oelheld®
innovative fluid technology



Product Range

Innovations since 1887

Human Technology
for man, environment
and machines
HUTEC



Philipp and Martin Storr • Managing Directors

Your partner for cooling lubricants

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 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

Index



Dielectrics

Dielectrics for EDM die-sinking machines 7
Dielectrics for combination machines 7
Dielectrics for EDM wire-cutting machines 7
Dielectrics for fast hole drilling machines 7



Metalworking lubricants

Grinding oils in the ToolGrind series 10
Grinding oils in the DiaGrind series 10
Grinding oils in the SintoGrind series 10
Superfinish oils 11
Honing oils 11
Lapping oils 11
Thread cutting fluids 11
Minimum quantity lubricants 11
Broaching oils 11
Deep-hole drilling oils 11
Cutting oils 12
Punching oils 12
Drawing and forming oils 13
Hardening oils 13



Water-soluble coolants

Water-soluble coolants (emulsions) 15
Water-soluble coolants (solutions) 15
2 component products 15
Lapping concentrate 15
Corrosion protection concentrate for wire cutting 15
Hot rolling concentrates 15
Acessories for water-soluble coolants 16
System cleaners 16
Additives 16



Forging products

Forging lubricants 19
Glass-coating products 19

Index



Industrial lubricants

Slideway oils DIN CGLP 21
Full synthetic slideway oils (PAO) 21
Gear oils – extreme pressure 21
Full synthetic gear oils (PAO) 21
Flushing oils 21



Hydraulic oils

Hydraulic oils – according to DIN HLP 23
Hydraulic oils – according to DIN HLPD 23
Hydraulic oils – according to DIN HVLP 23
Hydraulic oils – ultra-fine filtered 23
Full synthetic hydraulic oils (PAO) 24



Automotive lubricants and greases

Engine oils 25
Greases 25



Additional products / Auxiliaries / Miscellaneous

Solvent cleaners 26
Cleaning fluids 27
Corrosion-protection fluids 27
Corrosion-protection fluids for coolant circuits 27
LubTool 27
Auxiliaries / Miscellaneous 27

This brochure provides an overview of all standard products of oelheld. Please see our Product Data Sheets and Safety Data Sheets for each product. All information is subject to change.

Dielectrics

Spark erosion is a modern, metal-removing machining process suitable for all conductive materials. The advantages over machining in high-precision and demanding machining tasks are obvious: It is suitable for all common materials and even complicated geometric shapes can be manufactured.

We distinguish between four procedures: Wire erosion, die-sinking erosion, fast-hole erosion and rotary erosion. The spark erosion process takes place in a mainly non-conductive liquid, the dielectric. The tasks of the dielectric are ionization, isolation, cooling and removal of particles. Apart from the generator, the dielectric is the most important process component in this machining process. oelheld is a pioneer in this field, because more than a century ago odorous, unhealthy and environmentally harmful liquids were replaced by odorless dielectrics. In our own R&D department and in close cooperation with leading machine manufacturers, our products are constantly being enhanced in order to achieve greater productivity. The basis for this is provided by our separate technology center „Spark Erosion“, where our specialists put dielectrics through their paces.

Tell us your requirements and we will help you optimize your production process, because we have the right product for every application. Contact us!



Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Application
Dielectrics for EDM die-sinking machines				
EcoSpark 105	0.81	105	2.3	EDM machining in fine finishing and rough cut applications
Dielectric IME 56	0.77	56	1.3	EDM machining for finest applications and EDM drilling
Dielectric IME 63	0.77	63	1.3	EDM machining in finest application with the smallest spark gap
Dielectric IME 82	0.77	82	2.0	EDM machining in fine finishing and rough cut applications
Dielectric IME 110	0.78	110	2.5	EDM machining in fine finishing and rough cut applications
Dielectric IME 126	0.82	114	3.6	EDM machining in rough cut applications with optimal flushing conditions
IonoPlus IME-ET	0.77	63	1.4	EDM machining in the finest finishing applications with smallest spark gap (micro work)
IonoPlus IME-ZK	0.79	82	2.0	EDM machining in roughing and finishing applications
IonoPlus IME-MH	0.79	107	2.5	EDM machining in roughing and finishing applications
IonoPlus IME-GL	0.82	125	3.8	EDM machining in the roughing sector. In the finishing sector it can only be used under optimum flushing conditions
Dielectrics for combination machines				
IonoGrind Dielectric	0.84	155	7.3	For universal grinding and EDM machines
IonoGrind 105 Dielectric	0.78	106	2.3	For universal grinding and EDM machines
IonoGrind 165	0.82	>165	7.5	For universal grinding and EDM machines
IonoGrind X160	0.82	160	6.0	For universal grinding and EDM machines
IonoRex 500 Plus	1.05	-	-	Water-soluble dielectric for universal machining
Dielectrics for EDM wire-cutting machines				
IonoFil 80	0.78	90	2.1	Spark erosion wire processing
IonoFil 100	0.79	115	2.9	Spark erosion wire processing
IonoFil 2776	0.78	90	2.1	Spark erosion wire processing
IonoFil 2788	0.79	>100	3.6	Spark erosion wire processing
Dielectrics for fast hole drilling machines				
IonoVit S	1.01	-	-	Spark erosion drilling
IonoVit 0	1.00	-	-	Spark erosion drilling

Metalworking lubricants

Depending on the field of application, metalworking fluids must meet a wide variety of requirements and be specially adjusted. Here you will find suitable products for most applications in metalworking, where non-water mixable machining fluids are used. The wide range includes grinding oils, superfinishing oils, honing oils, cutting oils, broaching oils, deep hole drilling oils, thread cutting oils, punching oils, drawing oils, forming oils, lapping oils and oils for minimum quantity lubrication. Should you not find what you are looking for in our wide range of standard products, please do not hesitate to contact us with your special requirement.

Grinding oils

Our ToolGrind, DiaGrind and SintoGrind grinding oil products cover the entire range of grinding applications. The selection of the right grinding oil is of high importance, since productivity, production costs, process stability and, ultimately, the quality of the tools produced are highly affected. In our own R&D department and in close cooperation with leading machine manufacturers, we develop products which fulfill and even exceed the requirements of the entire market. Our goal is to increase your competitiveness with our grinding oils. The advantages are: shorter processing times, less grinding wheel wear and better surfaces.

