. Length: 220mm (8 21/32"). Weight: 230g (0.5 lbs).
Complete Model Building and Engraving Set. The right choice for creative hobbyists and model makers.

The rotary tool MICROMOT 50/E (as described on page 12) comes in this set with 6 high precision triple slit steel collets in sizes 1 – 1.5 – 2 – 2.4 – 3 and 3.2mm (1/32” – 1/16” – 5/64” – 3/32” – 7/64” and 1/8”) which ensure accurate clamping of the bits for highest concentricity and the precision you need for finest work pieces.

This kit includes an AC adapter (12 –18V, 1A) and a selection of 34 useful bits (1 diamond grinding bit, 1 fine cutter, 0.5 and 1mm (1/64” and 1/32”) micro-drills, 1 brass brush, 4 aluminum-oxide grinding bits (cylinder, sphere, disc and cone shaped), 1 polishing pad, 4 grinding wheels 22 x 3mm (7/8” x 7/64”), 2 each aluminum-oxide and silicon carbide, 20 cutting discs and 1 mandrel. A neat storage solution!

NO 38 515

Complete Glass Engraving Set

With engraver GG 12, trial glass, patterns and all necessary bits to start right away.

The engraver GG 12 spins at 20,000 rpm, yet weighs only 4 ounces! It allows for easy control and thus very safe operation featuring a touch sensitive switch for easy use and a simple push in/pull out shaft holder for easy accessory changeover (shaft capacity Ø 2.35mm (3/32”) only). The set includes: Engraver GG 12, AC adapter (12 –18V, 0.5A) trial glass and four bits: two spherical head diamond grinding bits Ø 1mm (1/32”) and Ø 1.8mm (5/64”) for engraving and line work, two silicon carbide grinding bits (conical and bullet shape) for shading and frosting, one corundum grinding bit in ball and cylinder shape for grinding and engraving (all shanks 2.35mm (3/32”)) as well as a bit holder usable for holding MICROMOT rotating bits. The bits are also optimal for working on metal, stone, shell and other hard materials.

NO 38 635

Engraver GG 12

Fast rotary action for effective engraving work

The unit (as described above) is also available by itself and comes with 1 diamond bit with spherical head size 1.8mm (5/64”). Engrave for hours without fatigue. Our 12V powered high-speed engraving tool lets you realize the finest details in glass, metal, wood, and plastic. It has the size and weight of a very fine writing instrument. You’ll have more control than you ever thought possible. It allows you to work precisely. For operating this unit we recommend PROXXON MICROMOT power supplies NG 2/S and NG 5/E or other power supply units with a minimum capacity of 0.5A.

NO 28 592
Precision Drill Grinder FBS 12/E

For precision drilling, milling, sanding, polishing, brushing, rust removal, engraving and cutting.
Includes keyless chuck capacity 0.3 – 3.2mm (1/64” – 1/8”). A precision ball bearing minimizes spindle side play. Spindle lock button for bit changing eliminates the need for spanners. Recessed spindle head for inserting MICROMOT steel collets (see page 6). Special, balanced, low noise DC motor with high life expectancy. Variable speed control with feedback effect (high torque at low rpm’s). Housing of glass fiberreinforced POLYAMIDE.

Technical data:
Direct voltage 12 – 18V. Maximum power consumption 100W. Speed 3,000 – 15,000rpm. Length 185mm (7.3”). Weight 450g (1lbs). We recommend the use of MICROMOT transformers of at least 2A (see page 11).

NO 28 462

Note:
For operating this unit we recommend PROXXON MICROMOT power supplies NG 2/S and NG 5/E or other power supply units with a minimum capacity of 2 A (24 VA).

Jig Saw STS 12/E
For curved cuts in wood, corrugated boards, plastics and non-ferrous metals. Also ideal for gourd carving.

This very lightweight and powerful 12 volts machine is ideal for curved cuts in wood up to 10mm (3/8”), circuit boards up to 3mm (7/64”) and non-ferrous metals up to 2.5mm (3/32”) thickness. Its weight makes it easy to handle and thus allows for precise control of the cutting action.
The specially balanced powerful permanent magnet motor with electronic speed control ensures variable speeds between 2,000 – 5,000 strokes/min., 100W, stroke: 6mm (15/64”). With additional, rounded foot for cuts on rounded surfaces and clean interior cuts. Is exchanged for the normal saw table by unscrewing a screw. Ideal for gourd carving. Includes 2 saw blades (coarse and fine).

NO 28 534

Jig Saw Blades. Special steel.
Pitch of 1.5mm (1/16”), teeth ground & set. Usable on hard & soft woods, plywood, fiberglass reinforced sheets as well as various plastics. Ideal for tight curves and clean cuts. For use with jig saws STS 12/E and STS/E.

NO 28 054  Pack of  2

Jig Saw Blades. HSS.
Tooth pitch of 1.06mm (3/64”), with teeth set & ground. Usable on metals, aluminium and softer alloys, fiberglass, Plexiglass and insulating materials. For use with jig saws STS 12/E and STS/E.

NO 28 056  Pack of  2
Pensander PS 13

This superfine sander with linear sanding motion (versus rotary or orbital) operates at 8,000 strokes per minute with a 2.5mm (3/32") stroke. It is ideal for surfaces, slots and tight corners. Included are four sanding attachments with straight shanks and 4 with angled shanks (four different shapes per shank style) as well as 3 sheets of pre-profiled adhesive sanding pads. The sheets are 180, 240 and 400 grit with 5 of each shape per sheet.

NO 28 594

Replacement Sandpaper for the PS 13

Three sheets, each with 20 pads (5 each of the four shapes, adhesive).

NO 28 822 180 grit
NO 28 824 240 grit
NO 28 826 400 grit

Note:
An AC adapter of at least 12 – 18V DC and 1A is required. We recommend PROXXON power supplies NG 2/S or NG 5/E. The electronic speed control on the NG 5/E unit allows the selection of different speeds for different applications and materials.

NO 28 622

Flexishaft MICROMOT 110/BF

As described right, but with 0.3 – 3.2mm (1/64" – 1/8") keyless chuck. Practical when working with different shaft diameters.

NO 28 622
**MICRO Screwdriver MIS 1, complete with 16 bits**

**Designed for industrial use.**
The MIS 1 is the ideal tool for torques up to 18 in-lbs. It is preferred over the compressed air types because of less costly running expenses, but also for its quietness and cleanliness. The highly flexible cord makes it easy to use. The MICRO Screwdriver MIS 1 is eminently suitable to cut threads!

**Transformer not included!**

**With pre-selectable torques of 0.35 – 2Nm (0.26 – 1.48 lbs ft).**
Small, light and easy to handle. An ideally positioned rocker switch provides on/off/reverse. A chuck facilitates acceptance of all bit shanks of up to 6.5mm (also for standard 1/4" bits). Housing of glass fibre-reinforced POLYAMIDE. Complete with 16 inserts of chrome molybdenum steel.

**Technical data:**
Direct voltage 12 – 18V. Maximum power consumption 50W. Torques of 0.35 – 1Nm (0.26 – 1.48 lbs ft) (the sixth stage bypasses the clutch and yields approx. 2Nm (1.48 lbs ft)). Length 200mm (8”). Weight 415g (0.9 lbs). We recommend the use of MICROMOT mains adapters of at least 2A.

NO 28 690

**MICRO-screwdrivers**

Each driver has a fixed place in the practical holder. May be used as desktop stand or attached to wall. 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 mold improve ease of use. Fixed place for each item in the practical holder. May be used as desktop stand or fixed to a wall.

- Slot: 0.3 x 1.5 / 0.35 x 2 / 0.4 x 2.5mm (1/64"x1/16"/ 1/64"x5/64"/1/64"x3/32")
- Phillips: Size 0 and 1
- TX: T6, T8, T10
- Allen key, internal: 3 – 3.5 – 4 – 4.5 – 5mm
- Allen key, external: 1.5 – 2 and 2.5mm

**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.

NO 28 148  15 pieces in a stand
Router base OFV

Made of die-cast aluminium. With plane-milled work base.
For use with all MICROMOT tools with 20mm (4/5”) system collar.
For slotting, milling grooves and edges, chamfering. With edge guide max. throat of 150mm (5.9”), plus interchangeable circle guide. Adjustable depth stop with preselectable travel stroke. Ideal also as drilling guide for round parts using the prism in the work base.

NO 28 566

Attention:
The wood router cutters offered here should only be used with tools that have a safety mechanism.

Router Bits

Tungsten carbide wood router bits, with 3.2mm (1/8”) shanks, inverse ground flutes and maximum speeds up to 30,000rpm in different profiles for optimal results.

- Straight Ø 3.2mm (1/8“) NO 29 024
- Straight Ø 4.3mm (11/34”) NO 29 026
- Straight Ø 6.5mm (1/4”) NO 29 028
- Core box Ø 6.4mm (1/4”) NO 29 030
- V-groove 90° Ø 6.5mm (1/4”) NO 29 032
- Plunge Ø 6.5/2.5mm (1/4") NO 29 034
- Piloted round over R Ø 3.2mm (1/8”) NO 29 036
- Rabbeting Ø 6.4mm (1/4”) NO 29 038
- Beading Ø 5mm (3/32”) NO 29 040
- Angle cutter R 45° NO 29 044

10-piece wood router cutter set

One each: Slot cutter Ø 3.2 – 4.3 and 6.5mm (1/8” – 11/34” and 1/4”), rounding over cutter Ø 6.4mm (1/4”), V-slot cutter Ø 6.5mm (1/4”), combi cutter 6.5/2.5mm (1/4”), core box bit R 3.2mm (1/8”), rebating cutter 6.4mm (1/4”), edge cutter with pin 5mm (3/16”), angle cutter R 45. Neatly packed in wooden box.

