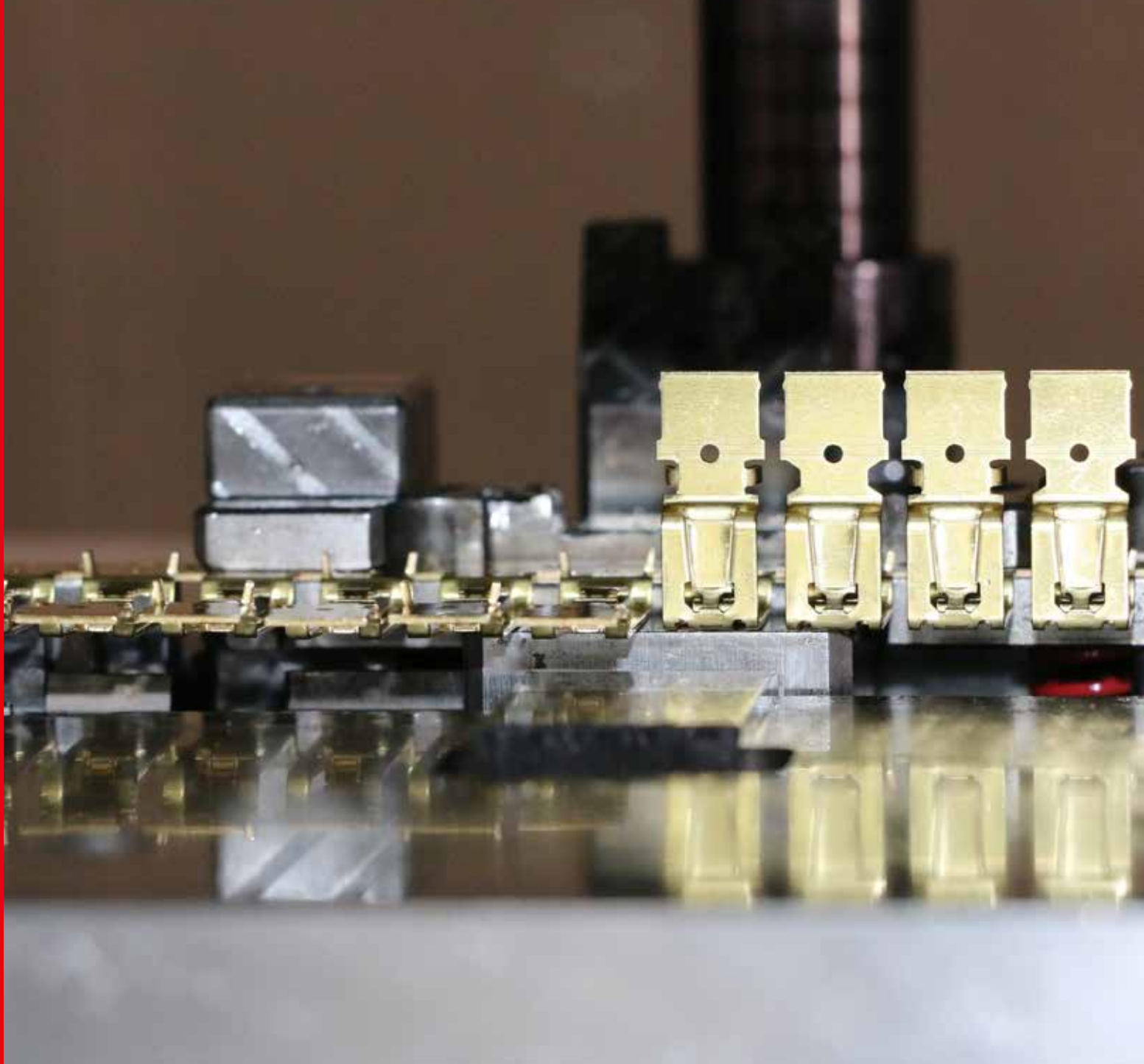


DiaCut – DiaPress

Punching and Forming Oil





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 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

