

MAGTRON

HOLE CUTTING TECHNOLOGY



MAGTRON MAGNETIC DRILLING MACHINES: **QUALITY FOR PROFESSIONALS!**

- *Electronic speed control **
- *Overload protection **
- *Constant speed" electronics **

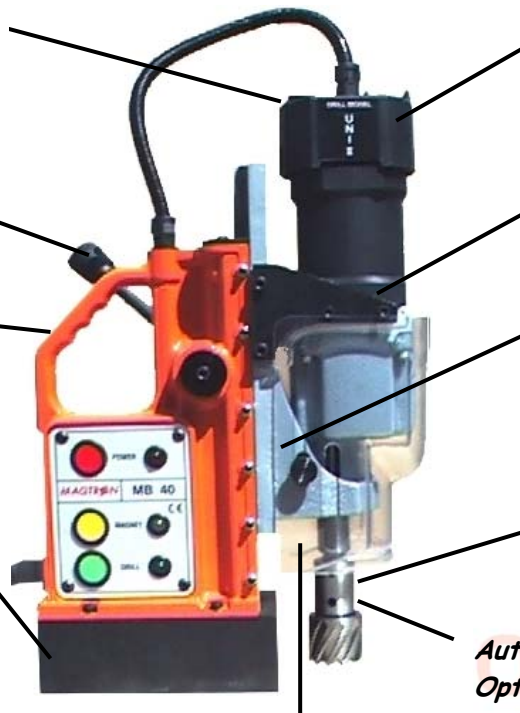
The operating handles can be moved to either side for working for ultimate accessibility

DIE-cast aluminium housing: 30% lighter, 20% stronger!

MAGTRON electromagnets have an optimum size / strength ratio, measured at the spindle.



MAGTRON machines are supplied in a robust, light to carry ABS plastic carry-case, which includes accessories and plastic safety guard as standard.



- *Slipping clutch **
- *2 geared ranges **
- *Variable torque control **

*Direct gearbox mounting for increased stability **

*Optimum stability with a gearbox mounted directly on the specially designed ridged "die cast" cradle **

MAGTRON machines are standard supplied with a 19mm broach cutter arbor

*Automatic coolant system *
Optional **Quick Release Arbor** **



All MAGTRON machines are supplied with a plastic safety guard for user safety.

** pending on model*

MAGTRON Accessories:



- Broachcutters standard shank \varnothing 12–100mm; cutting depth: 30/50/75/100mm
- Quality HSS, HSS-Cobalt, T.C.T., Several coatings e.g. Tin, TiAlN, etc.
- Special diameters / requirements on request
- Cutter arbors in MT2, MT3, MT4 without / with integral oil feed / lubrication
- Oil cups, cutting oil, cutting paste, etc.
- Special cutter arbors, Weldon arbors, fitting adapters, etc. on request.
- Drill chucks, adapters, (MT2/MT3) holders for drill chucks
- HSS-countersinks 90°, 0-50 mm with 19 mm shank, etc.
- Pipe clamp with quick fit straps, tapping tools, etc.



** Optional for small machines*

Control panel*:

- Unsafe use is impossible because of "smart electronics"; you cannot start the motor unit without an engaged magnet, the motor unit will switch-off after touching a random button. You cannot make mistakes in emergencies.
- Reduced chance of accidents because the magnet will delay 3 seconds before turning off
- Visual and (discrete) audiovisual checks of functions.
- Mains supply indicator by flashing LED.

MAGTRON MB30:

Cutter capacity: \varnothing 12 - 32 mm
 Twist drill capacity: \varnothing 1 - 13 mm
 Arbor: $\frac{1}{2}$ "x20UNF- 19 mm
 (30mm cutting depth)
 Speed no load: 550 min⁻¹
 Motor power: 720 W
 Magnet: 80x160x50 mm,
 "High Power"
 Weight: 9,5 kg
 Stroke: 147 mm

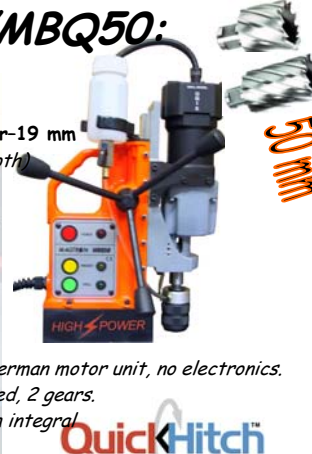
- Small, lightweight and portable.
- Easy changing between broach cutting and twist drilling with included 13mm drillchuck.
- Optional supplied with Quick Release arbor or automatic lubrication



MAGTRON MBE40/MBQ50:

Cutter capacity: \varnothing 12 - 45/50 mm
 Twist drill capacity: \varnothing 1 - 19 mm
 Quick release Arbor: MC2/Q.R.-MC2 arbor-19 mm
 (30/50mm cutting depth)
 Speed I no load: 0-280/280 min⁻¹
 Speed II no load: 0-500/500 min⁻¹
 Motor power: 1.100 W
 Magnet: 100x180x60 mm,
 "High Power"
 Weight: 15 kg
 Stroke: 170 mm

- Small and relative light, high torque German motor unit, no electronics.
- Stable 'one part' slide, gearbox mounted, 2 gears.
- MBQ50 with Quick Release arbor with integral lubrication standard fitted.
- MBE40 with electronic variable speed and overload protection

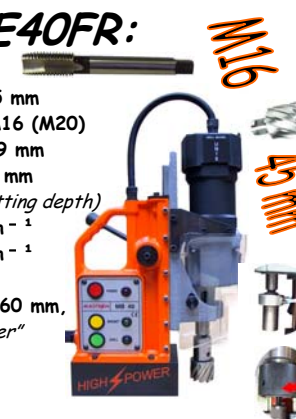


Tap & Cutting Machines

MAGTRON MBE40FR:

Cutter capacity: \varnothing 12 - 45 mm
 Tapping capacity: \varnothing M5 - M16 (M20)
 Twist drill capacity: \varnothing 1 - 19 mm
 Arbor: MC2 - 19 mm
 (30mm cutting depth)
 Speed I no load: 0-280 min⁻¹
 Speed II no load: 0-500 min⁻¹
 Motor power: 1.100 W
 Magnet: 100x180x60 mm,
 "High Power"
 Weight: 15 kg
 Stroke: 170 mm

- Tapping machine with forward/reverse run, no expensive reverse tap head required!
- Robust motor, two gears, variable speed, overload protection.
- Stable 'one part' slide, gearbox mounted.
- Optional: Automatic lubrication, Quick Release arbor.
- NEW!: Electronic safety Forward / Reverse panel



MAGTRON MBQ35:

Cutter capacity: \varnothing 12 - 35 mm
 Twist drill capacity: \varnothing 1 - 13 mm
 Quick release Arbor: $\frac{1}{2}$ "x20UNF- 19 mm
 (50mm cutting depth)
 Speed no load: 520 min⁻¹
 Motor power: 960 W
 Magnet: 80x160x50 mm,
 "High Power"
 Weight: 12,5 kg
 Stroke: 147 mm

- Small, portable, strong, high torque, German motor.
- New Quick Release arbor standard fitted.
- Integral lubrication system standard fitted.



Also ask for our special machines!!!

- Automatic feed till 50mm!! (UA5000)
- Hazardous environment, Pneumatic (AIRBOR2)
- Underwater, hydraulic
- Drillstands only



MAGTRON MB42:

Cutter capacity: \varnothing 12 - 42 mm
 Twist drill capacity: \varnothing 1 - 13 mm
 Arbor: $\frac{1}{2}$ "x20UNF- 19 mm
 (50mm cutting depth)
 Speed no load: 320-640 min⁻¹
 Motor power: 1.200 W
 Magnet: 80x160x50 mm,
 "High Power"
 Weight: 11,5 kg
 Stroke: 147 mm

- Small, portable, strong Atlas Copco motor
- Variable speed, overload protection.
- Easy changing between broach cutting and twist drilling with optional drillchuck.



MAGTRON MB(S)E100:

Cutter capacity: \varnothing 12 - 100 mm
 Twist drill capacity: \varnothing 1 - 32 mm
 Arbor: MC3 - 19 mm
 (50mm cutting depth)
 Speed I no load: 50-130 min⁻¹
 Speed II no load: 160-450 min⁻¹
 Motor power: 1.800 W
 Magnet: 110x220x65 mm,
 "High Power"
 Weight: 26 kg
 Stroke: 280 mm

- Two gears, electronic "constant speed" regulator, slipping clutch.
- Automatic integral lubrication, overload protection, Morse taper 3.
- Stable 'one part' slide, gearbox mounted.
- Optional: Quick Release arbor, Swivel base (MBSE100).



MAGTRON MAGTAP30:

Cutter capacity: \varnothing 12 - 100 mm
 Tapping capacity: \varnothing M5 - M27 (M30)
 Twist drill capacity: \varnothing 1 - 32 mm
 Arbor: MC3 - 19 mm
 (50mm cutting depth)
 Speed I no load: 240/265 min⁻¹
 Speed II no load: 470/515 min⁻¹
 Motor power: 1.050 W
 Magnet: 110x220x65 mm,
 "High Power"
 Weight: 26 kg
 Stroke: 280 mm

- Tapping machine with forward/reverse run, no expensive reverse tap head required!
- Very robust heavy-duty motor, two gears, two electric speeds.
- Stable 'one part' slide.
- Optional: Automatic lubrication, Quick Release arbor, Quick Release tapping arbor.