NO 29 020
**MICROMOT drill stand made of die-cast aluminium parts. With CNC-machined guides and fits. A world of difference.**

**MICROMOT drill stand MB 200**

*Head with dovetail guides can be tilted through 90° (scale ring available). Enables bevelled drilling and versatile milling operations.*

Geared rack and pinion feed with return spring allowing effortless and sensitive operation. Practical drill depth scale with adjustable limit stop (maximum travel 40mm (1 1/2")). With standard 20mm (4/5") collar for MICROMOT drilling and milling devices. With solid, hard chromium-plated steel column 280 x 20mm (11" x 4/5"), throat capacity (column inside to centre of tool) 140mm (5 1/2").

Plane-milled table 220 x 120mm (8 11/16" x 4 3/4") with parallel limit stop and scale. Drilled, tapped holes for securing the MICRO compound table KT 70 and holes to fix the drill stand itself are also provided. Weight 2.2kg (4.5 lbs).

**Machine vice MS 4**

*Die-cast zinc.*

With three machined sides. The slot fits the adjustable fence of the drill stands MB 140/S, MB 200 and bench drill TBM 220. Horizontal and vertical V-slots in jaw. Jaw width 50mm (2") and height 10mm (2/5"). Maximum clamping width 34mm (1 11/32").

**MICROMOT drill stand MB 140/S**

*Offers a sensitive feed set-up via drive disc and ball bearing system.*

Throat capacity (column inside to centre of tool) 140mm (5 1/2") with pinch screws for simple height adjustment. Travel 30mm (1 3/16"). Also with standard 20mm (4/5") collar. The mill/drill collar tilts through 90° in both directions. Other technical data related to table and column are the same as for the above mentioned drill stand MB 200.

**Universal Holder UHZ**

*Rotates in all directions. Made of die-cast zinc.*

Easily clamps to workbenches and tables of up to 60mm (2 3/8"). Alternatively, use 2 standard screws to secure to the work surface.

NO 28 600

NO 28 606

NO 28 132

NO 28 610
Helpful accessories for model builders, jewelers, watchmakers...

**MICRO Compound Table KT 70**
*For precise milling, boring, drilling or grinding operations as well as positioning.*

This high-precision cross slide table is the optimal attachment when working with the MICROMOT Drill Stands MB 140/S and MB 200, the Bench Drill Machine TBM 115 or the Machine Vice MS 4. Step clamps for easy attachment on or below the above items come with the table. Of course, the table can also be used with other Drill Stands or Drill Presses.

The table is made from surface-treated aluminum, has three longitudinal T-slots and provides dual axes (lateral & cross) positioning via two hand wheels. The hand wheels have zero-resettable dials graduated in 0.05 mm increments (1 complete revolution of the hand wheel = 1 mm, 1 pitch line = 0.05 mm feed). One set of step clamps is included.

**Other technical data:**
- Table size: 200 x 70 mm (7 7/8" x 2 3/4")
- With 3 longitudinal T-slots.
- Adjustable dials are graduated in 0.05 mm increments (1 revolution = 1 mm, 1 pitch line = 0.05 mm feed).
- Backlash is controlled by adjustable dovetails.
- X-travel 134 mm (5 9/32")
- Y-travel 46 mm (1 13/16")
- Overall height: 43 mm (1 11/16")

NO 27 100

**Precision Vice FMZ with integrated clamp**

Rotates in all directions. Made of die-cast zinc. Easily clamps to workbenches and tables of up to 60 mm (2 3/8"). Alternatively, use 2 standard screws to secure to the work surface. Ball and socket: rotates in all directions (even downwards). 75 mm (3") jaws with protective covers (for delicate workpieces).

Maximum clamping width 70 mm (2 3/16"). Weight 1.6 kg (3 1/2 lbs).

NO 28 608

**Precision Vice FMS 75**

As detailed above, but without clamp. A strong suction cup facilitates instantaneous grip to any smooth, flat surface.

NO 28 602
Engraving device GE 20

With standard 20mm (4/5") collar for all MICROMOT drilling and milling units which are equipped with steel collets.
For engraving letters, numbers and individual shapes on metal, plastics, glass or stoneware. For name plates, jewellery or valuable materials. Also 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).
Guide bar (template holder) holds a maximum of 14 letters. Template contours are precisely to be followed using the guide marker (ball handle).
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. The work piece is aligned and fixed on the movable guide block with clamping jaws (here MICROMOT clamping jaw set NO 24 256) or a vice.

Scope of delivery: two sets of letters from A to Z, incl. hyphen, full stop and slash (total 52 items), one each HX key 1.5 – 3 and 5mm as well as a HX (ball head) screwdriver 2.5mm. Complete with a comprehensive instruction manual.

Note: Professional drill/grinder IBS/E and clamping jaws are not included in the scope of delivery.

Solid carbide stylus for engraving device GE 20
For steel, cast steel, non-ferrous metal, plastic, glass, stoneware and tiles. Nose angle 60° (for V-shaped letters). Shaft diameter 3.2mm.

NO 28 765 Letter width 0.5mm (1/64")
NO 28 766 Letter width 1mm (1/32")

Stencil set for engraving device GE 20
Letters A – Z, incl. hyphen, full stop and slash. Also numbers 0 – 9.
For use with guide bar of the GE 20.

NO 27 106

NO 27 104
MICROFLAM Burner MFB/E – with piezo lighter.

For soldering, removing solder, brazing, heating of work pieces, baking and tinning. Ideal for model-building, electronics, jewelry design and repairs, dental laboratories, stained glass. The removable foot ensures stability on the worktop. Individually controllable gas and air supply. For finest flames and temperatures up to 2,192 °F/1,200 °C. The tank contents of 50cc is sufficient for approximately 60 minutes operation with normal flame. For safety reasons the torch is delivered without gas.

NO 28 146

MICROFLAM gas soldering set MGS

For working with open flame or with catalyst unit in combination with adapters for soldering, hot-cutting, woodburning and shrinking of insulating sleeves.

Also for retouching surface imperfections in wood (cracks, dents). Electronic piezo crystal lighter with safe on/off-gas flow switch. Individually controllable gas and air supply. Hard-soldering of delicate parts with flame temperatures up to 2,370 °F (1,300 °C). When working with tips up to 932 °F (500 °C). Relatively large gas tank 20ml (17 fl-oz) for long continuous work. Refillable with standard butane cartridges for lighters. Adapter tips: large wax/varnish-scraping knife for repairs in wood, hot knife for cutting even thicker plastic foil, 2 woodburning tips (angled and flat pointed), a soldering tip, a round nozzle for hot air work as well as one for heat-shrinking sleeves. Also included: Soldering tin, drip tray with sponge and 7mm open-end spanner for tightening the adapter tips. A practical stainless steel base also enables stationary work. Packed in plastic case with sturdy PP tray. Each piece finds its place!

NO 28 144

MICRO-Press MP 120

A precision tool for precision mechanics and model making: Pressing in, pressing out, riveting, imprinting, edging, bending of wires and sheets. Embossing, beading and crimping of easy to form materials (e.g. copper, brass).

With 5 cylindrical pressing tools Ø 3 – 4 – 5 – 6 and 8mm (7/64” – 5/32” – 13/64” – 15/64” – 5/16”), surface hardened), one each semi-spherical profile Ø 3mm (7/64”) and Ø 9mm (23/64”) and a 90° square prism for bending sheet metal. Pressing tools are inserted into the toothed rack and fixed with a knurled screw. The counter-part is an easily adjustable, hardened revolving plate with allrequired holes and bottom dies for the above-specified pressing tools. Force of pressure approx. 1,000N, 100kg (220 lbs). Maximum stroke of toothed rack with inserted tool 65mm (25/16”), above revolving plate 50mm (2”). Solid steel arm 120mm with (4 3/4”) throat. Ground base plate of steel, 80 x 190mm (2 3/16” x 7 1/2”) with an 8mm (5/16”) centre and two fastening bores. Weight approx. 2,800g (6.2 lbs).

NO 27 200
Bits and cutters for MICROMOT drills and mills of industrial and dental qua

Tungsten vanadium milling bits

For non-ferrous metals plastic plaster

NO 28 722
Tungsten Vanadium Milling Bits. Selected tungsten vanadium steel. Purposely made of stable construction with head and shaft out of a single blank. metals, as well as plastics and plaster of paris. Ideal for milling, routing, shaping, profiling and slotting.

HSS drill bits

For metal plastic wood

NO 28 864
NO 28 852
NO 28 854
NO 28 856
NO 28 858

Tungsten Vanadium Micro Twist Drills. Manufactured from one-piece blanks in tungsten vanadium steel for highest concentricity, providing breakage safety and long lifetime. For drilling metal, non-ferrous metals, plastic and wood. All shanks Ø 2.35mm (3/32”). Work speeds: soft materials approx. 8,000rpm., hard materials approx. 3,000rpm.

Tungsten carbide drills and milling bits

For steel glass circuit boards

NO 28 324
NO 28 326
NO 28 328
NO 28 320
NO 28 321
NO 28 750

Tungsten Carbide Micro Drills With ideal cutting angle of 6°. Especially for drilling in glass, porcelain, ceramics, marble (also semi-precious stones) and other hard stones. All shanks 3mm Ø (7/64”).

Tungsten Carbide Spear Drills. For drilling, cutting and separating fiberglass reinforced plastic, thermosetting plastic, non-ferrous metals, also for drilling into pearls, corals, etc. All shanks Ø 2.3mm (3/32”).

