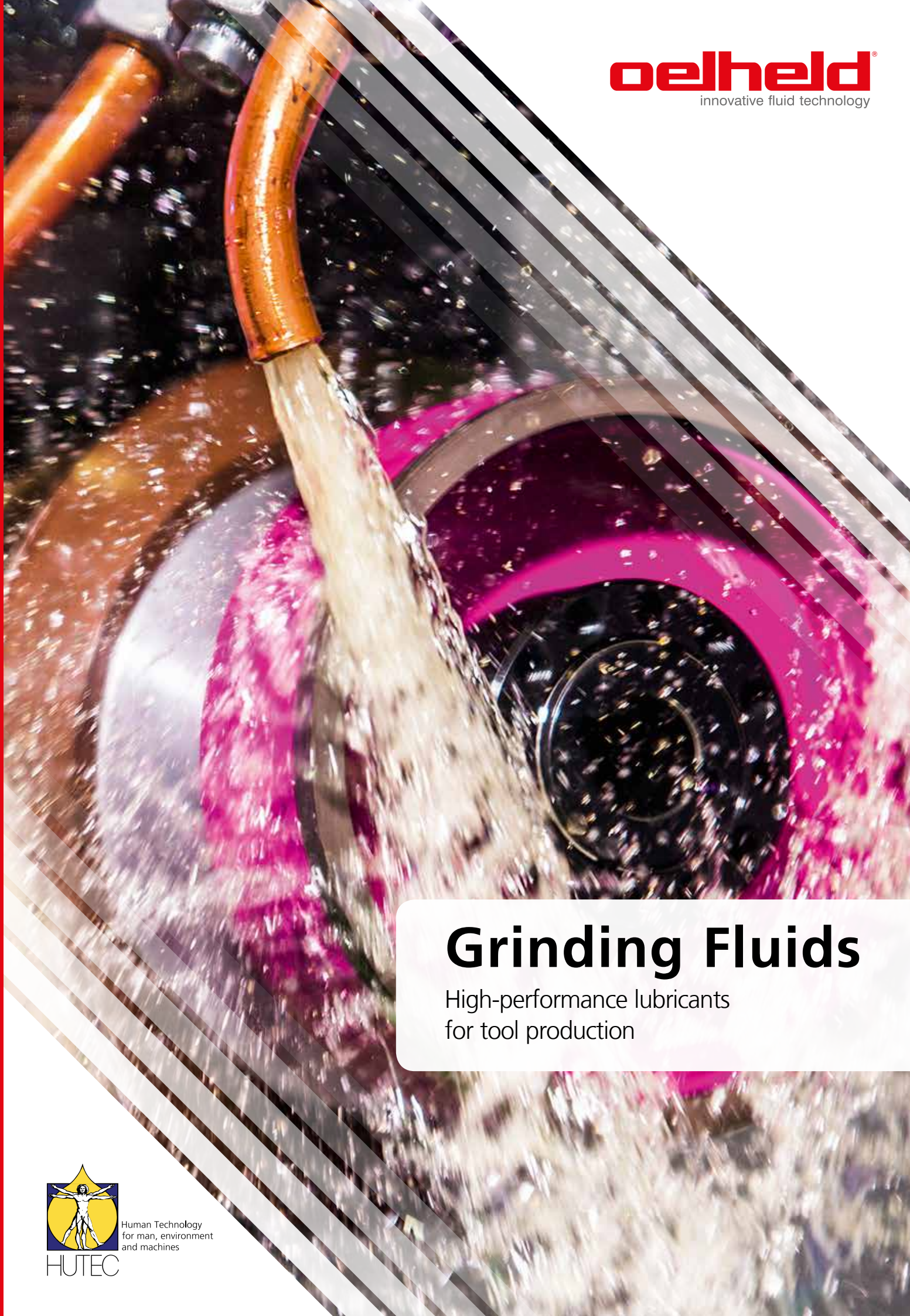


oelheld®
innovative fluid technology

Grinding Fluids

High-performance lubricants
for tool production

Human Technology
for man, environment
and machines
HUTEC

Philipp and Martin Storr • Managing Directors

Your partner for metalworking fluids

oelheld is a medium-sized company, which has more than 130 years of tradition and experience. Since the foundation in 1887 by Carl Christian Held, oelheld has become an established specialist for lubricants. Partnerships, research, and human resources technology have grown as a valuable tradition of which we are proud of.

