# Euroboor magnetic drilling machines

Our magnetic drilling machines are designed and engineered to the highest standards. With our many years of experience we dare to say that we know what you need. We stay in charge of today's and tomorrow's demands by being active in the field and remaining in close contact with the people that actually use our machines.

We develop, design, engineer and produce our magnetic drilling machines in-house. We only use the best and most trustworthy suppliers or we roll up our sleeves and produce the required parts ourselves. The same applies for all our drills and cutters.

Every stage in the production process is subjected to stringent durability tests, and pre-shipment inspections are equally meticulous. Only thus can we ensure you our core values: Efficiency, Focus, Quality, and Tailor-made.

We pride ourselves on our line-up of magnetic drilling machines ranging from small scale fabrication to special purposes and designed to offer you the best possible options. Regardless of your company size, specialism or tasks at hand, you will find the perfect match at Euroboor.







# Features explained

## Magnet LED-indicator

The control panel on your magnetic drilling machine is designed for maximum ease of use and safety. Here you can find the magnet LED-indicator. There are two options:





The LED-indicator lights up **GREEN** when the generated magnetic force is sufficient. You can now safely start your drilling job.

The LED-indicator lights up **RED** when the generated magnetic force is insufficient due to:

- Surface not being flat
- Workpiece not being magnetisable (e.g. aluminium)
- Workpiece is coated or painted
- Workpiece is not thick enough

If resolving the above doesn't help, the magnet doesn't function properly. Don't start your drilling job, but have your machine checked and serviced.

## Gyro-Tec safety

Gyro-Tec safety features a gyroscopic sensor which detects acceleration and displacement in any direction. The Gyro-Tec safety feature engages three seconds after the motor is started. Whenever the machine recognises a sudden or unwanted movement the motor will be shut down automatically by the machine's electronics. This safety functionality offers extra protection in various circumstances, such as:

- Sudden loss of magnetic force while in operation
- Excessive vibration caused by incorrect drilling procedure, worn-out cutting tools, etc.
- Sudden displacement of the workpiece to which the magnetic drilling machine is attached

By the motor shutting down automatically, risk of damaging or hurting the machine, tools, workpiece and operator is reduced.

## Self-protection

The self-protection feature is two-fold; it consists of both power surge protection and fluctuation protection, making the machine suitable for use in areas and workplaces where power supply is of less quality. The machine will shut part of the electronics and the motor down by itself when the machine cannot cope with insufficient or unreliable power supply. This prevents the control unit(s) in the machine from breaking by cause of power supply, and thus unexpected downtime and high repair cost. In such situations the magnet will remain switched on.

#### Power surge protection

The machine is able to cope with voltage spikes up to 4,000 V (1-2µs)\*, which could be caused by nearby welding activities.

#### **Power fluctuation protection**

The machine is able to cope with voltage and frequency fluctuations ranging from:

110 Volt to 130 Volt – 45 Hz to 65 Hz
220 Volt to 240 Volt – 45 Hz to 65 Hz
When the frequency is too high or too low,
so it falls outside of above mentioned range,
the motor will not start. If the frequency of
the power supply falls outside the range or
fluctuates strongly during your drilling job, the
motor will be shut off automatically\*

#### Overload protection

To ensure safe use and longer lifetime of the motor the machine profits by overload protection. While you are using the machine there are different types of load levels, which correlate with the feed pressure. Once you go from close to overload to exceeding the overload limit the machine will automatically stop the motor.

#### **Smart Restart**

When the motor is in overload, the Smart Restart torque control technology ensures trouble-free continuation of your drilling job. When the feed pressure is reduced, the machine's electronics recognise the reduction and the motor continues within a few seconds.

#### Overheat protection

To prevent damage, machines with this feature are equipped with a sensor which will shut off the motor automatically when the temperature of the field coil exceeds 95° C.

#### **Carbon brushes**

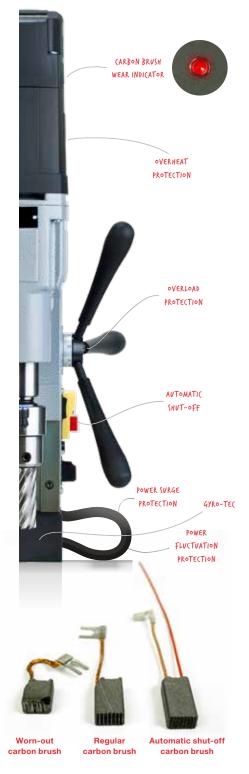
The carbon brushes on the magnetic drilling machine are equipped with two protective features. The purpose of both features is to schedule timely service and avoid additional costs by unexpected downtime or unnecessary part replacement.

#### Carbon brush wear indicator

On the motor housing you will find an integrated LED light. Under normal circumstances this light is off. The LED light will start burning **RED** when the carbon brushes are worn to a level where it is advised to replace them.

#### Automatic shut-off

When the carbon brushes are actually worn to a level where replacement is needed, the motor will be shut-off automatically. This prevents the armature from being damaged. Once shut off, the LED-indicator is no longer lit.



## 2-way magnet

The 2-way magnet saves energy when the machine is not being used. The machine sticks sufficiently at half the magnetic force, this ensures you use less energy. The magnet generates less heat which makes the lifespan of the machine is longer. Only with full magnetic force the machine can be used for drilling.



### Integrated motor cable

The frame of your magnetic drilling machine is designed for maximum safety and comfort. It is provided with an ergonomic handle and part of the machines in our portfolio have an integrated motor cable. The machines with integrated cable offer increased safety as the cable is completely incorporated in the frame. This prevents the user from getting caught in the cable and the cable from tearing or snapping off. It also prevents a lot of unnecessary repairs and therefore additional costs because the user can no longer lift and carry the machine by the motor cable, which often happens in practice.