Superfinish oils, honing and lapping oils

Highest surface quality and process stability can be achieved by the DiaMond series (Superfinish oils), DiaHon series (Honing oils) and the FlexiOil series (Lapping oils). These products are designed with additives and viscosity exactly to the requirements of ultra-fine machining processes. Applications include superfinishing, fine grinding, coordinate grinding, honing and lapping.

Thread cutting fluids

The thread cutting fluid of the Cutting Gel series is used for all common thread machining processes.

Minimum quantity lubricants

For metal cutting in combination with minimum quantity lubrication we offer a complete and efficient product range with our Metal-O-Fluid products. Metal-O-Fluid products have excellent cooling, wetting and lubricating properties. It can also be used for all cutting and in some cases also forming machining processes.

Cutting, broaching and deep drawing oils

The SulFol LC series cutting oils by oelheld have been developed especially for all applications in the area of chipping with geometrically defined blades. They are the ideal solution and, due to their special composition, completely up to date with newest cutting oil technology. Therefore, all oils of the SulFol LC-series are free from chlorine, nearly free from aromatics and low in oil fumes.

Punching and forming oils

The products of our DiaCut series are heavy duty lubricants for every level of difficulty which are free from chlorine and heavy metals. Adapted for the requirements of your punching process our products offer you the best wetting and separating properties for punching of thin aluminium sheets or fine cutting works with high alloy steels. Our DiaPress series can be used in all forming processes.

Hardening oils

Quenching oils are used for hardening workpieces. This is achieved by quenching the heated workpiece in an oil bath. As a result, the structure of the materials changes. In order to relieve stresses it is essential that the workpiece is tempered after hardening. The hardening oils EvoFluid BHO have a mild quenching effect. They minimize discolouring of the workpiece during quenching. They possess a high ageing stability and thus will retain their durability in the oil baths.



Metalworking lubricants

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Materials	Application
Grinding oils in the ToolGrind series					
ToolGrind TC-X 620	0.82	>150	6.2	HSS, carbide, PCD, CBN, cermet, ceramic	Flute grinding, profile grinding, external and internal cylindrical grinding
ToolGrind TC-X 1000	0.83	>150	10	HSS, steel, cast iron, carbide, PCD, CBN, cermet, ceramic	Flute grinding, profile grinding, external and internal cylindrical grinding
ToolGrind HSS-X 1400	0.88	>150	14	Steel, HSS-, PM- and medical steel	Flute grinding, profile grinding, external and internal cylindrical grinding
Grinding oils in the DiaGrind series					
DiaGrind TTK 105	0.79	>100	2.7	HSS, carbide, PCD, CBN, cermet, ceramic	Flute grinding, profile grinding, external and internal cylindrical grinding
DiaGrind KSB 1100-B	0.84	>150	8.8	Non-ferrous, high-alloyed chrome-nickel steel	For high-speed grinding applications, such as thread and flute grinding. Universally usable, also for cutting and punching applications
DiaGrind 535/5	0.83	>120	5.5	Non-alloyed to high alloyed steel	Grinding, rolling, honing and milling
DiaGrind 535/10	0.84	>150	10	Non-alloyed to high alloyed steel	Cylindrical, gear- and profile grinding as well as milling, turning, honing and deep-hole drilling
DiaGrind 535/15	0.845	>160	15	Steel	For the production of gears and precision tools. Suitable for flute and gear grinding, ID and OD grinding, hobbing, shaping, crankshafts as well as camshafts
DiaGrind 535/25	0.85	>180	25	Non-alloyed to high alloyed steel	Gear milling, shaping and shaving, as well as honing, milling, turning, broaching and deep-hole drilling
DiaGrind RHM 850	0.84	>150	11	Non-ferrous, non-alloyed to high alloyed steel	Cylindrical, gear- and profile grinding as well as milling, turning, honing and deep-hole drilling
DiaGrind IN	0.85	>150	8.5	Nickel-base alloy	Flute grinding and fir tree profile grinding
Grinding oils in the SintoGrind series					
SintoGrind 353	0.82	>150	8.7	Steel	For the production of gears and precision tools. Suitable for flute and gear grinding, ID and OD grinding, hobbing, shaping, crankshafts as well as camshafts
SintoGrind IG 540	0.80	>150	5.4	Carbide, HSS, CBN, PCD, cermet, ceramic	Flute grinding, profile grinding, ID and OD grinding
SintoGrind IN	0.83	>150	7.1	Nickel-base alloy	Flute grinding and grinding of fir tree profiles
SintoGrind HSS-X 1400	0.81	>180	14	Steel, HSS-, PM- and medical steel	Flute grinding, profile grinding, ID and OD grinding
SintoGrind MP 830	0.82	>150	8.3	Steel, HSS, PM- and medical steel, carbide, PCD, CBN, cermet, ceramic	Flute grinding, profile grinding, ID and OD grinding
SintoGrind PSA	0.82	>150	7.2	Steel difficult to machine	Flute grinding
SintoGrind SI	0.81	>150	5.4	Glas and Saphir	Fine grinding
SintoGrind TC-X 630	0.81	>150	6.3	Carbide, HSS, PCD, CBN, cermet and ceramic	Flute grinding, profile grinding, ID and OD grinding
SintoGrind TC-X 1000	0.81	>150	9.8	HSS, steel, cast iron, carbide, PCD	Flute grinding, profile grinding, ID and OD grinding
SintoGrind TC-X 1500	0.82	>200	15	HSS, steel, cast iron, carbide, PCD, CBN, cermet, ceramic	Flute grinding, profile grinding, ID and OD grinding
SintoGrind TTK	0.80	>150	5.3	Carbide, HSS	Especially for tool production
SintoGrind TTS	0.81	>150	7.1	Carbide, HSS	High-speed grinding
SintoGrind ZO	0.81	>150	5.7	Zirconium oxide and ceramic	Fine grinding