Numerous customers and machine manufacturers along with national and international universities have partnered with us to develop high quality lubricants. Through this cooperation we are able to focus intensively on meeting and adjusting to specific requirements on a wide range of different manufacturing processes. Our laboratories are equipped with state-of-the-art analytical equipment and numerous application testing systems that guarantee today's demanding requirements, and many of tomorrow's ever changing new standards.

„Innovative product development, strengthened by continuous quality control and comprehensive customer service, is the key to the success of our products."

Human Technology

Innovations for man, environment and machines

Hutec is our main focus in the development and production of our products. It is also our mission statement in our use of resources and at oelheld always presence.

What does this mean?

- REACH requirements are fulfilled
- Skin reviews and approvals available for most products
- Low emission and aromatics free / low aromatic products
- Products free of heavy metal
- State-of-the-art production facilities
- Environmentally friendly production processes
- Products are tested for compatibility with machine components
- Sustainability in the selection of raw materials
- Environmentally friendly and resource-saving products

Human Technology
for man, environment
and machines

HUTEC

The right grinding oil for every machine

oelheld has earned a reputation for proven, unrivalled high-end metalworking fluids designed to meet the highest requirements.

The constantly growing need for increased productivity, cost efficiency and optimal utilization of existing production capacities makes it necessary to continuously optimize all process influencing factors. The selection of the right grinding oil is particularly important, as it has a major influence on productivity, production costs, process stability and ultimately the quality of the tools produced. In our own R&D department and in close cooperation with leading machine tool manufacturers, we design products that fully meet the requirements of the market and even surpass them.

The goal of our research and development team is to strengthen your competitiveness with our grinding oils: Shorter processing times, less grinding wheel wear and better surfaces. Our engineers and technicians are equipped with the latest machine tools and analysis equipment. The high-performance grinding oils resulting from our development work are available in different viscosities and additives to optimally meet or exceed every requirement. oelheld's grinding oils comply with the strictest chemical regulations in the world.

Benefit from our many years of experience and let us know your requirements. Our experts will give you advice and support you in the selection of a suitable grinding oil on the way to greater productivity. Contact us!

Manufacturer approvals

Our products are specially designed for use with:

OEM certified

Machine tool manufacturers

AGATHON SWITZERLAND
ANCA CNC MACHINES
EWAG
Gleason
haas
haller HAWEMA Werkzeugschleifmaschinen
iseli SWISS PRECISION
ISOG
JUNKER partner for precision
KELLENBERGER
KLINGELNBERG
Loroch sharp solutions!
MOORE TOOLS
ROLLOMATIC
SAACKE
SCHNEEBERGER
Schütte
SMS
strausak Rollomatic Group
STUDER
TRU TECH
TTB Engineering SA Swiss Automatic Machines
ULMER WERKZEUGSCHLEIFTECHNIK
VOLLMER
WALTER