Please visit our Website:

WWW.MAGTRON.COM



Magnetic Drillingmachine UA5000 with AUTOMATIC FEED



**Broachcutting till 50 mm
with HSS cutters!!!**

Benefits Automatic Feed:

- Longer life of cutters because of optimal feed & speed.
- Higher efficiency; possibility of operating multiple machines by 1 operator.
- Ideal for volume drilling.
- Easy to use, no drilling experience required.



Automatic feed controlled by handle position

• **Automatic Coolant System**

Coolant is fed directly to the center of the cutter and will automatically shut-off after the cut.

• **Slow Start Mechanism**

When the cutter touches the material, in the first few seconds, the feed speed is reduced to ensure a smooth cut through the mill scale.

• **Variable Feed Speed**

The feed speed is pending on the load of the cutter and continuously monitored.

• **Overload protection both electronically as with a motion sensor**

With excessive loads on the cutter, both feed and drill motor will switch off due to the amp/overload protection. Strong vibrations or lateral movement will switch off the machine as well to prevent breakage of the cutter.

• **Cycle stop & Maximum Travel Cut-off**

A reduction of load at the end of the cut is sensed and will switch off both feed and drill motor automatically. In case of non-detection, it will be switched off by a limit switch at the end of the stroke.

• **Needle bearing for the Arbor**

Optimal stability ensures even longer life of the cutter.

• **Fail safe systems**

After a power failure, the drill will switch off and must be restarted. The drill will not start until the magnet is switch on.

• **Slow speed drill**

This unit is specially developed for **HSS cutters** and so fitted with a slow speed drill with two gears.



Specifications UA5000:

Broachcuttingcapacity:	Ø 12 - 50 mm
Arbor:	19 mm "side lock" (50 mm cuttingdepth)
Speed I no load:	250 min ⁻¹
Speed II no load:	450 min ⁻¹
Drill power:	1.150 W
Magnet:	92x216x58 mm
Magnet holding power:	7056 N
Weight:	21 kg
Stroke:	80 mm
Voltage:	110V / 230V

We like to advise you:

MAGTRON (U.D.C.E. Ltd)
Dalweg 1 (Pinnepot II)
3233 KK OOSTVOORNE
The Netherlands
Tel.: +31 (0)181 404563
Fax: +31 (0)181 404373

new from universal- airbor

Further development of the already highly successful airbor - a magnetic drilling system for use in hazardous or explosive environments - has resulted in the airbor 2.

Aimed at specialised applications such as petrochemical plants; offshore oil and gas facilities; mining; shipyard and marine, mineral and powder processing industries, etc., the Airbor 2 is powered entirely by compressed air.

By eliminating the risk of explosion from sparking and the danger of electric shock and short circuits due to moisture, the airbor is quite simply the only magnetic drilling machine that can offer such a high degree of safety.

FEATURES AND BENEFITS

* Fail safe Permanent Magnet

The mechanically operated magnet has a clamping force of 650kg and is designed with a simple but highly effective mechanical interlock that prevents the motor running unless the magnet is activated.

* Air motor

Drive is from a compact but very powerful pneumatic motor delivering sufficient power for all likely applications via a well proven arbor and mounting system.

* Integral Coolant system

The arbor also features an integral bore to allow coolant to be fed to the cutter, further reducing the risk of sparking or overheating - the coolant can be either gravity fed or pressurised.

* Anti-static piping

Fitted as standard, this further reduces the risk of sparking

* Light weight

At only 13kg, the unit is easily carried by one person and is compact for easy manoeuvrability on the workpiece.

MAGTRON

HOLE CUTTING TECHNOLOGY

Magtron electro-magnetic drilling machines and broaching cutters have been designed, developed and manufactured to the very highest standards to provide users with a powerful, portable and cost effective solution to hole cutting problems.



There is a Magtron machine to suit all kinds of hole cutting requirements, together with a wide range of cutters in standard diameters and lengths.

Special bespoke cutters for particular applications can be developed and manufactured to special order.

Please call for free technical help and advice!



universal
Drilling & Cutting
EQUIPMENT LIMITED

A Nitto Kohki Company

MAGTRON (U.D.C.E. Ltd)
Dalweg 1
3233 KK Oostvoorne
The Netherlands
Tel: +31 (0)181 404563

Fax: +31(0)181 404373

Website- <http://www.magtron.com> e-mail: info@magtron.com

YOUR LOCAL DISTRIBUTOR

LINNA TRADE
Pirkkalaistori 8, 37100 Nokia
linnatrade@linnatrade.fi
www.linnatrade.fi

puhelin (03) 343 2450
faksi (03) 343 3878
matkap. 0400-914 669

airbor

for HAZARDOUS ENVIRONMENT
MAGNETIC DRILLING

MAXIMUM
SAFETY IN
DANGEROUS
SITUATIONS!



universal
Drilling & Cutting
EQUIPMENT LIMITED



Safety interlock

The simple but very effective mechanical interlock prevents the motor from being started without the magnet being activated.