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Materials	Application
Superfinish oils					
DiaMond 80	0.78	>82	2.0	Steel, aluminium, carbide and non-ferrous	Superfinishing, fine and jig grinding
DiaMond 100	0.78	>106	2.4	Steel, aluminium, carbide and non-ferrous	Superfinishing, fine and jig grinding
DiaMond 120	0.82	>114	3.6	Steel, aluminium, carbide and non-ferrous	Superfinishing, fine and jig grinding
DiaMond 160	0.83	>160	6.0	Steel, aluminium, carbide and non-ferrous	Superfinishing, fine and jig grinding
Honing oils					
DiaHon ESH 1300	0.865	>115	13	Steel	Heavy honing
Lapping oils					
FlexiOil 01	0.84	>148	10	Steel, carbide, non-ferrous	Fluid with high pressure absorption capacity for universal use of grit sizes of approx. 8 to 18 µm (e.g. SiC 600 and 400)
FlexiOil AG	0.87	>150	9.0	Steel, carbide, non-ferrous	Sedimentation of the lapping agent is effectively prevented by special additives
FlexiOil GAL	0.83	>114	3.9	Steel, carbide, non-ferrous	Sedimentation of the lapping agent is effectively prevented by special additives
Thread cutting fluids					
CuttingGel chlorine free	0.97	>150	200	Steel	Thread grinding
Minimum quantity lubricants					
Metall-O-Fluid 38	0.84	>200	20	Aluminium	Minimum-quantity lubication
Metall-O-Fluid E	0.92	>200	43	Stainless steel, steel, non-ferrous	Minimum-quantity lubication
Metall-O-Fluid SPL	0.92	>150	43	Steel, stainless steel	Minimum-quantity lubication
Metall-O-Fluid OH464	0.91	>180	15	Stainless steel, steel, non-ferrous	Minimum-quantity lubication
Broaching oils					
SulFol HXS 6000	1.02	>150	60	Steel	Broaching, thread grinding and forming, grooving and fine blanking
SulFol LCR 1700	0.89	>150	17	High alloy steels	ID broaching. Especially suitable for the heaviest, slowest broaching operations
SulFol SPR 3400	0.94	>140	35	Steel	Broaching and thread grinding
SulFol XPR 3600	0.99	>160	36	Steel and case-hardening steel, as well as soft-annealed tool steel. Not suitable for non-ferrous materials	Broaching and thread grinding
Deep-hole drilling oils					
SulFol TMH 2200	0.86	>160	21	Chrome-nickel-steel, acid and soft-annealed steel, case-hardening steel, titanium. Not suitable for non-ferrous materials	Deep-hole drilling
SulFol HST 1100	0.86	>150	11	Austentic steel, chrome-nickel-steel, acid and soft-annealed steel, case-hardening steel, titanium	Deep-hole drilling and heavy machining

Metalworking lubricants

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Materials	Application
Cutting oils					
SulFol LCD 500	0.82	>120	5	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Drilling, turning, milling, thread grinding and hobbing
SulFol LCD 850	0.835	>150	9	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Drilling, turning, milling, thread grinding and hobbing
SulFol LCD 1500	0.84	>160	15	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Drilling, turning, milling, Honing, punching, broaching and deep-hole drilling
SulFol LCD 2200	0.84	>180	22	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Drilling, turning, milling, thread grinding and hobbing
SulFol LCD 3200	0.88	>180	32	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Drilling, turning, milling, thread grinding, forming and hobbing
SulFol LCO 500	0.83	>120	5.6	Nitrided steel, non-alloy and alloyed heat-treated steel, tool steel and high alloy steel	Drilling, turning, milling, Honing, punching, broaching and deep-hole drilling
SulFol LCO 1000	0.85	>155	10	Nitrided steel, non-alloy and alloyed heat-treated steel, tool steel and high alloy steel	Drilling, turning, milling, Honing, punching, broaching and deep-hole drilling
SulFol LCO 1500	0.87	>160	15	Nitrided steel, non-alloy and alloyed heat-treated steel, tool steel and high alloy steel	Drilling, turning, milling, Honing, punching, broaching and deep-hole drilling
SulFol LCO 2500	0.88	>180	25	Nitrided steel, non-alloy and alloyed heat-treated steel, tool steel and high alloy steel	Drilling, turning, milling, Honing, punching, broaching and deep-hole drilling
SintoCut PE-S	0.82	>160	7.1	Nitrided steel, non-alloy and alloyed heat-treated steel, tool steel and high alloy steel	Milling, turning and drilling
SintoCut PE-B	0.82	>160	7.1	Steel, non-ferrous, cast material, aluminium- and magnesium alloys	Milling, turning and drilling
SintoCut PE-B 1000	0.82	>150	10.4	Steel, non-ferrous, cast material, aluminium and magnesium alloys	Milling, turning and drilling
Punching oils					
DiaCut CP 1	0.78	>56	1.8	Non-ferrous, stainless steel, steel, aluminum	Very thin punching oil of highest purity. Evaporates almost residue-free
DiaCut CP1/43	0.77	>43	1.2	Non-ferrous, stainless steel, steel, aluminum	Extremely thin punching oil, which evaporates without residue within a very short time
DiaCut CP1/63	0.78	>61	1.6	Non-ferrous, stainless steel, steel, aluminum	Very thin punching oil of highest purity. Evaporates almost without leaving any residue
DiaCut CP 2	0.78	>56	1.7	Non-ferrous, stainless steel, steel, aluminum	Very thin punching oil of highest purity. Evaporates almost without leaving any residue
DiaCut CP 5	0.80	>56	1.7	Non-ferrous, stainless steel, steel, aluminum	Low-residue punching and forming oil which, among other things, offers increased temporary corrosion protection
DiaCut CP 6	0.80	>56	1.8	Stainless steel, steel, aluminium	Low-residue punching and forming oil which, among other things, offers increased temporary corrosion protection. Especially suitable for chrome-nickel steel
DiaCut EMM 4300	0.93	>200	43	Steel, non-ferrous metal etc.	Punching, forming and deep-drawing
DiaCut FAA 21	0.79	>63	2.1	Non-ferrous, stainless steel, steel, aluminum	High-performance punching and forming oil, especially for the production of air conditioning components
DiaCut FBB 15	0.78	>63	1.5	Non-ferrous, stainless steel, steel, aluminum	Heavy duty punching oil with high pressure additives. Low evaporation residue
DiaCut FD	0.77	>56	1.3	Non-ferrous, stainless steel, steel, aluminum	Extremely thin punching oil that evaporates without leaving any residue within a very short period of time
DiaCut FMB 600	0.86	>63	6.1	Non-ferrous, stainless steel, steel, aluminium	Punching oil for demanding punching processes that require partial self-evaporation. It is also suitable for medium-heavy deep-drawing and forming operations
DiaCut FMS 125	0.76	>56	1.2	Non-ferrous, steel, aluminium	Extremely thin punching oil that evaporates without leaving any residue within a very short period of time
DiaCut FMS 130	0.77	>63	1.3	Non-ferrous, steel, aluminium	Extremely thin punching oil that evaporates without leaving any residue within a very short period of time
DiaCut MAW 400	0.82	>115	4.4	Aluminium	Rolling and punching processing
DiaCut MST 200	0.94	>180	180	Stainless steel, steel, aluminium	Heavy duty punching and forming oil with special wetting agents that simplify cleaning. Suitable for medium to heavy forming processes