Note: MICROMOT steel collets are hardened and thus have a high, consistent flexibility. They also maintain prolonged accuracy, even after regular use (these collets should not be compared with unhardened, four-slit collets of brass and aluminium). The triple slit collet is substantially more difficult to manufacture than the four-slit type, but offers a better load-bearing surface. This is especially important for cutters with small shaft diameters.

MICROMOT steel collet set

Triple slit and hardened. 1 each of 1 – 1.5 – 2 – 2.4 – 3 and 3.2mm (1/32” – 1/16” – 5/64” – 3/32” – 7/64” – 1/8”). With clamping nut and holder for storage (see note at left).

NO 28 940
The precise flutes and optimal concentricity ensure best life expectancy. All shanks 2.35 or 3mm (3/32” or 7/64”). For use on hard and soft woods, non-ferrous metals and precious metals.

**Note:**
The term HSS for this tool category comes from the utilised drill material. High speed steel (HSS) is a high alloy tool steel extremely resistant to wear due to its manufacturing process and is dimensionally stable up to approx. 600°C. Cutting oil or coolant emulsion should be used as cooling lubricant, when machining steel. Spirits or petroleum should be used for aluminium. Normally, plastic and wood can be dry-machined.

**Drill chuck or collet?**
Drill chucks provide more convenience to quickly change the tools when working with shafts of varying diameters. 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. See also note to the left.

**Three-jaw steel drill chuck**
For all prepared MICROMOT devices. Advantageous when working with different shafts. Capacity 0.3 – 3.2mm (1/64” – 1/8”). NO 28 941

**Rasp Cutter.**
Tungsten Carbide. For cutting and milling tiles, stoneware, wood and plastics. Shank Ø 2.35mm (3/32”).

**Milling Cutters**
These double flute cutters are made from solid tungsten and are to be used for clockwise cutting. The fishtail profile ensures cutting to the center, allowing boring. Usable on cast iron, hardened cast iron, steel, cast steel, brass, aluminium, and even glass, plastics and carbon fiber. The set includes one each of 1, 2 and 3mm (1/32”, 5/64” and 7/64”). Shank diameter: 3mm (7/64”). NO 27 116
**Diamond tools**

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8mm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>5mm</td>
<td>13/64&quot;</td>
</tr>
<tr>
<td>1mm</td>
<td>1/32&quot;</td>
</tr>
<tr>
<td>1.8mm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>0.8 / 1.2mm</td>
<td>2/64&quot; / 3/64&quot;</td>
</tr>
<tr>
<td>1.2mm</td>
<td>3/64&quot;</td>
</tr>
</tbody>
</table>

**Cleaning brushes**

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<tr>
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<td>7/8&quot;</td>
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<tr>
<td>8mm</td>
<td>5/16&quot;</td>
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<tr>
<td>13mm</td>
<td>33/64&quot;</td>
</tr>
<tr>
<td>22mm</td>
<td>7/8&quot;</td>
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</tbody>
</table>

**Polishing bits**

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22mm</td>
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<tr>
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<tr>
<td>5mm</td>
<td>13/64&quot;</td>
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<tr>
<td>14mm</td>
<td>35/64&quot;</td>
</tr>
<tr>
<td>22mm</td>
<td>7/8&quot;</td>
</tr>
</tbody>
</table>

**Protective cover for hand-operated MICROMOT machines with standard 20mm (4/5") collar**

For work with saw blades, cutting discs, milling bits, grinding tools, steel brushes and polishing tools. Maximum useable tool diameter 22mm (7/8"). Easy to mount.

NO 28 944
**Holiers and for the jewellery industry!**

**NO 28 232**
- coated grinding bits for glass and stone
For drilling and cutting stone including granite. Recommended for a speed of 2,000 rpm with the use of coolant. Shaft diameters: 2.2mm (1/12"), 3.2mm (1/8"), 20mm (13/16"), 38mm (1 1/2”).

**NO 28 234**
- For drilling and types of stone including granite. Recommended for a speed of 2,000 rpm with the use of coolant. Shaft diameters: 2.2mm (1/12"), 3.2mm (1/8"), 20mm (13/16"), 38mm (1 1/2”).

**NO 28 840**
- Diamond Cut-Off Wheels for cutting very hard and brittle materials. Only 0.6mm (3/128”) thick, wheel Ø 20mm (13/16”) or 38mm (1 1/2”), shank of mandrel: Ø 2.35mm (3/32”).

**NO 28 842**
- 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 Ø 2.35mm (3/32”).

**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!

**NO 28 844**
- Stainless Steel Brushes, Cups and Wheels
For cleaning, brushing and cleaning 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 Ø 2.35mm (3/32”).

**NO 28 846**
- High Gloss Polishing Set.
Cotton, suede and felt buffing. Used with polishing compound for high gloss polishing of metal, non-ferrous metal, ceramics, porcelain. Also for polishing of plastics and lacquered woods. All shanks Ø 2.35mm (3/32”).

**NO 28 801**
- Felt Polishing Tips.
Assorted shapes for fine finishing jobs on work pieces of metal, non-ferrous metal and plastic as well as for cleaning those tough-to-reach areas. Shank Ø 2.35mm (3/32”).

**NO 28 297**
- Rasp cutter with tungsten carbide burrs
Unrivalled for sculpting, cleaning and smoothing wood and fibre glass. Extremely sharp and easy to handle: 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. Shanks Ø 3.2mm (1/8”). Not for use on metal!

**NO 28 292**
- Polishing Compound
This universal solid compound is used with cotton, felt, or suede polishing wheels or tips for high gloss polishing.

**NO 28 295**
- Holders 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 (3/32” – 1/8”). Without bits and cutters.

**NO 28 359**
- 2 pieces

**NO 28 296**
- Cone
8 x 12mm (5/6” x 1/2”) NO 29 043
Taper
4 x 19mm (3/4” x 1/8”) NO 29 044
Selected cutting, sanding and polishing bits for professional use and long use life.

**Sanding bits**

**For**
- steel
- stainless steel
- cast iron
- wood

**Grinding pins and discs**

**For**
- steel
- cast iron
- HSS steels

**Cut off wheels**

**For**
- wood
- steel
- stainless steel

### 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 Ø 1 mm (1/32’’), diamond bit 2: ball Ø 1.8 mm (5/64’’), silicon carbide bit cone 3/2 x 3 mm (5/64’’ x 1/8’’). Bullet 2/2.5 x 7mm (5/64’’ x 7/64’’ x 9/32’’). All shanks Ø 2.35 mm (3/32’’).

### 13-pieces set for model makers

- 13 diamond grinding bits and 3 silicon carbide grinding bits. For engraving, grinding or frosting glass. Diamond bit 1: ball Ø 1 mm (1/32’’), diamond bit 2: ball Ø 1.8 mm (5/64’’), silicon carbide bit cone 3/2 x 3 mm (5/64’’ x 1/8’’). Bullet 2/2.5 x 7mm (5/64’’ x 7/64’’ x 9/32’’). All shanks Ø 2.35 mm (3/32’’).
Grinding pins and discs

**For glass ceramics tungsten carbide**

**NO 28 980**
Grits for different sanding/finishing stages. Use for furniture refinishing, removing rust, and multiple sanding/finishing and shape sanding, smoothing of surfaces, edges, even inside curves and tough to reach areas. All shanks of pad and drum

**NO 28 981**

**NO 28 978**

**NO 28 979**

**NO 28 984**
Flapwheel Conformable flapwheel for grinding and polishing flat or contoured surfaces and working inside round work pieces. Most effectively used as finishing sander after heavier surface sanding and material removal is completed. Shanks Ø 3mm (7/64").

**NO 28 302**
Of applications. For grinding of 2.35 or 3mm (Ø 3/32" or 7/64")

**NO 28 270**
Silicon carbide grinding bits Fine particles of consistent hardness for engraving and frosting of glass, ceramics and stellites. Also for grinding tungsten carbide, chilled cast iron and other hard steel alloys. Shafts Ø 2.35mm (3/32").

**NO 28 272**

**NO 28 304**

**NO 28 821**
Ferrous metal, alloys, stainless its outside edge only! Do not use mm (7/8" x 1/32" or 1 1/2" x 1/32").

**NO 28 808**
Aluminium Oxide with reinforcement The cutting discs are available in 22 x 0.8 and 38 x 1mm (7/8" or 1 1/2" x 1/32"). Nearly unbreakable, making it usable to remove stock. Will cut alloyed, standard and stainless steels, non-ferrous metals, and even wood and plastics. Mandrel Ø 2.35mm (3/32").

**NO 28 818**

**NO 28 819**

**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 mandrel.

**NO 28 285**
For modelling in Styrofoam. No "crumbling" as when working with knife and sandpaper.

**Hot Wire Cutter THERMOCUT 12/E**

- Cutting wire (gauge 285 x 0.85mm (11.4" x 20") can be shaped by hand or with pliers to cut any shape or profile.
- Extendable wire fixture. Maximum extension 200mm (7.9").
- Variable cutting temperature.
- Top pivotal fixture.
- Polarity-protected system plug for MICROMOT transformers (page 11).

**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 pivotal fixture at the top and extendable lower wire fixture. Maximum extension 200mm (7.9"). Maximum work piece height 150mm (5.9").

Variable cutting wire temperature control. With a little practice, you can achieve perfect cuts depending on the material density and thickness at medium temperatures and with moderate pressure. Heat up time is 1 second. Comes with 5 shapable cutting wires.

**Technical data:**
12V. 60W. Variable cutting wire temperature ranges from approx. 300 – 660 °F (150 – 350 °C). We recommend the use of our MICROMOT transformer NG 2/S for operation.