Filtration system manufacturers

KNOLL .It works
LEHMANN UMT
TRANSOR FILTER GMBH
Turbo-Separator
VOMAT

Your advantages when using our grinding oils

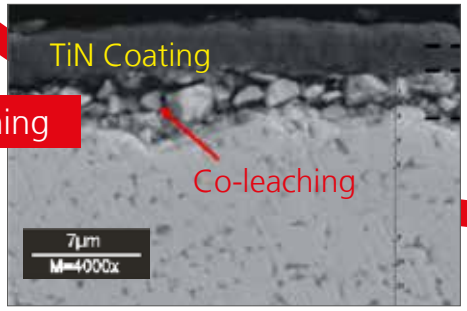
Reduction in oil consumption

Increased productivity

Optimized surface quality

Increased grinding wheel service life

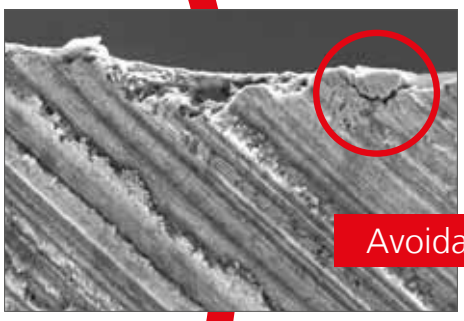
Inhibitors to prevent cobalt leaching



Reduction of oil mist

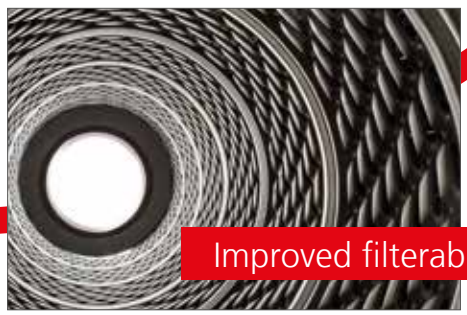
Improved release time of entrained air

Your way to the perfect tool!



Avoidance of microcracks

Increased oil longevity



Improved filterability

Conclusion

By choosing the right grinding fluid you not only save time and money, but you eliminate your other concerns so you can focus on manufacturing.

Your strong partner

Own research and development!

Personal consulting!

In-house production!

Worldwide availability!

Seminars and training available!

Laboratory service!

Protecting employee health!

Protecting the environment!

Structure of grinding oils

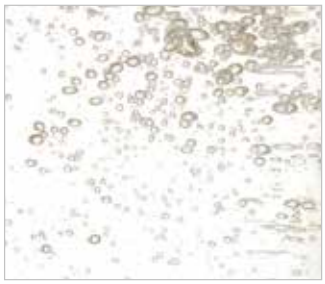
Grinding oils consist of a base oil and additives and oelheld uses only the best ingredients. With more than a 130-year-old tradition in the production of high quality metalworking oils this guarantees you the maximum performance out of your grinding process.

Base oils

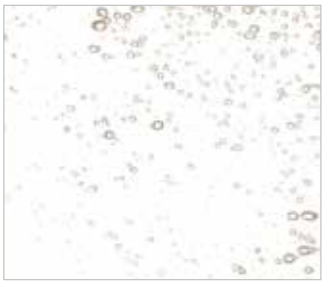
Hydrocrack (HC), gas-to-liquid (GTL) and polyalphaolefins (PAO) are available, which have the characteristics of good air separation and low foam formation. All base oils used are colorless, odorless, dermatologically tested and very low in misting.

mineral oil
air release: 60 seconds

hydrocrack (HC)
air release: 29 seconds



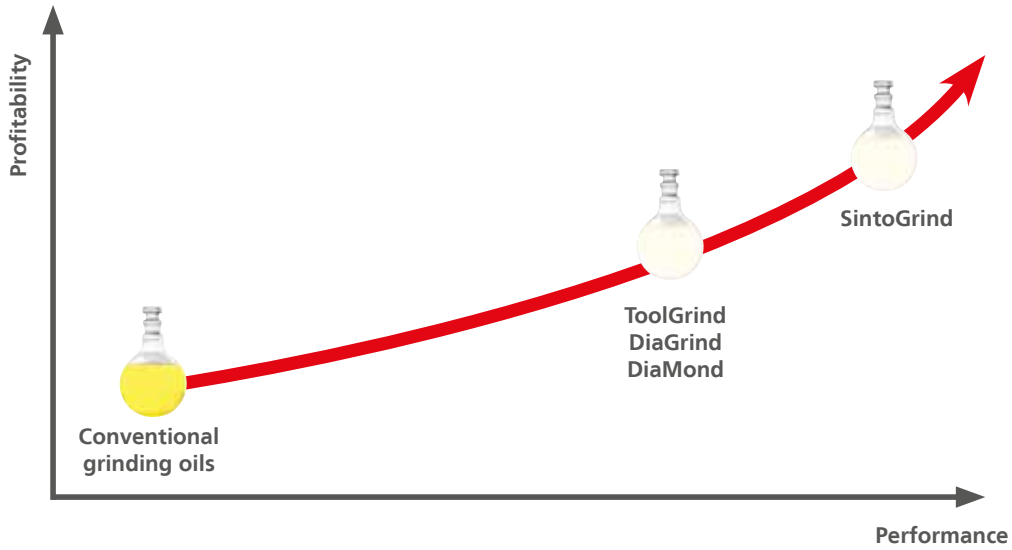
gas-to-liquid (GTL)
air release: 15 seconds