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Materials	Application
Punching oils					
DiaCut MXW 18000	1.00	>160	180	High alloyed steel	Punching, forming, cutting
DiaCut NCL	0.80	>63	3.4	Non-ferrous, stainless steel, steel, aluminium	Low-viscosity high-performance stamping oil which is also suitable for light deep-drawing and forming operations
DiaCut OEGR	0.80	>63	2.7	Stainless steel, steel, aluminium	Low-viscosity high-performance punching oil which is also suitable for light deep-drawing and forming operations
DiaCut OH 2344	0.80	56	1.9	Steel, stainless steel	Punching and forming
DiaCut OH 1186 N	0.86	180	52	Steel	Punching and forming
DiaCut TOE 230	0.82	>100	2.4	Aluminium	Rolling
DiaCut VCE	0.87	>63	17	Stainless steel, steel, aluminium	High-performance punching and forming oil for demanding parts up to 5 mm material thickness. It has good adhesion and offers temporary corrosion protection
DiaCut VFD 1	0.75	>43	1.2	Steel, aluminium, non-ferrous	Extremely thin punching oil that evaporates without leaving any residue within a very short period of time
DiaCut VPH 70	0.92	>180	65	Steel sheet, stainless steel	Chipless machining, medium to heavy forming processes
DiaCut VSD 46	0.93	>160	46	Stainless steel, steel, aluminium	Highly-additive punching and forming oil for demanding punching, deep-drawing and impact extrusion operations
DiaCut VSG 511	0.91	>200	140	Stainless steel, steel, aluminium	Highly-additive stamping and forming oil for medium to heavy stamping and forming operations
DiaCut VSS 76	0.91	>180	76	Stainless steel, steel, aluminium	Universal micro blanking, punching and forming oil for highest requirements up to 8 mm material thickness. Also ideal for deep drawing and bending
Drawing and forming oils					
DiaPress CS 12000	0.94	>150	120	High-strength steel, stainless steel	Chipless machining, challenging punching, deep-drawing, bending and impact extrusion operations
DiaPress HAS 4300	0.86	>100	43	Non-ferrous, aluminium	Forming and punching oil with excellent adhesion which evaporates residue-free after heat treatment
DiaPress LCI 3200	0.88	>160	32	Stainless steel, steel, aluminium	Special forming oil for rotary swaging of rods, pipes and wires
DiaPress MFP	0.925	>160	32	Non-ferrous, stainless steel, steel, aluminium	Forming oil for demanding jobs. Solid lubricants are included to improve the compressive strength
DiaPress TZE	0.96	>160	170	Non-ferrous, stainless steel, steel, aluminium	Special deep-drawing oil with special high-pressure additives
DiaPress ZHO	1.04	>180	160	Stainless steel, steel, aluminium	Heavy duty forming oil for machining very demanding parts with a high degree of forming
Hardening oils					
EvoFluid BHO 32	0.86	>210	32	Universal	Hardening oils for workpieces up to 1 kg
EvoFluid BHO 68	0.88	>220	68	Universal	Hardening oils for workpieces up to 5 kg
EvoFluid BHO 100	0.88	>230	100	Universal	Hardening oils for workpieces over 5 kg

Water-soluble coolants

Users know exactly what to expect from water-miscible coolants and what problems their use can cause. These expectations, special requirements and problems have been taken care of by our research team in cooperation with machine manufacturers, universities and customers. As a result of this extensive development work, our water-miscible cooling lubricants of our AquaTec series were developed.

The AquaTec series offers the right product for every application, e.g. for high-pressure applications or for processing non-ferrous metals. During the development, special attention was paid to process stability and the reduction of maintenance costs, as this offers an enormous competitive advantage for our customers when working at high capacity. The use of modern raw materials and therefore the compliance with the latest chemical laws, make the products of the AquaTec series a long-term choice.