**Note:**
Styrofoam is an inexpensive material and very environmentally friendly when compared to other materials and can be easily cut with a hot wire.

**For free hand cutting in thick Styrofoam for diorama model railroad construction of any shape.**

**Replacement Cutting Wire**

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

**NO 28 082**

10 pieces
Cuts Styrofoam and thermoplastic materials fast!
For hobbyists, architects, designers and artists.

Hotwire Cutter THERMOCUT 115/E

The large table with 390 x 280mm (15 11/32" x 11") ensures smooth and easy movement of the work piece. The printed grid and protractor assist with division and cutting. The solid aluminum overarm has a 350mm (13 3/4") throat and offers 140mm (5 1/2") in height. The holder and wire coil (one spool of wire 30mm (98ft.), 0.2mm (0.008") diameter is included) may be shifted and adjusted along the overarm to enable miter cutting. An LED indicates operation and thus reminds you not to touch the hot wire to prevent burnt fingers (the wire heats to maximum in less than 1 second).

NOTE:
The correct temperature, being material and thickness dependent, is learned from experience. Profiles are ideally cut at lower temperatures and while applying less cutting force.

Technical data:
- Volts: 110 – 120V AC 60 Hz
- Cutting wire temperature: 100 – 200 °C (210 – 390 °F)
- Transformer secondary max.: 10V at 1A
- Weight: 3kg (6.6 lbs)

NO 37 080

Spare Cutting Wire for Hotwire Cutter THERMOCUT.
Made of NiCr 8020.
- Spool diameter: Ø 24mm (15/16")
- Spool thickness: 8mm (5/16")
- Bore diameter: Ø 6.5mm (1/4")
- Wire size: Ø 0.2mm x 30m (0.008" x 98ft)

NO 28 080
For clean and safe chop and miter cuts in non-ferrous metals, plastics and wood.

**Chop and Miter Saw KGS 80**

Saw head moves laterally making it possible to get extremely close to the vise holding the work piece when making the cut affording a vibration- and burr-free cut.

With longitudinal fence stop (overhang 300mm/12”).

Integrated tightening mechanism with self-centering clamps. V-groove for round pieces. Front side groove for clamping thin work pieces.

Ergonomically correct grip with integrated switch and saw head release mechanism.

Saw blade protection cover made from POLYCARBONATE swings up automatically.

Carbide tipped saw blade for non-ferrous metals, wood and plastics. Power transfer via quietly operated belt drive.

Continually adjustable (may be tightened in any position) round table made of pressure-cast aluminum swivels 45° in both directions with positive stops at 15° intervals.

Ideal for miter cuts. Instead of swivelling the saw head, the table with clamped down work piece is turned!

By using the fence and counter-rotating the table 2x 45°, one can get the opposite angles for two equally long framing pieces by simply reversing them. Powerful, very quiet DC motor. Power transfer via belt drive. Carbide tipped saw blade 80 x 1.6 x 10mm (3 1/8” x 1/16” x 3/8”), 24 teeth.

**Other technical data:**

Base with round table of pressure-cast aluminum and CNC-machined guides and fittings.

**Synthetic resin bonded cut-off wheel.** 80 x 1 x 10mm (3 1/8” x 3/64” x 3/8”). For cutting wood, steel, non-ferrous metals and plastics. NO 28 729

**Carbide tipped saw blade. 80 x 1.6 x 10mm (3 1/8” x 1/16” x 3/8”). 36 teeth.** Extremely clean cutting edges when cutting balsa wood, plywood or soft wood as well as glass-fiber reinforced plastics (GRP) because of large number of teeth. May also be used for cutting hard wood, POLYCARBONATE, plastics and aluminum. Also fits circular table saw FET. NO 28 732

<table>
<thead>
<tr>
<th>Cutting capacity at 90° (Perpendicular cut):</th>
<th>Cutting capacity at 45° (Miter cut):</th>
</tr>
</thead>
<tbody>
<tr>
<td>With material thickness up to (in mm and inch)</td>
<td>Maximum material width (in mm and inch)</td>
</tr>
<tr>
<td>10 3/8”</td>
<td>65 2 9/16”</td>
</tr>
<tr>
<td>18 11/16”</td>
<td>50 2”</td>
</tr>
<tr>
<td>21 13/16”</td>
<td>40 1 9/16”</td>
</tr>
<tr>
<td>25 1”</td>
<td>25 1”</td>
</tr>
</tbody>
</table>

**NO 37 160**

Volts 110 – 120V AC. 200W. 50/60Hz.

Speed 5,400rpm.

Table Area 230 x 230mm (9” x 9”)

Weight 6kg (12 lbs)

Cutting capacity see chart.
**MICRO woodturning lathe DB 250**

Turning miniatures is a pleasing hobby. One can make glasses, cups, saucers, vases and columns for a doll house. In model trains, one can make lighting masts, windows, tanks. Limbs for marionettes and hundreds of classical miniature turning tasks may be carried out with ease. The electronic speed control assists in the lower range in a ‘semi-automated’ painting process.

**Technical data:**
Motor 110 – 120V AC, center to center 250mm (10”), 40mm (1 3/5”) swing. 25mm (1”) swing over support. 100W (1/8 hp), 60Hz. Variable speed control covering between 1,000 and 5,000rpm. Headstock spindle bore of 10mm (13/32”). Tailstock travel 20mm (1 3/16”). Includes 6 collets 2 – 3 – 4 – 6 – 8 – 10mm (5/16” – 1/8” – 5/32” – 15/64” – 5/16” – 13/32”), drive center, live center and face plate.

NO 37 020

---

**Five piece HSS chisel set**
A high quality set with the most frequently used turning tools: beading tool, gouges 3mm and 6.4mm (1/8” and 1/4”), parting tool and scraper. Neatly packed in a wooden box.

NO 27 023

**Drill chuck for the tailstock of the DB 250**
Clamps up to 5mm (13/64”). 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 (1 1/16” – 1 3/8”), inside and from 14 – 67mm (9/16” – 2 9/16”), 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 (1/16” – 1 1/4”) and 12 to 65mm (1/2” – 2 9/16”) when reversing the jaws. The chuck has a M16 x 1 thread for fitting directly to the DB 250 headstock spindle.

NO 27 026
For perfectly straight cuts in wood, non-ferrous metal, plastics and fiberglass reinforced plastics.

**Bench Circular Saw KS 115**

The machine is for cutting small pieces, whenever working with a regular circular saw is impossible and too dangerous. The high-performance 110 – 120V motor is very quiet and has a prolonged life expectancy.

Cutting depths: in wood up to 8mm (5/16"), in plastic (also circuit boards) up to approx. 3 mm (1/8"), in non-ferrous metals up to 1.5mm (1/16"). Even fiberglass reinforced plastics can be cut with the carbide tipped saw blade (available as accessory). The machined and perfectly plane aluminum worktable in size 160 x 160mm (6 1/4" x 6 1/4") allows for sliding the work piece easily. The housing is made of sturdy plastic (ABS) with a side door to conveniently remove saw dust.

With the included Super Cut Saw Blade Ø 58mm (2 9/32") it is possible to cut soft wood up to 8mm (5/16"). Other saw blades, available as accessories in our program, with Ø 50mm (2"), still ensure up to 6mm (15/64") cutting depth. Overall size approx. 265 x 195 x 85mm (10 1/4" x 7 5/8" x 3 11/64"). Weight approx. 1.8kg (4 lbs).

NO 37 006

Your circular saw can only be efficient, if you use the appropriate saw blade. We offer a selection of high quality saw blades for many various materials.

**Diamond Blade**

50mm diameter (10mm arbor). With 0.5mm (1/64") layer of class „D107“ diamond for cutting ceramics porcelain, tiles, stone as well as circuit boards.

NO 28 012

**NOTE:**
A larger circular saw (model FET) is described on page 39.

**Tungsten Carbide Saw Blade**

Ø 50mm (2") x 0.5mm (1/64"), arbor 10mm (13/32"), fine teeth, 80 teeth. The blade is ideal for cutting fiberglass sheets, non-ferrous metal, miniature moldings, plastics, and other „difficult-to-cut“ materials.

NO 28 011

**Crosscut Blade Super-Cut**

Ø 58mm (2 9/32") x 0.4mm (1/64"), arbor 10mm (13/32"), 100 teeth. Ideal for use on hard and soft wood, as well as plastic. For fast, clean cuts. The 80 teeth are alternately set and sharpened. For superior cutting power!

NO 28 014

**Tungsten Tipped Saw Blade**

Ø 50 mm x 1.1mm (2" x 3/64"), arbor 10mm (13/32"), 10 teeth. Ideal for quickly cutting hard and soft woods, aluminum and circuit-boards.

NO 28 016

Ø 50mm x 1.1mm (2" x 3/64"), arbor 10mm (13/32"), 20 teeth. For extremely clean cuts of balsa, plywood. Can also be used for cutting circuit boards and POLYCARBONATE.

NO 28 017

**High-Alloy Special Steel Saw Blade**

Ø 50mm (2") x 0.5mm (1/64"), arbor 10mm (13/32"), fine, 100 teeth. Alloy holding a high proportion of tungsten, vanadium and molybdenum for an even structure, high hardness and long life. Fine-toothed. For very fine cuts in non-ferrous metals (aluminium, brass, copper). Also suitable for cutting compound materials like PC boards and sawing wood and plastics.

NO 28 020

**IMPORTANT**

The transmission through belt drive (in sturdy gear-housing, via ball-bearings), ensures the appropriate blade speed for different jobs (approx. 5,000rpm) with a doubling of torque. Above all, it ensures adequate cutting depth.
A saw without competition in its size – a wonderful machine for complex scroll saw projects up to 30mm (1 3/16") thick.