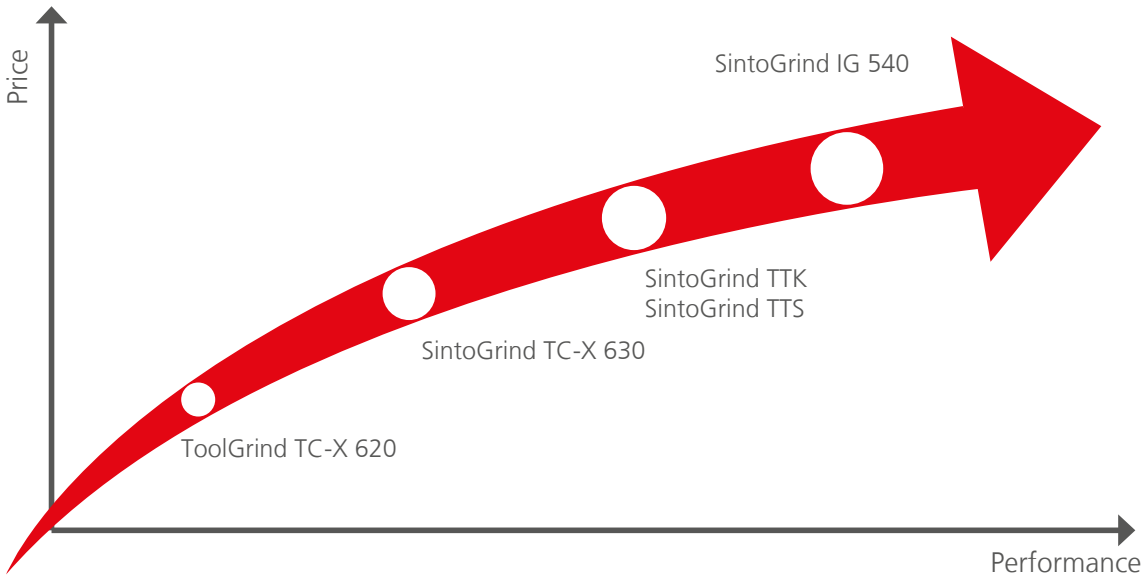
polyalphaolefin (PAO)
air release: 12 seconds

Additives

As a pioneer in the development and production of grinding oils, oelheld develops grinding oils which are designed for different materials and grinding processes. In addition to high-quality base oils, the selection of the right additives plays an important role. However, not only the selection of the right additives is important, but also how they react with each other. The peak performance in the grinding process can only be achieved with a grinding oil that has the optimum combination of quality additives. Our research and development department is always formulating new additive combinations, and then testing them in close cooperation with grinding machine tool manufacturers.



Product overview
Material: carbide and steel < 30%



Grinding oils for the machining of carbide and steel of < 30%

These grinding oils are suitable for flute grinding, profile grinding, external and internal cylindrical grinding of carbide, HSS, CBN, PCD, cermet and ceramics.

If you are primarily grinding carbide, then following products are available:

ToolGrind TC-X 620

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,82	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	6,2	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

For other materials and applications please contact our technical service.