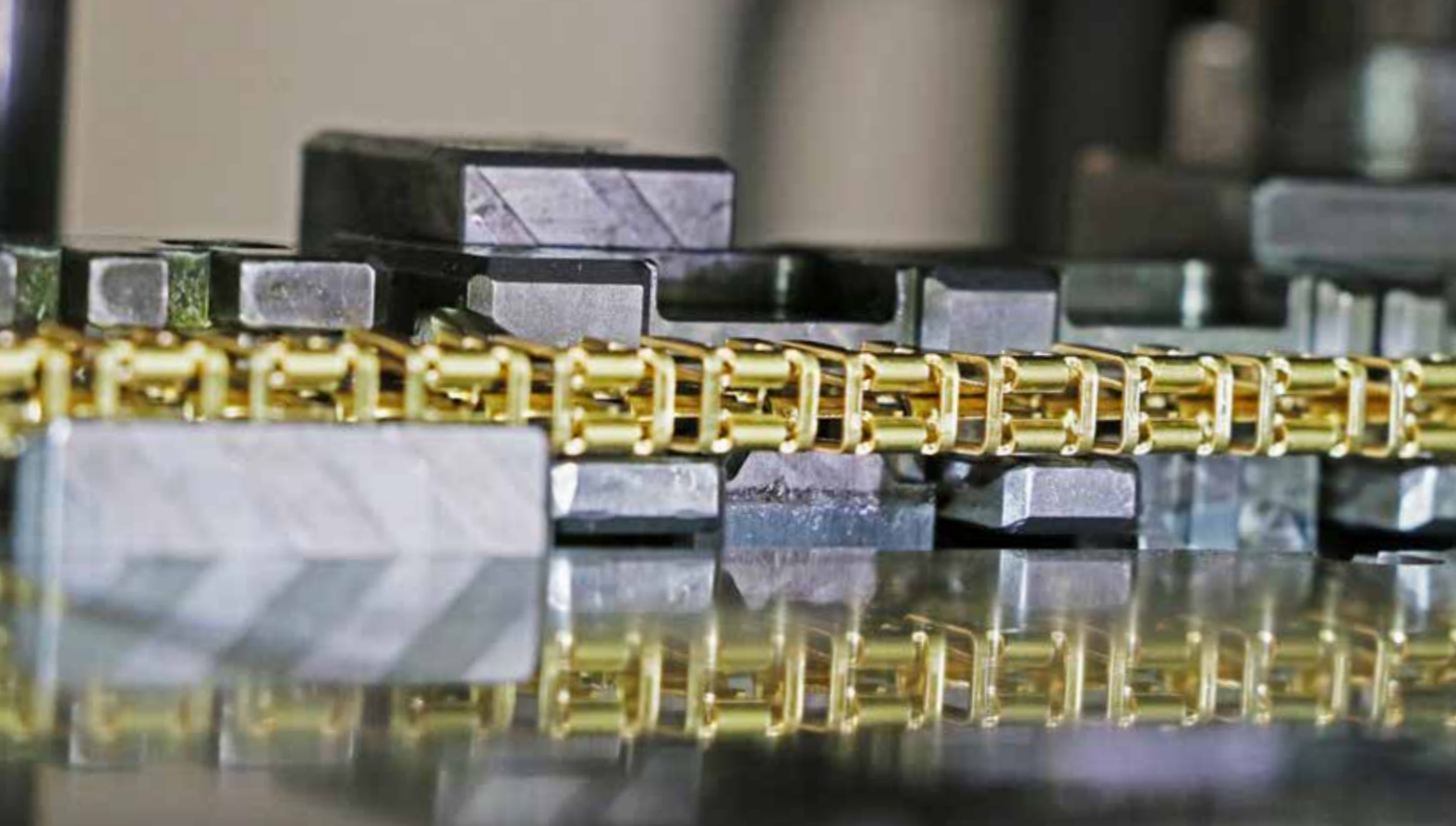
Innovations for man, environment and machines

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





Advantages

Our broad punching, drawing and forming product range offers many advantages:

- Chlorine and heavy metal free
- Residue-free evaporating punching oils
- Can be welded over
- Ash-free evaporation during heat treatment
- Easy to wash off
- Can be sprayed, even electrostatically
- Suitable for many metals and alloys
- Optimum wetting and adhesion for multi-stage tools
- Additional corrosion protection
- Cost savings through process optimization
- The ideal product for every application
- Biodegradable
- PERC-compatible
- Bondable stamping oil
- Minimum quantity lubrication

Punching, drawing 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.

Selected base oils and additives are generating mechanically and thermally extreme stable lubricating films with a high pressure resistance for the ideal material flow and less tool wear. 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.