**Scroll Saw DS 115/E**

Adjustable patented head offers numerous advantages (see description below).

**NOTE:**
Also consider our larger scroll saw (model DS 460) on page 36.

This is the ideal machine for the delicate project: model building, toy manufacturing and precision work. It cuts soft wood (e.g. bass wood) up to 30mm (1 3/16"), hard wood up to approx. 10mm (25/64"), plastic (including circuit boards) up to approx. 4mm (5/32") and non-ferrous metals up to 2mm (5/64") with standard scroll saw blades.

The machine has a very stable ribbed die-cast aluminum saw arm with 300mm (11 13/16") throat. The blade guide is equipped with an integrated blower. The patented head-piece is height-adjustable in three positions and offers numerous advantages:

The lifetime of the saw blade is tripled after shortening it twice (teeth in the middle part of the saw blade are finally used, too).

With the head in the lowest position, working with a blade shortened to 60mm (2 23/64") is even more precise.

The machined worktable of die-cast aluminum has a size of 160 x 160mm (6 19/64" x 6 19/64") and is equipped with an adjustable longitudinal stop and graduated miter gauge (0 – 90°). The ABS plastic body provides a very practical sliding door on the right side of the housing for the removal of saw dust. The saw is powered by a 110 – 120V motor (85W) for prolonged use, low noise performance and driven by a quiet and wear-resistant toothed belt drive, running in a ball bearing assembly. The machine offers an electronically controllable stroke rate from approx. 150 – 2,500 strokes/min.

**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, No. 9: 14 TPI  
**NO 28 116** 130x1.5x0.48mm (5.1"x1/16"x1/52") 12 pcs

Standard-toothed blades, No. 5: 17 TPI  
**NO 28 117** 130x1.20x0.38mm (5.1"x3/64"x1/64") 12 pcs

Fine-toothed blades, No. 3: 20 TPI  
**NO 28 118** 130x0.8x0.34mm (5.1"x1/32"x1/64") 12 pcs

Hard materials such as steel and PERTINAX.

Standard-toothed blades, No. 5: 36 TPI  
**NO 28 112** 130x0.85x0.4mm (5.1"x1/32"x1/64") 12 pcs

Fine-toothed blades, No. 3: 41 TPI  
**NO 28 113** 130x0.75x0.36mm (5.1"x1/32"x1/64") 12 pcs

Very fine-toothed blades, No. 1: 50 TPI  
**NO 28 114** 130x0.6x0.3mm (5.1"x1/32"x1/64") 12 pcs

**NOTE:**
All described saw blades can also be used with our larger scroll saw DS 460 (page 36).

**NOTE:**
Also consider our larger scroll saw (model DS 460) on page 36.
A precision device for fine sanding work and minor material correction. Variable speed 1150 – 3600rpm (250 – 800m/min).

**Disc Sander TG 125/E**

Suction channel with adapter to connect a vacuum cleaner.

125mm (5") sanding disc, with affixed silicon film. Adhesive sanding discs can be easily removed after use.

Table can be adjusted to 50° downward and 10° upward. With miter gage and c-clamp for horizontal and vertical clamping.

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

Powerful, vibration-free running due to a powerful and balanced DC motor. Housing made of fiber glass reinforced POLYAMID. Aluminum table, adjustable to incline 50° downward and 10° upward; with miter gage. Sanding disc with affixed silicon film. This surface ensures easy removal of self-adhesive sandpaper. Two additional square silicon sheets ensure that used discs can be stored and reused as necessary. Can be mounted horizontally and vertically to a table or workbench with the included c-clamp. Also includes an adapter to attach a vacuum cleaner for dust free working, as well as 2 each sanding discs 80, 150 and 240 grit.

**Technical data:**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volts</td>
<td>110V. 140W. 50/60Hz</td>
</tr>
<tr>
<td>Speed</td>
<td>Variable speed 1150 – 3600rpm (250 – 800m/min)</td>
</tr>
<tr>
<td>Disc Diameter</td>
<td>125mm (5&quot;) sanding disc</td>
</tr>
<tr>
<td>Max. Sanding Height</td>
<td>off the table 62.5mm (2.46&quot;)</td>
</tr>
<tr>
<td>Table Size</td>
<td>98 x 140mm (3.9&quot; x 5.5&quot;)</td>
</tr>
<tr>
<td>Sanding Height</td>
<td>Size 300 x 140 x 160 mm (11.8&quot; x 5.5&quot; x 6.3&quot;)</td>
</tr>
<tr>
<td>Weight approx.</td>
<td>3kg (6.6 lbs)</td>
</tr>
</tbody>
</table>

**Adhesive Sanding Discs for TG 125/E**

Industrial quality. For sanding of soft and hard wood, chip boards, fiber boards, non ferrous metals, steel, plastics, cork, rubber and minerals. Dia. 125mm (5"). One square silicon sheet for storage and reuse of used sanding discs is included.

<table>
<thead>
<tr>
<th>NO</th>
<th>Grit</th>
<th>Pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 160</td>
<td>80 grit</td>
<td>5</td>
</tr>
<tr>
<td>28 162</td>
<td>150 grit</td>
<td>5</td>
</tr>
<tr>
<td>28 164</td>
<td>240 grit</td>
<td>5</td>
</tr>
</tbody>
</table>
**Disc Sander TSG 250/E**

For sanding, polishing, de-burring and beveling of hard and soft wood, non-ferrous metal, steel, plastic (also Plexiglas and fiberglass reinforced plastics), cork and rubber. Sands long edges, end sections, radii, miters, and by turning work piece over, accurate flat surfaces at right angles. The electronic speed control ensures optimal results on multiple types of material.

**Sturdy construction:**
Main body of ribbed die-cast aluminum (no steel tube or sheet metal construction) with machined aluminum die-cast work table. The table tilts 15° inwards and 45° outwards (a scale facilitates accurate adjustment) and has a slot for the adjustable miter gauge. Disc provided with a silicon film ensuring that affixed sanding discs can be removed effortlessly after use. Two additional square silicon films for storage and reuse of used sanding discs are included.

A simple chart indicates the recommended speeds on different materials.

**Technical data:**
- Volts: 110 – 120V AC, 60Hz
- Speed: 820 to 2,460ft/min (belt drive 7.3 : 1 reduction ratio)
- Disc Diameter: 250mm (9 27/32")
- Max. Sanding Height: 135mm (5 5/16")
- Table Size: 275 x 105mm (10 13/16" x 4 1/8")
- Adjusts: 15° in, 45° out
- Overall Size (w/o table): 330 x 280 x 230mm (3" x 11" x 9")

Comes with miter gauge and two each 80 and 240 grit sanding discs.

**NO 38 060**

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**Self-Adhesive Corundum Sanding Discs**

For sanding soft and hard woods, chipboards, fibre boards, non-ferrous metals, steel, plastic, cork, rubber and minerals. Ø 250mm (9 27/32"). Includes silicone film for storing used sanding discs.

- **NO 28 970**
  80 grit  5 discs
- **NO 28 972**
  150 grit  5 discs
- **NO 28 974**
  240 grit  5 discs

---

**Self-Adhesive Silicone Carbide Sanding Discs**

For sanding non-ferrous metals, steel, glass, PC cards, plastics and ceramics. Ø 250mm (9 27/32"). Includes silicone film for storing used sanding discs.

- **NO 28 976**
  320 grit  5 discs

---

**Self-Adhesive Silicone Film for easy sanding disc replacement Ø 250mm (9 27/32")**

For retrofitting older disc sanders TG 250/E (production before 2008 with serial no. up to 7825). Is attached to the sanding disc. Ensures that affixed sanding discs can be removed effortlessly after use. With 4 square silicone films for storage and reuse of used sanding discs.

**NO 28 968**

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A dust collection adapter for attaching a vacuum cleaner or dust extractor is included.
**2-speed scroll saw DS 460**

The DS 460 is equipped with a suction connection with vacuum cleaner adapter. For dust-free and clean working.

**Note:**
You will find the scroll saw DS 115/E, ideal for delicate projects, on page 33!

**Sturdy construction:** Vibration-reducing base housing of cast steel, neatly CNC-processed and powder-coated. For stability and working without vibrations.

Magnesium saw arms precisely mounted on bearings: Extremely light and firm with a slender-shaped cutting area for a clear view of the work piece. Chip blowing device with adjustable nozzle. Additional suction connection to connect a vacuum cleaner. Large saw table made of die-cast aluminum 400 x 250mm (16” x 10”). For easier saw blade replacement, it can be unlocked and pushed back (see description at top right). Regular scroll saw blades are fastened by saw blade holders with high clamping force: This ensures true alignment in the saw arm! The machine has also been prepared for saw blades with pin ends that are used without blade holders. Extremely important for these types of scroll saws: A handy adjusting knob enables sensitive clamping of the saw blades!

Table angle adjustment possible from 5° to 50° (see bottom right). Cutting performance in wood 65mm (2 1/2”), in non-ferrous metals (depending on type) 10 – 15mm (3/8” – 5/8”). Also easily cuts Plexiglas, glass fibre reinforced plastic, foam, rubber, leather or cork. Includes 5 each coarse and fine saw blades.