SintoGrind TC-X 630

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,81	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	6,3	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

SintoGrind TTS

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,81	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	7,1	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

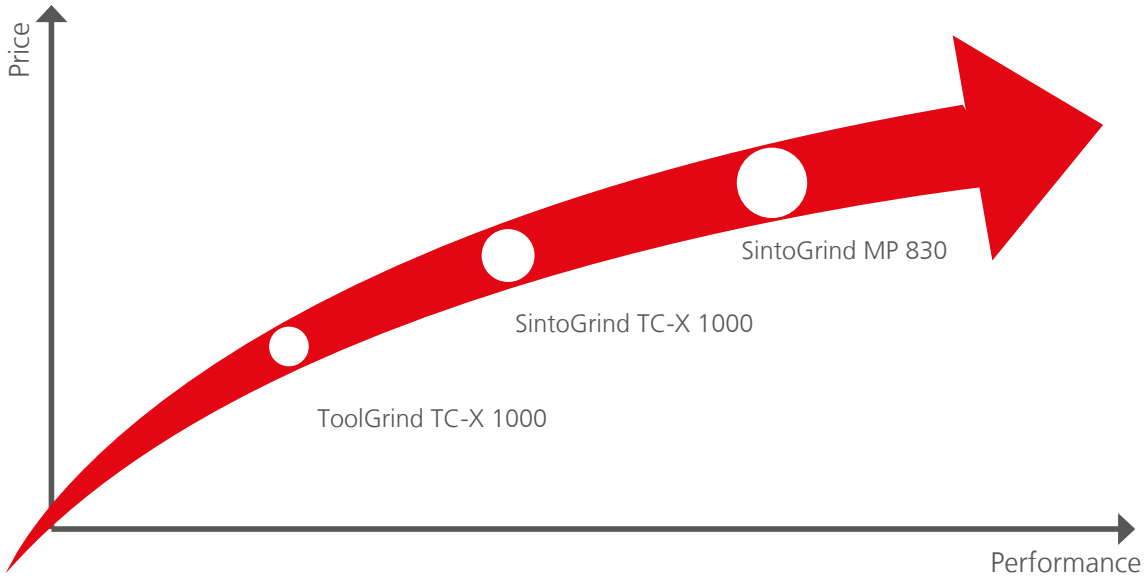
SintoGrind TTK

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,80	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	5,3	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

SintoGrind IG 540

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,80	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	5,4	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

Product overview
Material: carbide and steel > 30%



Grinding oils for the machining of carbide and steel > 30%

These grinding oils were developed for flute grinding, thread grinding, profile grinding, as well as external and internal cylindrical grinding of steels such as HSS, PM and medical steels. Surface burning and burr formation are successfully prevented. In addition, these grinding oils are also designed for machining carbide, PCD, CBN, cermet and ceramics.

If you are primarily grinding HSS and carbide, then following products are available:

ToolGrind TC-X 1000

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,83	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	10	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

For other materials and applications please contact our technical service.

