

# Cutting Lubricants

Euroboor spends a lot of time and effort on pushing boundaries to make your drilling process far more efficient. This continuous research and development is reflected in superior quality magnetic drilling machines, annular cutters and all other kinds of tools and accessories. While this lays the basis for optimum drilling and cutting performance, there is also the hugely important, often underestimated, factor of proper cooling and lubrication.

However sharp, stable or fast a cutting tool may be, working with metal is a demanding job which generates friction and heat, impacting end result, processing time and durability.

#### Lubrication

A suitable lubricant will reduce friction greatly. The tool will set itself much better and will generate less vibrations. A smoother operation means less power needs to be put into the job, the finished result will be more precise and operation time can be reduced by up to 30%.

#### Cooling

Processing metals can, as generally known, produce a lot of heat. Overheating can have serious negative effects on the behaviour of the workpiece and tool, and thus the overall performance. The result is generally an increased processing time, but not being

able to complete the job might even be possible as well. Inappropriate cooling can lead to specific issues, such as unreliable slug ejection when working with annular cutters.

#### Protection

For example, think about the discolouration of your metal workpiece or about the sizing accuracy of drilled holes after cooling down. When pushing your cutting tools fast and hard, burning them up might even be possible quicker than you would have imagined. With the use of appropriate lubrication and cooling you are able to actively protect the workpiece and used tools.

#### Durability

Making sure a cutting tool is able to perform smoothly and constantly by proper cooling and lubrication will increase its

functional life significantly. Taking annular cutting as an example, both the drilling machine and cutter will benefit from the drastically reduced stress. Depending on circumstances, an annular cutter can last up to 5 times longer when properly taken care of during operation!

#### Our offering

Euroboor offers a wide range of well-considered cooling and lubrication products to match your requirements. If you are processing high-tensile strength stainless steel or need to cut a plain aluminium bar, create large-bore holes or prepare a fine-coarse thread, whether working on a drilling line or in difficult spots on location, we can help you out with just the right lubricant.

## The use of appropriate cutting lubricant adds value to your business operation

- Higher quality workpiece finishing
- Minimised tool wear and replacement
- Reduced processing time & lower operation cost

Material application		Plastics GRP/CRP	Brass, Copper, Tin	Grey cast iron	Steel					Stainless steel		Aluminium		Exotic materials*	Rails
Material					< 500N	< 750N	< 900N	< 1,100N	< 1,400N	< 900N	≤ 900N	< 10% Si	≤ 10% Si		
Oil															
IBO.10		○	○	○	●	●	●	●	●	○	○	○	○	○	○
IBO.P911		○	○	○	●	●	●	●	●	○	○	○	○	○	○
IBO.20		○		●	○	○	○	○	○	●	●			●	●
IBO.50		○	●	○	○	○	○	○	○	○	○	●	●	○	○
IBO.60		○	○	○	●	●	●	●	●	○	○	○	○	○	○
MV.4		○	○	○	●	●	●	●	●	○	○	○	○	○	○
IBO.30		○	○	○	●	●	●	●	●	○	○	○	○	○	○
IBP.70				●	●	●	●	●	●	●	●			●	●

This overview only offers an indication of use. Further information on lubrication and material behaviour on request. Always try the chosen cutting lubricant on a test piece first.

\* Inconnell, Nimonic, HARDOX and Hastelloy

## Cutting oils, sprays, paste and gearbox oil

### General usage

#### IBO.10

##### Mild steel lubricating and cooling cutting oil

General cutting oil offering premium cooling and lubrication for most common mild steel projects. High-cutting power tool preservation and improved processing times.

**IBO.1001 (1 litre)**

**IBO.1050 (5 liters)**



#### MV.4

##### All metals lubricating and cooling concentrate

User and environmentally friendly water-soluble cooling and lubricating concentrate. Particularly suitable for automatic dosing systems, offering efficient cooling on the majority of metal workpieces. No harmful mist formation and economical in use (can be diluted up to 1:20 ratio).