**Technical Data:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volts</td>
<td>110 – 120V AC, 50/60Hz</td>
</tr>
<tr>
<td>Motor</td>
<td>190W powerful brushess 2-speed motor</td>
</tr>
<tr>
<td>Speeds</td>
<td>800 or 1,700 strokes/min.</td>
</tr>
<tr>
<td>Stroke Length</td>
<td>19mm (3/4”)</td>
</tr>
<tr>
<td>Throat</td>
<td>460mm (18 2/16”)</td>
</tr>
<tr>
<td>Cutting Depth</td>
<td>65mm (2 1/2”), 32mm (1 1/4”) at 45° angle</td>
</tr>
<tr>
<td>Overall Dimensions</td>
<td>L 580mm (22 7/8”)</td>
</tr>
<tr>
<td></td>
<td>W 320mm (12 1/2”)</td>
</tr>
<tr>
<td></td>
<td>H 300mm (12”)</td>
</tr>
<tr>
<td>Weight</td>
<td>20kg (44 lbs)</td>
</tr>
</tbody>
</table>

**Blade holders for DS 460**

(one pair is already included with the machine).

For clamping regular saw blades with high clamping force: for true alignment of the saw arm.

**NO 37 094**

2 pieces
**Easy saw blade replacement without tedious fiddling by pushing back the table!**

**Innovative solution (patented):** To enable easy saw blade replacement, the horizontally positioned table can be unlocked and pushed back by 80mm. For an unobstructed view of the bottom saw arm when fitting the saw blade holders or pin end blades.

**Patented saw blade holders with high clamping force** ensure true alignment of the saw blades. Recesses in the table surface serve as guide line in assembly to define position and distance of the saw blade holders.

**Table angle adjustment possible from 5° to 50°.** With large dimensioned serrations at 0°, 10°, 20°, 30° and 45°. Additional fine adjustment for precise mitre and angle cuts.

**Standard scroll saw blades with pin ends. 127mm (5”):**

- For cutting soft and hard wood, plastics as well as other soft materials and especially thicker work pieces. Coarse-toothed (10 TPI): 
  **NO 28 741**  
  127 x 2.61 x 0.51mm (5”)  
  12 pieces
- For cutting thin materials, soft and hard wood as well as plastics. Normal toothed (18 TPI): 
  **NO 28 743**  
  127 x 1.86 x 0.24mm (5”)  
  12 pieces
- For cutting non-ferrous metals, glass-fibre reinforced plastics, plastics, Plexiglas and wood. Fine-toothed (25 TPI): 
  **NO 28 745**  
  127 x 1.76 x 0.25mm (5”)  
  12 pieces

**Spiral blade. 130mm (5.1”) long with plain ends (without pins).**

- These blades cut all directions and obviate the turning of the workpiece (advantageous, especially with bigger workpieces). A 1.5mm (1/16”) hole is required. Ideal for plastic, hard and soft woods. 
  **NO 28 747**  
  130 x 1.2mm (5.1”)  
  12 pieces

**"Super-Cut" scroll saw blades without pins. 130mm (5.1”)**

- For cutting hard and soft woods, plastic, Perspex and soft non-ferrous metal. Coarse-toothed blades, No. 9: 14 TPI 
  **NO 28 116**  
  130 x 1.5 x 0.48mm (5.1”)  
  12 pieces
- Standard-toothed blades, No. 5: 17 TPI 
  **NO 28 117**  
  130 x 1.50 x 0.48mm (5.1”)  
  12 pieces
- Fine-toothed blades, No. 3: 20 TPI 
  **NO 28 118**  
  130 x 1.5 x 0.48mm (5.1”)  
  12 pieces

- Hard materials such as steel and PERTINAX.
- Standard-toothed blades, No. 5: 36 TPI
  **NO 28 112**  
  130 x 0.85 x 0.4mm (5.1”)  
  12 pieces
- Fine-toothed blades, No. 3: 41 TPI 
  **NO 28 113**  
  130 x 0.75 x 0.36mm (5.1”)  
  12 pieces
- Very fine-toothed blades, No. 1: 50 TPI 
  **NO 28 114**  
  130 x 0.6 x 0.3mm (5.1”)  
  12 pieces
Solid, ribbed die-cast aluminum housing (no tubular or sheet metal construction) with a sturdy machined table with slot for miter gauge. The table tilts up to 45° for accurate miter sawing. The machine has a low noise high-quality motor with belt driver for quiet and prolonged operation. Electronically controlled speeds allow for exceptionally accurate cutting without the need for subsequent finishing. A chart indicates the recommended speed for practically all materials. The blade size of 5 x 0.4mm (13/64" x 1/64") is ideal for fine work and permits cutting small radii.

The machine comes equipped with one band saw blade in size 1,065 x 5 x 0.4mm (42" x 13/64" x 1/64"), 14 TPI (also available as accessory, NO 28 176).

**Technical data:**
- Volts: 110 – 120V AC, 60Hz
- Speed: 395 to 820 ft/min (with feedback control)
- Throat Depth: 150mm (5 29/32")
- Max. Work Piece Height: 85mm (3 13/32")
- Table Size: 200 x 200mm (7 7/8" x 7 7/8"), adjustable from 0 – 45°
- The unit includes an adapter to connect a vacuum cleaner or dust extractor.

**Blade Guide, separately**
see picture

**NO 37 172**

**Saw Blades**

These high-performance band saw blades are extremely efficient and are very unlikely to break, even when being used for prolonged periods. Each band saw blade is alternately set with teeth in N-form, which are individually sharpened. This type of toothing provides oscillation-free operation of the saw blade, which is extremely important in order to obtain straight and clean cuts.

**Standard Bandsaw Blade, fine toothed (24 TPI)**
1,065 x 5 x 0.4mm (42" x 13/64" x 1/64"). Of hardened Swedish steel. Ideal for cuts in steel and brass.

**NO 28 174**

**As above, coarse toothed (14 TPI)**
1,065 x 5 x 0.4mm (42" x 13/64" x 1/64").

**NO 28 176**

**Extra narrow Bandsaw Blade, coarse toothed (14 TPI)**
1,065 x 3.5 x 0.4mm (42" x 9/64" x 1/64"). Of special tempered steel, with induction hardened teeth. Ideal for cuts in aluminum and plastics. Extremely narrow, and thus optimal for cutting tightest curves and radii.

**NO 28 180**

**Bandsaw Blade of bimetal**
1,065 x 6 x 0.6mm (42" x 13/64" x 1/32"). Carrier belt of alloyed tempering steel, sawing teeth of wear-resistant high-speed steel. Varying teeth 10 – 14 TPI. Ideal for cutting all standard steel qualities, non-ferrous metals and stainless steel.

**NO 28 172**

**Diamond Blade**
1,065 x 3 x 0.3mm (42" x 7/64" x 1/64"). Ideal for cuts in glass, stone, ceramic, PC cards.

**NO 28 186**

**Band knife of hardened spring band steel** (without teeth)
For cutting foam, plastic, rubber, leather, cardboard and paper board.
1,065 x 6 x 0.4mm (42" x 13/64" x 1/64").

**NO 28 184**
Perfectly straight cuts. The ideal machine for model building, picture-framing, dollhouses, birdhouses and other intricate projects.

**Table Saw FET**

Extendable table extension with integrated auxiliary stop.

Angle stop with stop rail of aluminium and adjustable limit stop for manufacturing parts of equal length and the same angle.

For fine mechanics, model building, mould construction, toy manufacture, architects, model carpenters and fitters.

For cutting wood, non-ferrous metals, plastics, Plexiglas, fiber-glass reinforced sheets, foam and many other materials. Stable construction because load bearing parts and plane-milled table are made of die-cast aluminium.

The micro-adjustable, precise and stable longitudinal stop provides decisive advantages: Corrections even smaller than 1/10mm (0.004") can be made after coarse adjustment using an adjusting screw. The height is adjustable and 45° tiltable saw blade makes it possible to cut double mitres when used together with the angle stop.

Low-noise drive using DC special motor with compound belt driver. Ball-bearinged saw blade shaft. Tungsten tipped saw blade Ø 80mm (3 9/64") x 1.6mm (1/16") x 10mm (13/32") (24 T). Additional work piece push stick and non-slotted ABS zero clearance table insert for tight tolerances between saw blade and table.

**Technical data:**

110 – 120V AC. 60Hz. 7,000rpm. Mitre infinitely adjustable up to 45°. Table size 300 x 300mm (12" x 12"). Cutting depth 1 – 22mm (0.04" – 5/6"). Saw blades between 50 – 85mm (2" – 3 11/32") can be used (with 10mm (13/32") centre hole). Weight approx. 6kg (12 lbs).

**NO 37 070**

**Crosscut Blade Super-Cut**

Ø 85mm (3 11/32") x 0.5mm (1/64"), bore 10mm (13/32"), 80 teeth. Ideal for use on hard and soft wood, as well as plastic.

**Carbide Tipped Saw Blade**

Ø 80mm (3 9/64") x 1.6mm (1/16"), bore 10mm (13/32"), 36 teeth Used for balsa, plywood, hard and soft woods, POLYCARBONATE, plastic, aluminium and PC boards.

**NO 28 731**

**Carbide Tipped Saw Blade**

80mm (3 9/64") x 1.6mm (1/16"), bore 10mm (13/32"), 24 teeth For cutting difficult to separate materials as aluminium, hard wood, chipboard, fiberboard and plastics.

**NO 28 732**

**Carbide Tipped Saw Blade**

80mm (3 9/64") x 1.6mm (1/16"), bore 10mm (13/32").

For clean cuts in ceramics, porcelain, tiles, stone, PC cards.

**NO 28 733**

**Diamond Coated Cutting Blade**

Ø 85mm (3 11/32") x 0.7mm (1/32"), bore 10mm (13/32").

**NO 28 734**
Competent drilling of micro holes down to 0.5mm (1/64").

Bench Drill Press TBM 115

With extremely high rotational accuracy and optimal power transmission via belt drive for three different speeds.