Water-soluble coolants

Product name	Density at 20°C (g/cm³)	pH-value 5%	Boron-free	Amine-free	Formalde-hyd-free	Materials	Application
Water-soluble coolants (emulsions)							
AquaTec 1250	0.980	9.0	•	•	•	Non-ferrous materials, aluminium alloys, steel	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
AquaTec 1530	0.990	9.3	•	•		Non-ferrous materials, aluminium alloys, steel	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
AquaTec 1548	0.970	9.1	•	•	•	Non-ferrous materials, plastics	Sawing, milling, turning, drilling
AquaTec 1550	0.950	9.0	•	•	•	Aluminium alloys, steel, plastics	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
AquaTec 1570	0.925	9.0 - 9.2	•	•	•	Casting alloys, non-ferrous materials, aluminium alloys, steel, plastics	Grinding, sawing, milling, turning, drilling, thread grinding
AquaTec 5530	0.965	9.8	•		•	Steel	Grinding, sawing, milling, turning, drilling
AquaTec 5540	0.888	9.8	•			Steel	Grinding, sawing, milling, turning, drilling
AquaTec 7520	1.013	9.3				Casting alloys, aluminium alloys, steel, plastics	Grinding, sawing, milling, turning, drilling
AquaTec 7539	1.000	9.2				Casting alloys, aluminium alloys, steel, plastics	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming
AquaTec 7544	0.980	9.4				Casting alloys, non-ferrous materials, aluminium alloys, steel, plastics	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
AquaTec 7650 *	0.930	9.2			•	Aluminium alloys, steel, plastics	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
AquaTec 7655	0.973	9.6			•	Aluminium alloys, steel, plastics	Sawing, milling, turning, drilling, deep-hole drilling, thread grinding, thread forming, forming
Water-soluble coolants (solutions)							
AquaTec 3001 *	1.180	9.1		•	•	Ceramic, non-ferrous materials, aluminium alloys, steel, carbide	Grinding, milling, turning, drilling
AquaTec 3101 *	1.180	9.2		•	•	Ceramic, non-ferrous materials, aluminium alloys, steel, carbide	Grinding
AquaTec 5000	1.056	9.7	•		•	Ceramic, casting alloys, steel	Grinding
AquaTec 5001	1.070	9.2	•			Ceramic, steel, carbide	Grinding
AquaTec 5001 F	1.70	9.4	•		•	Ceramic, steel, carbide	Grinding
AquaTec 5001 K	1.074	9.2	•			Ceramic, steel, carbide	Grinding
AquaTec 7000	1.090	9.1 - 9.3				Ceramic, casting alloys, steel	Grinding
AquaTec 7300	1.090	9.1 - 9.3				Ceramic, casting alloys, steel	Grinding, milling, turning, drilling
2 component products							
AquaTec 7005	1.090	10.4			•	Aluminium alloys, steel	all machining operations
AquaTec Additive APS	0.935	6.8			•	Aluminium alloys, steel	all machining operations
Lapping concentrate							
PlanoFlex 1000	1.082	9.1	•				Lapping
Corrosion protection concentrate for wire cutting							
ControFil 2	1.250	-			•		Corrosion-protection
Hot rolling concentrates							
AquaTec W5572	0.928	8.95				Aluminium and copper strip	Hot rolling

* Product is not subject to labelling.

Water-soluble coolants

Product name	Application
Acessories for water-soluble coolants	
Hand refractometer	To determine the concentration in the range of 0 - 15 % Brix
Test strips pH-value	pH value measurement
Test strips cobalt	Co content measurement
Test strips water-hardness/GH	Water hardness measurement
Test strips nitrite/nitrate combined test	Nitrite/nitrate measurement
Dipslides - submerged culture media	Determination of the total bacterial count
AquaTec Mix 1500	Emulsion mixer
AquaTec Mix 900	Emulsion mixer
AquaTec Mix 600	Emulsion mixer
RSK 350	Oil skimmer
Rapid 2.1	Band skimmer
Tramp oil separator	Good and continiously foreign oil discharge
Emulsion transport tank	Mobile, spill-free supply with fresh emulsion or fresh oil
Micro-aerator	Extension of the service life of the coolant
System cleaners	
AquaTec Clean E	System cleaner for emulsions
AquaTec Clean L	System cleaner for solutions
Additives	
AquaTec Additive AF-W	Defoamer especially for rolling emulsions
AquaTec Additive BIZ-10	Post-conserver (fungi)
AquaTec Additive DFM-17	Defoamer for emulsions and solutions
AquaTec Additive KORR-30	Corrosion protection for emulsions and solutions
AquaTec Additive KORR-Alu	Corrosion inhibitor for aluminium for emulsions and solutions
AquaTec Additive LAV-01	Deaerator for emulsions and solutions
AquaTec Additive OH 1668	Non-ferrous metal inhibitor for emulsions and solutions
AquaTec Additive OH 2377	Corrosion protection for emulsions and solutions
AquaTec Additive OH 3407	Supporting emulsifier / wetting agent for emulsions and solutions
AquaTec Additive pH	pH stabilizer (contains amine)
AquaTec Additive VP 156	Supporting emulsifier
AquaTec Additive VP 183	Water hardener
Vinkocide CMI 1,5 M	Post-conserver (bacterias)



Forging products

Increasingly demanding and complex forging processes require new developments of release agents that reduce the number of forming steps in the process.

oelheld's AirForge products (glass coating) for the aerospace industry have been established in the international market for many years. Now, oelheld is increasingly penetrating the market of water-miscible forging lubricants, both in the hot and in the warm forging industry, e.g. in the automotive industry.

Whether with or without graphite, i.e. black or white, the outstanding properties of AirForge products meet the highest demands. We are also well positioned in the field of oil graphite products.

Tell us your requirements and optimize your manufacturing process with the right product of our AirForge series.