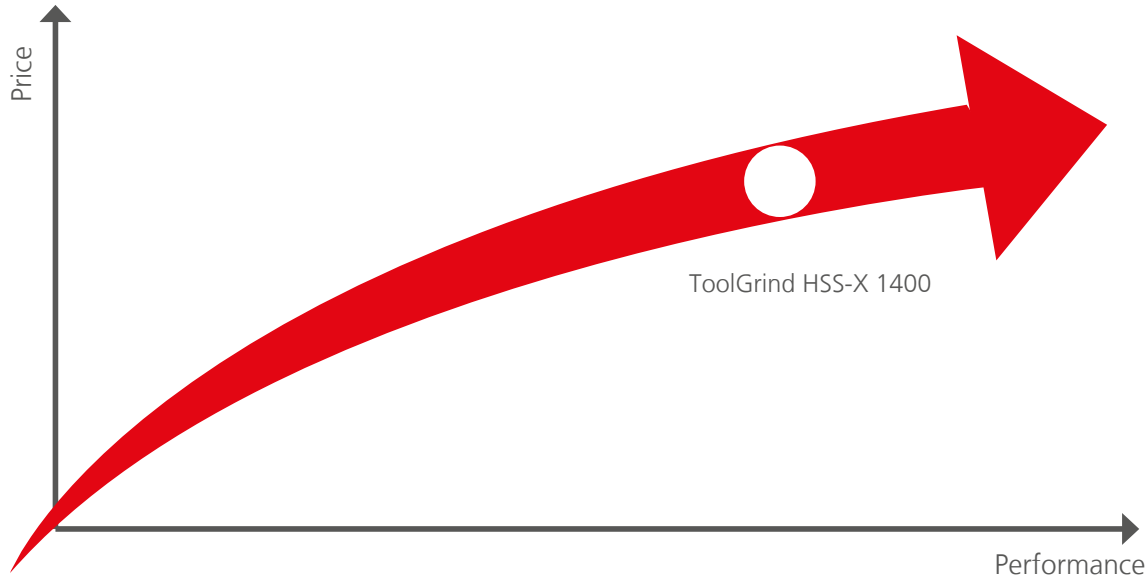
SintoGrind TC-X 1000

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,81	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	9,8	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

SintoGrind MP 830

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,82	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	8,3	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

Product overview
Material: steel / HSS



Grinding oils for machining steel / HSS

These grinding oils have been developed for flute grinding, thread grinding, profile grinding as well as external and internal cylindrical grinding of steels such as HSS, PM and medical steels. Surface burning and burr formation are successfully prevented. Since the grinding oils are specially designed for high-performance grinding of steels, materials such as carbide, PCD, CBN, cermet and ceramics should not be machined.

If you are primarily grinding HSS and other steels, then following products are available:

ToolGrind HSS-X 1400

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,86	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	14,0	ASTM D 7042
Flashpoint (°C)	>150	DIN EN ISO 2592
Copper corrosion	1a	DIN EN ISO 2160

For other materials and applications please contact our technical service.

Product overview
Material: PCD

Innovative technology had made two machines into one by combining grinding and spark erosion. This saves time and money. That's why oelheld developed the IonoGrind specialty fluid for this process.

IonoGrind is a multifunctional fluid that is equally suitable as a grinding oil and for spark erosion. It was designed for use in combination machines (two in one) and combines the advantages of a low-foaming and low-evaporation high speed grinding oil with a high-performance dielectric for extraordinarily high erosion rates and surface quality.

IonoGrind is the right fluid for grinding PCD (polycrystalline diamonds) and eroding, HSS and tungsten carbide because its special composition prevents cobalt leaching.

PCD-equipped tools are increasingly gaining in importance. By using special high-pressure additives, IonoGrind also achieves maximum grinding performance.

IonoGrind

Technical data	Values	Testing method
Density at +15 °C (g/cm³)	0,84	ASTM D 7042
Kin. viscosity at +40 °C (mm²/s)	7,3	ASTM D 7042
Flashpoint (°C)	155	DIN EN ISO 2719
Copper corrosion	1b	EN ISO 2160

Service analytics and technical advice for your all-round service

- We accompany you right from the start with our technical service on site and our service analysis.
- With us each customer has a direct technical service contact person, who provides advice and support.

The combination of service analytics and technical service in particular offers our customers added value and the security of receiving the appropriate service for the product.

Our service analytics offer a wide range of methods and state-of-the-art analytical instruments, which are used specifically for the requirements of our customers. With this know-how we can provide assistance in troubleshooting and optimize production processes. Employees in these areas take part in training courses and exchange knowledge with each other. This systematic transfer of knowledge ensures that know-how continues to grow and plays an important role for future product developments.

Contact us to learn more about our all-round service!

Seminar courses

oelheld offers free seminars all year round, which teach the correct handling of grinding fluids. Through this, the best possible application can be guaranteed.

Registration is possible at any time. For larger groups oelheld offers separate seminars.

Registration:
Current dates can be found on our website: https://www.oelheld.com/en/service/seminars/

We are looking forward to seeing you!

Process optimization

You want your machine to be more efficient?