Place the machine in the correct drilling position. To activate the magnet, extend the telescopic magnet handle for more leverage, and pull it to the left.



Re-check the unit is correctly positioned for the hole to be cut, and close the magnet handle extension.

To start the motor, pull the motor actuating handle to the left. The motor will start.



While the motor is running, the magnet cannot be disengaged.

When the cut is complete, stop the motor by moving the lever to the right

THE NEW universal



FEATURES

- * Failsafe Permanent Magnet
- * Air Powered
- * 50mm (2") Cutting capacity
- * Powerful motor
- * Anti-spark, anti-static construction
- * Light weight
- * Integrated 'through-tool' coolant system
- * Safety interlock

airber2 specifications

Cutter capacity	- 12 - 50 mm
Chuck Capacity	- 13 mm (with chuck adapter)
'No load' speed	- 400 rpm
Air consumption	- 30 cfm
Air pressure	- 6.3 bar
Clamping force	- 650 kg
Magnet footprint	- 160 x 100 mm
L x H x W (mm)	- 260 x 500 x 300
Standard air inlet	- 3/8" BSP female thread (other options available)
Weight	- 13 kg

INCLUDES:

Warranty, Carrying case, Allen keys,
Safety guard, Oil Bottle, Cutting Oil





MAGTRON BROACH CUTTERS, QUALITY BY EXPERIENCE!



HSS Cutters with 19 mm* standard shank
Available in Ø12 mm - Ø100 mm with
Cutting depth 30 mm, 50 mm, 75 mm, 100 mm

* As from Ø75 mm: 32 mm standard shank



HSS-Co8 Cutters with 19mm* standard shank
Available in Ø12 mm - Ø100 mm with
Cutting depth 30 mm, 50 mm, 75 mm, 100 mm

* As from Ø75 mm: 32 mm standard shank



HSS & HSS-Co8 Cutters with TiAlN - Futura coating
Available on all our broach cutters!

MAGTRON broach cutters are equipped with a special geometry for optimal cutting conditions, longer tool life and smooth cutting against limited chance on breakage.

MAGTRON HSS-Co8 cutters with 8% Cobalt. Extra long tool life and suitable for tougher materials as stainless steel and alloyed steels.

Especially at upside down cutting, coolant- or cutting- fluids cannot be used.

By using a TiAlN - Futura coating, breakage will be reduced considerable and increase of life will be realised, even at "dry cutting" and higher cutting speeds.

1997

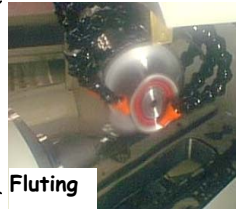


Till 1997, MAGTRON cutters (as most other cutters) were milled without proper coolant. This way, the cutter heats up in every stage (fluting, teething, flats) with undesired hardening and brittleness as a result. Especially with cobalt alloyed cutters

2000



Fluting



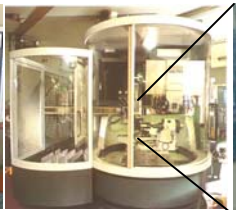
Teething

Till 2000, MAGTRON cutters were fully ground, were as one machine produces the flutes as well as the teething under proper cooling. This results in a far better and more constant quality.

2001



Fluting



Teething

As from 2000, MAGTRON cutters are fully ground, were as one specially developed machine produces the flutes only under high pressure cooling. Material and hardening deformation is excluded. This results to an even better quality, especially with Cobalt alloyed cutters.

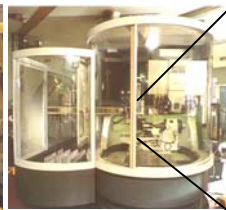
2004



Fluting



Cylind. grinding



Teething

As from 2004 MAGTRON cutters are being cylindrical ground to tolerance **after** fluting, resulting in even less influence to the hardening by the production process and an even *higher* quality of the cutter.

With a production capacity of 45.000 broach cutters per month, MAGTRON can count itself to the largest cutter manufacturers of the world. We supply our cutters under the MAGTRON label and supply (OEM) other world wide well known manufacturers. We yearly invest large amounts, in development and the latest on the market available production equipment. With the current, "state of the art" machines, we produce top quality at absolute competitive prices.

On request we produce cutters in nearly every diameter & length!

We like to advise you:

MAGTRON (U.D.C.E. Ltd)
3233 KK OOSTVOORNE
Tel.: +31 (0)181 404563

Dalweg 1 (Pinnepot II)
THE NETHERLANDS
Fax: +31 (0)181 404373

Site: WWW.MAGTRON.COM Email: INFO@MAGTRON.COM