**MV.4001 (1 litre)**

**MV.4050 (5 liters)**



### Specialised usage

#### IBO.20

##### Inox, chromium and nickel lubricating and cooling cutting oil

Heavy duty cutting oil with extremely efficient lubricating and cooling properties, solely for use on hard (plated) materials such as stainless steel, chromium and nickel. Drill up to two times faster, while minimising the chance of burnt tool bits and discoloured workpieces.

**IBO.2001 (1 litre)**

**IBO.2050 (5 liters)**



#### IBO.50

##### Non-ferrous metals cutting oil

Mild paraffin-based mineral oil with excellent lubricating possibilities for softer, non-ferrous, metals such as aluminium, copper and zinc. Highly effective in preventing discoloration and deformation of the workpiece and enhancing drilling performance.

**IBO.5001 (1 litre)**

**IBO.5050 (5 liters)**



#### IBO.60

##### Tapping and threading oil

Universal non-staining cutting oil, specifically for tapping and threading. Offers consistent lubrication and enhances the precision of your operation. The unique properties actively help chip clearance and keep your tools sharp.

**IBO.6001 (1 litre)**

**IBO.6050 (5 liters)**







**IBO-P.911**  
**Mild steel lubricating and cooling cutting oil spray**  
 Premium metal processing cooling and lubrication in spray can form, suitable for use on mild steel. Highly versatile in use and ideal for tool preparation.

**IBO-P.911.500 (500 ml)**



**IBO.30**  
**All metals lubricating and cooling cutting oil spray**  
 Versatile spray with high-cooling and evaporation properties. Ideal for the (after) cooling of all workpieces and tools. The minimal harmful contents and minimal greasy residue facilitate further proceedings with the workpiece.

**IBO.30 (500 ml)**

**IBP.70**  
**High-alloy steel cutting paste**  
 A cutting compound for metal, with strong adhesive strength on materials and tools, for vertical and upside down applications where liquid metal working oils can't be used. Based on mineral oil with carefully selected extreme pressure additives with excellent lubricating properties for low tool wear and excellent surface quality. Suitable for drilling, milling, tapping, threading and punching of high-alloy steel grades.

**IBP.70 (1 liters)**



## Gearbox oil

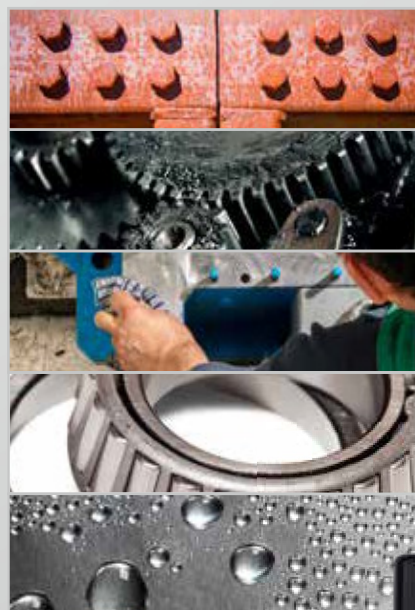
**IBO.G1**  
 Offered as official Euroboor spare part, IBO.G1 is the recommended oil for Euroboor magnetic drilling machines with oil lubricated gearboxes. This is the only gear lubricant which is able to meet our high-requirements for operating temperature, minimal wear and high-machine efficiency.

**For use with:**  
 ECO.30S+, ECO.40S, ECO.40S+, ECO.50S, ECO.50S+, ECO.55S/T, ECO.55S+/T, ECO.55S+/TA, ECO.60S, ECO.60S+, ECO.80S+, ECO.100S+/T, ECO.100S+/TD, TUBE.30S+ and TUBE.55S/T, TUBE.55S+/T.

**IBO.G101 (1 litre)**



## Multifunctional oil spray



**Operational use:**

- Rust removing
- Lubricating
- Contact improving
- Cleaning
- Corrosion protective
- Moisture repellent

**IBO.40**  
 Universal problem solving and preventing spray, suitable for the maintenance of tools and other moving parts. Also suitable as protector of electronics. Does not contain silicones, water or graphite.

**IBO.40 (400 ml)**