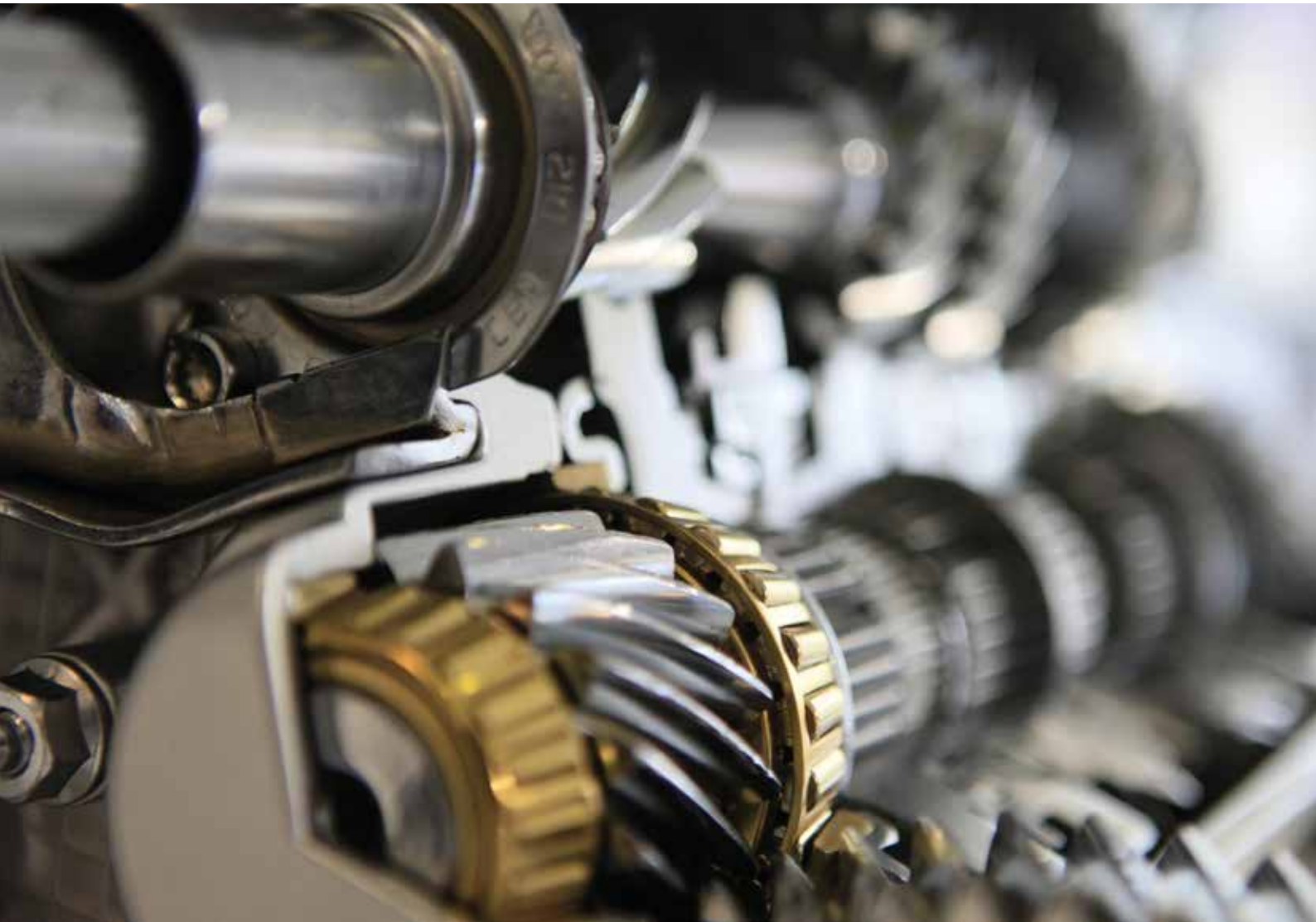


Product name	Density at 20°C (g/cm³)	pH-value concentrate	Solid content	Materials	Application
Forging lubricants					
AirForge 4027	1.1	approx. 7.3	0 %	Steel alloys	Hot forming
AirForge 4028	1.2	approx. 7.6	0 %	Steel alloys	Hot forming
AirForge 4500	1.07	max. 9.0	0 %	Steel alloys	Hot forming for flood lubrication
AirForge 4507	1.06	max. 8.8	0 %	Steel alloys	Hot forming for flood lubrication
AirForge 5200	1.12	approx. 8.6	20 %	Steel alloys	Hot and semi-hot forming
Glass-coating products					
AirForge 1983	1.28	-	approx. 35 %	Titanium, titanium alloys nickel, nickel based alloys	Hot forming
AirForge 2371	1.28	-	approx. 35 %	Titanium, titanium alloys nickel, nickel based alloys, special steel alloys	Hot forming
AirForge 2472	1.27	-	approx. 35 %	Titanium, titanium alloys	Hot forming
AirForge 2596	1.27	-	approx. 35 %	Titanium, titanium alloys nickel, nickel based alloys	Hot forming

The mixing ratio depends on the degree of forming and must be individually adjusted for each process.

Industrial lubricants

Industrial lubricants ensure smooth operation and optimum power transmission. Our industrial lubricants of the EvoFluid series are ideally suited for use in machine tools and offer a genuine added value in combination with our metalworking fluids. With our product range we cover all requirements of a modern production plant.



Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)
Slideway oils DIN CGLP			
EvoFluid CGLP 32	0.87	200	32
EvoFluid CGLP 68	0.88	230	68
EvoFluid CGLP 220	0.89	250	220
Full synthetic slideway oils (PAO)			
EvoFluid CGLP-PAO 32	0.84	>200	32
EvoFluid CGLP-PAO 46	0.85	>200	46
EvoFluid CGLP-PAO 68	0.85	>200	68
EvoFluid CGLP-PAO 100	0.85	>200	100
EvoFluid CGLP-PAO 220	0.86	>200	220
Gear oils – extreme pressure			
EvoFluid CLX 68	0.88	242	68
EvoFluid CLX 100	0.89	225	100
EvoFluid CLX 150	0.89	245	150
EvoFluid CLX 220	0.90	250	220
EvoFluid CLX 320	0.90	250	320
EvoFluid CLX 460	0.90	>230	460
Full synthetic gear oils (PAO)			
EvoFluid CLX-PAO 68	0.85	240	68
EvoFluid CLX-PAO 100	0.84	>200	100
EvoFluid CLX-PAO 150	0.85	>200	150
EvoFluid CLX-PAO 220	0.85	>200	220
Flushing oils			
EvoFluid 4	0.82	>115	3.8
EvoFluid 8	0.83	155	8.5

Hydraulic oils

oelheld offers high-quality hydraulic oils for the most different applications, which lubricate your hydraulic system and guarantee a transmission of hydraulic forces without any loss. Hydraulic oils of our EvoFluid series are highly resistant to ageing and offer excellent corrosion and wear protection. We have a wide range of different viscosities and base oil versions. In addition, we offer ultra-fine filtered hydraulic oils.



Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Kin. visc. 100°C (mm²/s)	VI	Pour-Point (°C)	Zinc and ash free
Hydraulic oils – according to DIN HLP							
EvoFluid HLP 2,5	0.78	>110	2.5	-	-	-	•
EvoFluid HLP 5	0.84	125	5	-	-	-48	•
EvoFluid HLP 10	0.84	150	10	2.5	81	-45	•
EvoFluid HLP 22	0.845	>165	22	4.2	97	-30	•
EvoFluid HLP 32	0.87	>175	32	5.3	98	-27	•
EvoFluid HLP 46	0.88	>185	46	6.7	99	<-15	•
EvoFluid HLP 68	0.88	>195	68	8.6	98	<-12	•
EvoFluid HLP 100	0.88	>205	100	11.1	96	<-12	•
Hydraulic oils – according to DIN HLPD							
EvoFluid HLPD 22	0.87	187	22	4.4	109	<-21	•
EvoFluid HLPD 32	0.88	189	32	5.5	108	<-18	•
EvoFluid HLPD 46	0.88	192	46	6.9	105	<-15	•
EvoFluid HLPD 68	0.88	192	68	8.9	101	<-12	•
Hydraulic oils – according to DIN HVLP							
EvoFluid HVLP 15	0.87	148	15	4.8	220	<-39	
EvoFluid HVLP 32	0.88	185	32	6.7	190	<-30	
EvoFluid HVLP 46	0.88	190	46	8.6	160	<-27	
EvoFluid HVLP 68	0.88	190	68	12.3	160	<-24	
Hydraulic oils – ultra-fine filtered							
HiPure HLPD 32	0.85	>180	32	5.6	113	-33	•
HiPure HLPD 46	0.86	>190	46	7.0	109	-28	•
HiPure HLPD 68	0.88	245	68	8.7	104	-24	•
Full synthetic hydraulic oils (PAO)							
EvoFluid PE-B 1	0.81	>150	10	3.2	214	<-57	
EvoFluid PE-B 2	0.83	>150	25	7.6	303	-54	
EvoFluid PE-B 3	0.84	182	46	9.9	209	-36	
EvoFluid HLP-PAO 5	0.80	>150	5	2	n.a.	<-65	
EvoFluid HLP-PAO 10	0.81	>150	10	3	110	<-60	
EvoFluid HLP-PAO 15	0.82	>160	15	4	119	<-60	
EvoFluid HLP-PAO 32	0.83	>200	32	6	140	<-50	
EvoFluid HLP-PAO 46	0.83	>220	46	8	141	<-50	
EvoFluid HLP-PAO 68	0.84	>220	68	10	136	<-40	

Automotive lubricants and greases

oelheld offers various automotive lubricants that meet the current specifications of the automobile manufacturers. Furthermore, we have greases of the various NLGI classes in our product range, so that your roller and plain bearings are optimally lubricated. We also have the right special lubricating greases for special conditions, such as heat-resistant high-temperature greases, low-temperature greases and high-pressure greases or greases for food processing technology.



Automotive lubricants and greases

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 100°C (mm²/s)	Specification / approval
Engine oils				
ADDINOL Turbo Diesel MD 105	0.86	240	6.6	ACEA E2, API CG-4, SJ, MAN 270, MTU oil category 1, MB approval 228.0
ADDINOL Premium 0530 C3-DX	0.853	230	11.8	ACEA C3, API SN / CF, MB approval 229.52, MB approval 229.51, MB approval 229.31, VW 502 00 / 505 00 / 505 01, BMW Longlife-04

Product name	Classification to DIN 51502	Soap base	NLGI class	Base oil visc. at 40°C (mm²/s)	Application temperature (°C)
Greases					
EvoGrease Li 2 EP	KP 2 K-30	Lithium	2	110	-30 to +120
EvoGrease Li 00 EP	GP 00 K-30	Lithium	00	200	-30 to + 120
EvoGrease Li 000 EP	GP 00/000 K-50	Lithium	000	45	-50 to +120
EvoGrease LiX 000 EP	GP 000 N-30	Lithium complex	000	100	-30 to + 150
Heldolith 1 EP	KP 1 K-30	Lithium	1	200	-30 to + 120
EvoGrease PowerSaver	KPHC 1-2 N-50	Lithium complex	1-2	40	-50 to +150
EvoGrease LiX 00GP	GP00 N-30	Lithium complex	00	100	-30 to + 150

Additional products / Auxiliaries / Miscellaneous

To round off our product range, we offer you high-quality additional products such as solvent cleaners, cleaning fluids, corrosion protection fluids and many more. We are also an authorised OKS dealer and can offer you other special lubricants from our wide portfolio.

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40 °C (mm²/s)	Side area	Application
Solvent cleaners					
Cleaning solvent DSP 100/140	0.744	<10	-	-	Cleaning of parts and surfaces contaminated with oil and grease. Suitable for all metallic materials, ceramics and hydrocarbon-resistant materials.



Additional products / Auxiliaries / Miscellaneous

Product name	Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40 °C (mm²/s)	Side area	Description
Cleaning fluids					
EvoFluid Clean 43	0.75	43	0.8	140-190	Cleaning fluid
EvoFluid Clean 56	0.76	56	1.3	180-190	Cleaning fluid
EvoFluid Clean 63	0.77	63	1.3	190-210	Cleaning fluid
Corrosion-protection fluids					
ControXid S	0.80	56	1.7	-	Corrosion-protection fluid
ControXid CS	0.79	56	1.8	-	Corrosion-protection fluid
ControXid Dewatering	0.78	56	2.0	-	Corrosion-protection fluid
ControXid RCC 850	0.86	140	10	-	Corrosion-protection fluid
ControXid RCC 3200	0.88	>180	32	-	Corrosion-protection fluid
Corrosion-protections fluids for coolant circuits					
ControXid 1642	1.03	-	-	-	Corrosion-protection fluid for coolant circuits
ControXid 3000	1.04	-	-	-	Corrosion-protection fluid for coolant circuits
ControXid 1642 F	1.00	-	-	-	Corrosion-protection fluid for coolant circuits
LubTool					
LubTool 2000	-	-60	-	-	Full synthetic lubricating and fine oil
LubTool 4000	-	-97	-	-	Universal cleaner spray
LubTool 6000	-	-	-	-	Corrosion-protection-spray

Product name	Description
Auxiliaries / Miscellaneous	
EvoSorb	Universal binding agent type lll R
CoverSkin	Skin protection agent
Carela SP machine cleaner	Alkaline cleaning concentrate
Horn drum pump 10 C	Manual drum pump
Drum tap 3/4 inch (plastics)	Drum tap for 208 l drums
Drum tap 2 inch (plastics)	Drum tap for 208 l drums
Drum bung wrench	Drum bung wrench for all common bung holes
EvoGrease all-steel grease gun	Grease gun for 400g grease cartridges



Packing sizes

The majority of our products are available in the following standard packages:



Jerry can 20 l



Small drum 60 l



Drum 208 l



IBC container 1000 l



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!



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 in future product developments.

Contact us to learn more about our role for future service!

Process optimization

You want your machine to be more efficient?