1 

Contact oelheld

2 

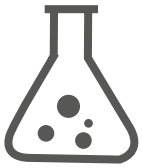
First analysis on site by an expert

3 

Detailed consultation and proposal

4 

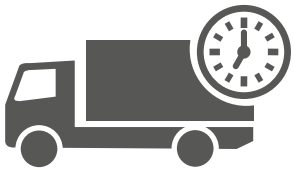
Testing phase (if applicable)

5 

Optimal laboratory analyses

6 

Purchase of grinding fluid

7 

Fast delivery

8 

Regular checks by your oelheld contact

9 

Seminars

High-tech products for machines – worldwide!

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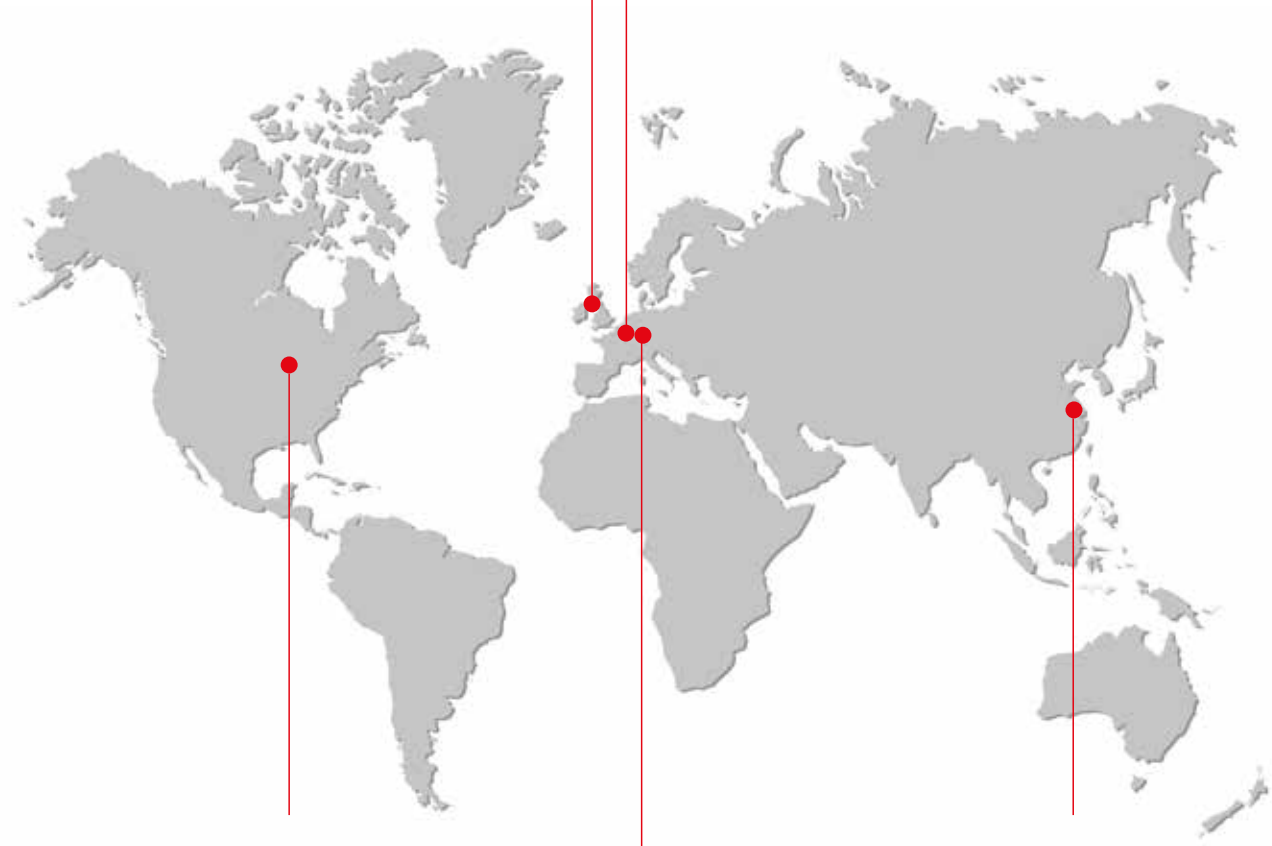

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