The unit offers a high quality machined work table of ribbed die-cast aluminum (worktable size 220 x 120mm (8 1/2" x 4 3/4") providing an adjustable parallel fence. The solid, hard-chromed steel column is 280mm high (11") and has a diameter of 20mm (4/5"). The powerful motor, which is built into the super stable die-cast head of the machine, runs very quiet and has a long life expectancy. The power transmission by 3-step aluminum pulleys and flat belt provides 3 spindle speeds of 1,800, 4,700 and 8,500rpm allowing triple torque at lower speeds. The chrome feed lever has a practical adjustable drilling depth gauge.

The spindle is essentially free of play as a result of the three high quality ball bearing assemblies. It is recessed for the insertion of MICROMOT steel collets, but also threaded for attaching drill chucks with 3/8" thread. The spindle has an extremely high rotational accuracy and a 30mm (1 3/16") feed. The quill diameter is 32mm (1 1/4") with return spring, the throat depth (column to drill spindle) is 140mm (5 1/2"). The unit provides quick coarse height adjustment of the headstock via clamp lever. The max. height (worktable surface to spindle end) is 140mm (5 1/2").

Technical data:

110 – 120V, 60Hz, 85W (0.115hp), speeds 1,800/ 4,700/8,500rpm. The unit comes with six triple slit MICROMOT precision steel collets in sizes 1 – 1.5 – 2 – 2.4 – 3 and 3.2mm (1/32" – 1/16" – 5/64" – 3/32" – 7/64" and 1/8").

To clamp work pieces we recommend using either one of our machine vises or the X-Y table KT 70 (see page 21) to convert this machine into a high-precision machining center.

NO 38 128

Chuck

For drill shank sizes from 0.5 to 6mm (1/64" to 1/4") and maximum speeds up to 10,000rpm this chuck offers industrial quality with extra high-speed accuracy. With 3/8" thread. For MICROMOT Bench Drill Press TBM 115.

Including chuck key.

NO 28 122
**MICRO Mill MF 70**

The unit is supplied with a stable base of cast iron. Both vertical column and compound table are of treated, high quality aluminum. All axes are play-free and have adjustable slides. The headstock, made of die-cast aluminum, houses the 24 pole balanced special motor and provides stability even at high operating speeds. This stability facilitates the use of the finest cutters.

Six triple slit, hardened MICROMOT steel collets come with the machine and cover shank sizes of 1 – 1.5 – 2 – 2.35 – 3 – 3.2mm (1/32” – 1/16” – 5/64” – 3/32” – 7/64” and 1/8”). The table is fitted with three T-slots of the 12 x 6 x 5mm (15/32” x 15/64” x 13/64”) MICROMOT-norm. An adjustable ruler scale eases the positioning of the work piece.

All hand wheels are zero adjustable with 1 revolution = 1mm (1/32”), 1 division = 0.05mm (.002”).

**Technical data:**

- **Volts:** 110 – 120V AC, 60Hz
- **Speed:** 5,000 – 20,000rpm
- **Table Size:** 200 x 70mm (7 7/8” x 2 3/4”)
- **X-Y Travel:** 134 and 46mm (5 17/64” and 1 13/16”)
- **Vertical Travel:** 70mm (2 3/4”)
- **Footprint Size:** 130 x 225mm (5 7/64” x 8 55/64”)
- **Height:** 340mm (13 25/64”)
- **Max. Power:** 100W (1/8hp)
- **Weight:** 7kg (15.5 lbs)

**NO 37 110**

**Note:**

Optionally this machine may also be used with our three jaw keyless chuck (see page 23, NO 28 941).

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**Dividing Attachment for MICRO Mill MF 70**

This dividing attachment has been especially designed for use with the MICRO Compound Table KT 70 which is identical to the X-Y table of the MICRO Mill MF 70. All provided mounting holes match the slot distance of the above items, so that it can be mounted in no time with the included clamping parts either standing or lying on the table. When using it standing upright, also long work pieces can be worked on, as they can be pushed through a hole provided in the base plate. Comes in a wooden box.

**NO 24 264**
Precision lathe PD 250/E. The new generation with system accessories.

For face, longitudinal and taper turning, thread-cutting. For machining steel, brass, aluminium.

Mounting flange for fastening the mill/drill head PF 230.

Center to center 250mm (10"). Swing 70mm (2 3/4"). Height over cross slide 43mm (1 11/16").

**Machine bed:** Of cast iron, wide-legged prismatic guide. For vibration-free work even at high loads. Rear flange for mounting the mill/drill head PF 230. Covered lead spindle.

**Headstock:** Of die-cast aluminium. Precision bearing mounted main spindle (run-out without chuck 1/100mm (0.0004") with 10.5mm (13/32") opening. Chuck side 70mm (2 3/4") hollowed to 14mm (0.56"). With MT2 bore. Rotary switch for engaging the automatic feed via lead and feed spindle (optionally 0.05 or 0.1mm/rev. (2/100" or 4/1000").

**Tailstock:** Of die-cast aluminium. Sleeve Ø 20mm (3/4"), retractable up to 30mm. With millimetre scale, MT 1 bore and live centre.

**Support:** Bed carriage made of die-cast zinc. Cross slide and top slide of steel (adjustment 60 or 45mm (2 3/8” or 1 3/16”)). Turning tool post for cutting tools size 8 x 8mm (5/16” x 5/16”).

**Drive:** Quiet DC special motor with 3-stage belt drive for 300 – 900 and 3,000rpm. With additional speed control (full-wave electronics) continuously adjustable to 100 – 300 or 1,000rpm, depending on belt ratio. Clockwise - anticlockwise rotation. Main switch with emergency stop function and restart protection.

**Lathe chuck:** High quality 3-jaw chuck (concentricity tolerance 0.04mm (0.002")). Capacity through reversing jaws from 2 – 75mm (5/64” – 3”). Including lathe chuck guard with safety shutdown.

**Handwheels:** Of aluminium, with adjustable scale ring (1 division = 0.05mm (.002"), 1 revolution = 1mm (3/64").

**Thread cutting device:** With change gears for left-hand and right-hand threads of the most important metric pitches (0.5 – 0.625 – 0.7 – 0.75 – 0.8 – 1 – 1.25 – 1.5mm).

**Other technical data:**

110 – 120V. 50/60Hz. Size L 56mm (2") W 270mm (10 3/4"), H 170mm (6 5/8"). Weight approx. 12kg (26.5 lbs).

NO 34 002
Made in Europe!

m and plastic.

Quick change tool post – easy to use!

For quick tool change and easy height adjustment. Includes 2 tool holder elements.

NO 24 026

Additional quick change tool holder (separately)

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

NO 24 024 piece

Note:
The work piece pictured here is not included in the delivery!

Collet set with ER 20 collets: For extreme true concentric accuracy. 2 – 10mm (5/64" – 25/64").

For high precision machining of round parts. The collet set is mounted instead of the lathe chuck. With 8 collets (2 – 2.5 – 3 – 4 – 5 – 6 – 8 and 10mm). Packed in a wooden box.

NO 24 038

Centre turning attachment. For highest accuracy with high rotational precision.

This includes:
1 face plate, 2 fixed centres (MT 2 and MT 1/short) and 1 drive dog. Packed in a wooden box.

NO 24 014

Professional gear chuck with MT1

For the tailstock of the PD 250/E. Capacity up to 10mm (3/8").

NO 24 020

Fixed steady for longer work pieces

Especially for boring. Also required if the tailstock cannot be used to „counter“.
Up to Ø 40mm (1.57").

NO 24 010

Dividing attachment TA 250
For lathe PD 250/E, miller PF 230 and FF 230

For accurate machining of circular work pieces (e.g. production of gear wheels). Supplied with twodividing discs (40 and 48 teeth), enabling standard divisions of 2 – 3 – 4 – 5 – 6 – 8 – 10 – 12 – 16 – 20 – 24 – 40 and 48. The taper of the dividing attachment is the same size as that of the main spindle of the PD 250/E lathe, thus 3 jaw chuck (to be ordered separately under NO 24 034 on the right handside) and 4 jaw chuck (NO 24 036, see page 47) may be mounted. Horizontal fitting (e.g. on the cross-slide of the lathe) and vertical fitting (on the machine bed) are possible.
With matching nuts and screws for fixation in MICROMOT standard T-slots 12 x 6 x 5mm (15/62" x 15/64" x 3/16"). Supplied in a wooden box with sliding lid. The 3 jaw chuck depicted here is not included in the scope of delivery.

NO 24 044

Self-centering 3-jaw chuck

Identical to chuck of lathe PD 250/E (page 44). High quality clamping fixture as per DIN 8386, Class 1 (concentricity accuracy 0.04mm). Capacity through reversing jaws from 2 – 75mm. Suitable for PD 250/E and the dividing attachment NO 24 044.

NO 24 034
**Edge Finder Set**

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

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

This holder allows mounting of our rotary tool IBS/E (collar size 20 mm (4/5”)) to the tool post of the Lathe PD 250/E for grinding or polishing purposes.

**Die Holder for round dies, threads**

*M 3 to M 10*

Sizes: M 3 – 4 – 5 – 6 – 8 – 10. The straight shank 13/32” fits our drill chuck NO 24 020 when mounted in the tailstock of the PD 250/E. The holder is held by hand while cutting the threads. Comes in a wooden box.

**HSS Boring Tool Set**

One each cutter for 60 degree (metric) and 55 degree (Whitworth) inside threads, 1.3 mm (3/64”), 2.65 mm (7/64”) and 4 mm (5/32”). Shank: 6 mm (15/64”). Length: 95 mm (3 3/4”). The cutters are held by a tool holder that mounts to the tool post of the PD 250/E. Comes in a wooden box.