1 

Contact oelheld

2 

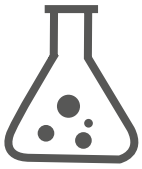
First analysis on site by an expert

3 

Detailed consultation and proposal

4 

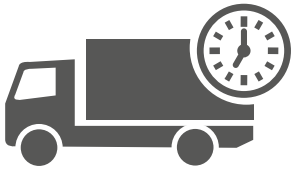
Testing phase (if applicable)

5 

Optimal laboratory analyses

6 

Purchase

7 

Fast delivery

8 

Regular checks by your oelheld contact

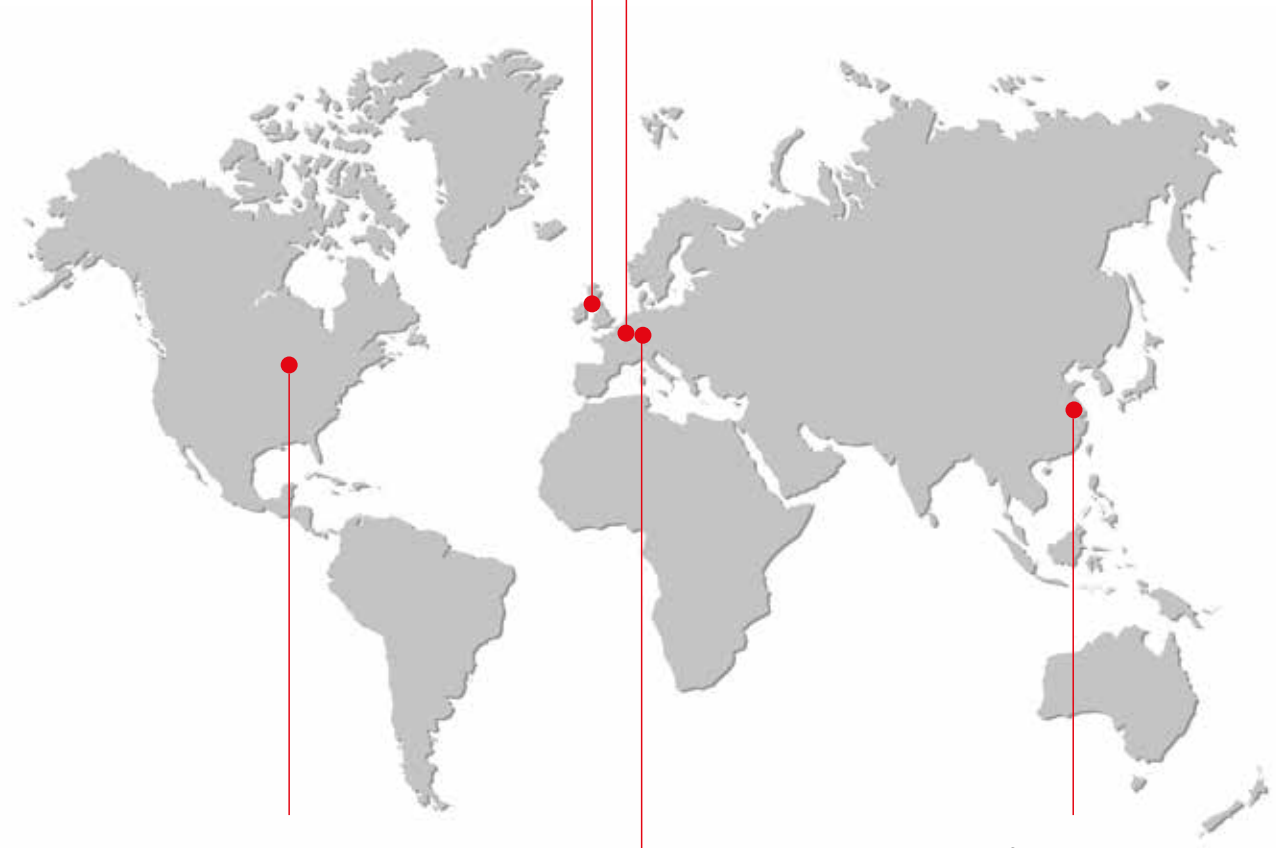
9 

Seminars

High-tech products for machines – worldwide!

oelheld UK Ltd.
Unit 16, Colomendy Business Park, Erw Las
Denbigh, LL16 5TA. • United Kingdom
Phone: +44 1745 814-777
E-mail: sales@oelheldgroup.co.uk
Internet: www.oelheld.com

oelheld technologies SAS
Technopôle de Forbach-Sud
140, Avenue Jean-Eric Bousch,
57600 Oeting • France
Phone: +33 387 90 42 14
E-mail: hutec-fr@oelheld.com
Internet : www.oelheld.com



oelheld U.S., Inc.
1100 Wesemann Dr
West Dundee, IL 60118 • USA
Phone: +1 847 531 8501
E-mail: hutec-us@oelheld.com
Internet: www.oelheld.com

oelheld GmbH
Ulmer Strasse 133–139
70188 Stuttgart • Germany
Phone: +49 711 168 63-0
E-mail: hutec@oelheld.de
Internet: www.oelheld.com

oelheld innovative fluid technology (Taicang) Co., Ltd
No. 5 Suzhou Road, Jiangsu
215400 Taicang • China
Phone: +86 512 8278 0027
E-mail: services@oelheld.com.cn
Internet: www.oelheld.com

Representatives worldwide

Argentina • Austria • Australia • Belarus • Belgium • Bosnia and Herzegovina • Brazil • Bulgaria • Canada • Chile • Croatia • Czech Republic
Denmark • Estonia • Finland • Greece • Hungary • India • Indonesia • Israel • Italy • Japan • Kazakhstan • Latvia • Lithuania • Malaysia • Mexico
New Zealand • Netherlands • Norway • Poland • Portugal • Romania • Russia • Serbia • Singapore • Slovakia • Slovenia • South Africa • South Korea
Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey • Ukraine

Human Technology
for man, environment
and machines
HUTEC

oelheld®
innovative fluid technology

oelheld GmbH • Ulmer Strasse 133–139 • 70188 Stuttgart • Germany
Phone: +49 711 16863-0 • Fax: +49 711 16863-3500
E-mail: hutec@oelheld.de • Internet: www.oelheld.com

02/2021