**The Mill/Drill Head PF 230 converts your Lathe PD 250/E into a machining center.**

The Mill/Drill Head PF 230 comes with a column size 35 x 400 mm (1 3/8” x 15 3/4”) including the necessary mounting bracket and bolts to attach it to the Lathe PD 250/E. The lathe’s top slide is then replaced with the table (supplied with the Mill/Drill Head PF 230). The table has a size of 110 x 70 mm (4 5/16” x 2 3/4”) and 3-T slots 15/32” x 15/64” x 13/64” longitudinal and cross-wise respectively. Three collets of sizes 6, 8, 10 mm (15/64” – 5/16” and 25/64”) are included.
**Cutter Set with tungsten inserts**

Three holders (5/16" x 5/16" x 3 35/64"), for ① roughing out, ② finishing cuts and ③ boring bar, holes from 15/32". Standard tungsten tips, 55°, plated. Three additional inserts, securing screws an key TX8 are included.

| NO 24 555 | 8 x 8mm |

**Tungsten Disposable Tips**

for the holders 24 555. Ten piece set.

| NO 24 557 |

**The lathe tools are made from high-quality Cobalt HSS, pre-ground. Packaged in a wooden box.**

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**Quick Change Tool Post**

Including 2 tool holders. Enables quick tool changes and easy height adjustments.

| NO 24 022 |

**Additional Quick Change Tool Holder**

Used with the above quick change tool post.

| NO 24 024 |

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**Drill Chuck**

German industrial drill chuck, capacity up to 10mm (13/32"), with key and MT 1, for tailstock.

| NO 24 020 |

**Same as above**

German industrial drill chuck for MICRO Mill PF 230 and FF 230 with 10mm (13/32") capacity and 10mm (13/32") arbor to fit the 10mm collet.

| NO 24 110 |

**Radius Turning Attachment**

For working on convex and concave shapes. Can be mounted on the cross slide instead of the tool holder. Enables turning of radii or 3/4 balls up to max. 32mm (1 1/4") in steel (max. cutting depth 1mm (1/32"), non-ferrous metals and plastics. Comes with one finishing cutter 8 x 8mm (5/16" x 5/16") in a wooden box.

| NO 24 061 |

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**Fixed Steady**

Used when turning long, slender pieces, capacity up to 40mm (1 37/64"). Also used when the tailstock cannot be utilized.

| NO 24 080 |

**Center Turning Attachment**

Used for highest accuracy with high rotational precision. One face plate, 2 fixed MT 1 (short) centers, and 1 drive dog are included.

| NO 24 070 |

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**4-jaw chuck with independent jaws**

For clamping angular and asymmetrical shaped work pieces. Capacity up to 80mm (3,1"). Chuck Ø 75mm (3").

| NO 24 036 |

**5-piece Cutting Set**

8 x 8 x 80mm (5/16" x 5/16" x 3 9/64"). One each roughing out, parting, finishing cut, left and right cutter.

| NO 24 530 |

**Three Piece Thread Cutting Set**

6 x 8 x 80mm (15/64" x 5/16" x 3 9/64"). One cutter for external thread (ground to 60°, metric), one for internal thread, one general cutting.

| NO 24 540 |

**Three Piece Center Drill Set**

HSS, 60°. Complete set with sizes of 2, 2.5 and 3.15mm (5/64", 3/32", 1/8").

| NO 24 630 |
A small, high accuracy machining system to mill, drill and bore.

MICRO Mill FF 230

Hand wheel serves as height adjustment.

Poly-V drive system offers 6 speeds between 280 and 2,500rpm.

Fine feed available separately (see page 47).

Hand wheels with zero adjustable scale, 1 rev = 1.5mm (1/16”), 1 division = 0.05mm (.002”).

The MICRO Mill FF 230 is a small, accurate milling system used to mill, drill and countersink steel, cast iron, aluminum, brass and plastic. The headstock swivels 360°, indicated on a scale. Height is adjustable. One revolution equals 1mm (1/32”) travel, 1 division equals 0.05mm (.002”). The quill and headstock may be locked in position, which is essential when milling. The powerful permanent magnet motor drives via a poly-v-belt, yielding high torques, especially at lower speeds. The machine comes with three collets of 6, 8 and 10mm. The solid table has a size of 270 x 80mm (10 5/8" x 3 5/32") and is T-slotted to 12 x 6 x 5mm (the MICROMOT norm of 15/32” x 15/64” x 13/64”).

Technical Data
- Volts: 110 – 120V AC, 60Hz
- Speeds: 280, 550, 870, 1,200, 1,500, 2,200rpm
- Table Size: 270 x 80mm (10 5/8” x 3 5/32”)
- Column Size: Ø 35 x 400mm long (1 3/8” x 15 3/4”)
- X-Y Travel: 170mm x 65mm (6 11/16” x 2 9/16”)
- Overall Height: 500mm (20”)
- Weight: 41 lbs (17kg)

NO 34 108

Splash guard and chip collecting tray for PROXXON milling machines

Made of 1.5mm (1/16”) thick sheet steel, powder-coated. Secure stand due to drill holes for fastening to a work surface (the use of steel sleeves keeps the tray tightly sealed). L 700mm, W 420mm, H 40mm (27 1/2” x 16/12” x 1 37/64”).

NO 24 322

Important:
For best results when milling, it is recommended to lock the headstock. This is easily done via the FF 230’s lock levers.
**Fine Feed for Mill/Drill Head PF 230 and MICRO Milling Machine FF 230**

Easily installed. The feed may now be used via the height feed (vertical) or the fine feed in the tilted position. One revolution is equivalent to 1.5mm (1/16”) spindle travel, with 1 division = 0.05mm (.002”). The graduated scale can be reset to zero.

**NO 24 140**

**Compound Table KT 230**

The individually available solid table is the same as described with the MICRO Mill FF 230 above, has a size of 270 x 80mm (10 5/8” x 3 5/32”) and is T-slotted to 12 x 6 x 5mm (the MICROMOT norm of 15/32” x 15/64” x 13/64”). The compound table does not include the headstock and column. The Mill Drill/Head PF 230 may be attached to it.

**NO 24 106**

**Five Piece Collet Set for PF 230 and FF 230**

Includes 1 each collet for round stock 2.4 – 3 – 3.2 – 4 and 5mm. Supplied in a wooden box and lid.

**NO 24 144**

**Step Clamp Set**

Made of steel. Complete with 2 step blocks, 2 clamps, 2 nuts and 2 T-slot nuts for MICROMOT standard 11.5 x 11 x 4mm (29/64” x 7/16” x 5/32”). For use with the lathe systems PD 230/E, PD 250/E, KT 70 and MF 70.

**NO 24 256**

**Precision Machine Vice PM 60**

**Milled in steel.**

Can be used on its side and back. Width of jaws 60mm (2 3/8”), clamping capacity 42mm (1 2/3”). Complete with mounting bolts. Packed in a wooden box.

**NO 24 255**

**Precision Steel Vice PM 40**

Especially suited for intricate and accurate working! Milled of steel. Completely angular. Jaw width 46mm (1 13/16”), clamping capacity 30mm (1 3/16”). Total length 70mm (2 3/4”). Ideal for working with MICRO Mill MF 70 or Compound Table KT 70. Slot stones and fixing screws included. Comes in a wooden box.

**NO 24 260**

**Milling Cutters**

These double flute cutters are made from solid tungsten and are to be used for clockwise cutting. The fishtail profile ensures cutting to the center, allowing boring. Usable on cast iron, hardened cast iron, steel, cast steel, brass, aluminum, and even glass, plastics and carbon fiber. The set includes one each of 1, 2 and 3mm (1/32”, 5/64” and 7/64”) shank diameter: 3mm (7/64”).

**NO 27 116**

**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 (2” x 1 3/16” x 1 3/16”). The solid clamp and knurled knob ensure superb securing of the work piece.

**NO 24 262**

**Step Clamp Set**

Consists of 2 step blocks and 2 clamps, 2 nuts, 2 T-slot nuts. Secures objects to approx. 35 mm (1 3/8”) high. May be used with PD 230/E and FF 230. Supplied in wooden box.

**NO 24 257**

**Milling Cutter Set 5 2 – 5mm**

(4/64” – 13/64”)

HSS, all with 6mm (15/64”) shank. Cutters of Ø 2, 3, 4 and 5mm (5/64”, 7/64”, 5/32”, 13/64”). Double fluted. Supplied in wooden box.

**NO 24 610**

**Milling Cutter Set 6 – 10mm**

(15/64” – 13/32”)

HSS, 4 cutters Ø 6, 7, 8 and 10mm (15/64”, 9/32”, 5/16”, 13/32”). Four flute design. Supplied in wooden box.

**NO 24 620**
PROXXON tools are distributed in North America by:

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P.O. Box 1909
Hickory, NC 28603-1909

For any questions, call us toll free at 1-877-PROXXON and be sure to frequently check our website for updates and new items at www.proxxon.com/us.

“There is hardly anything in the world that some man cannot make a little worse and sell a little cheaper, and the people who consider price only are this man’s lawful prey.

It’s unwise to pay too much, but it’s worse to pay too little. When you pay too much, you lose a little money – that’s all. When you pay too little, you sometimes lose everything, because the thing you bought was incapable of doing the thing it was bought to do.”

John Ruskin (1819 – 1900), writer and social philosopher

“We reserve the right to change/modify/improve equipment, specifications, and prices without prior notice.”