Forming oils of our DiaPress series are made of base oils with low aromatic content. They are free from chlorine, heavy metal and oil mist, occupy a high aging resistance and a good viscosity-temperature behavior. By using physiological harmless high-performance extreme-pressure additives we reach the highest pressure resistance even at strong thermal heavy duty. Forming oils of our DiaPress Series are surface-active, adhesive and are showing good wetting and release properties. They are easily sprayable and pumpable. Our DiaPress series can be used in all forming processes. Different viscosities allow for an optimal adaption to existing spray and pump requirements. DiaPress can be used for all cold formed steels but not for non-ferrous metal.

Evaporating
punching oils

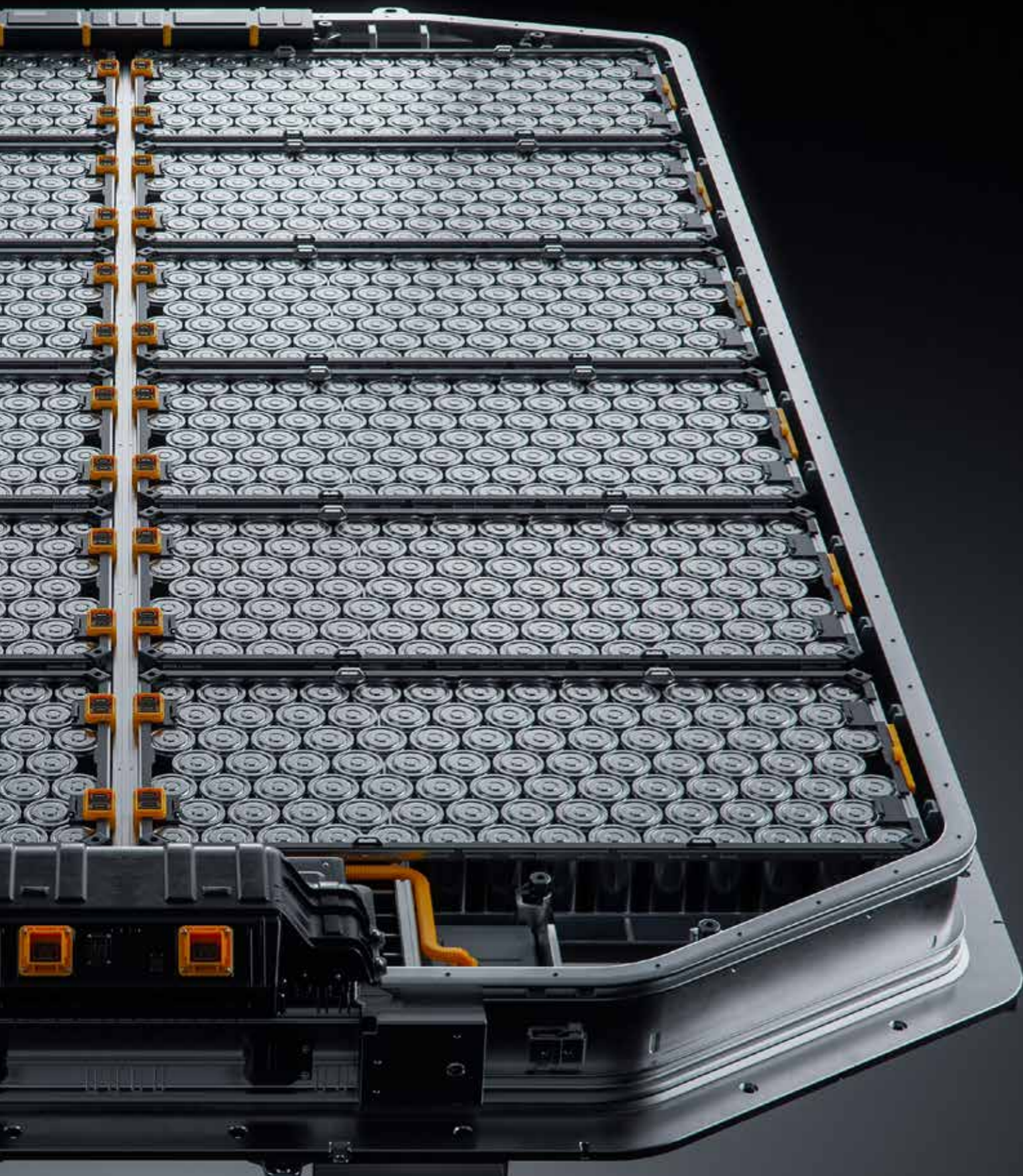
Remove
punching oils

Biodegradable
punching oils

Water rinsable
punching oils

Test now!





A small selection of our products

Applications / Suggestions for processing

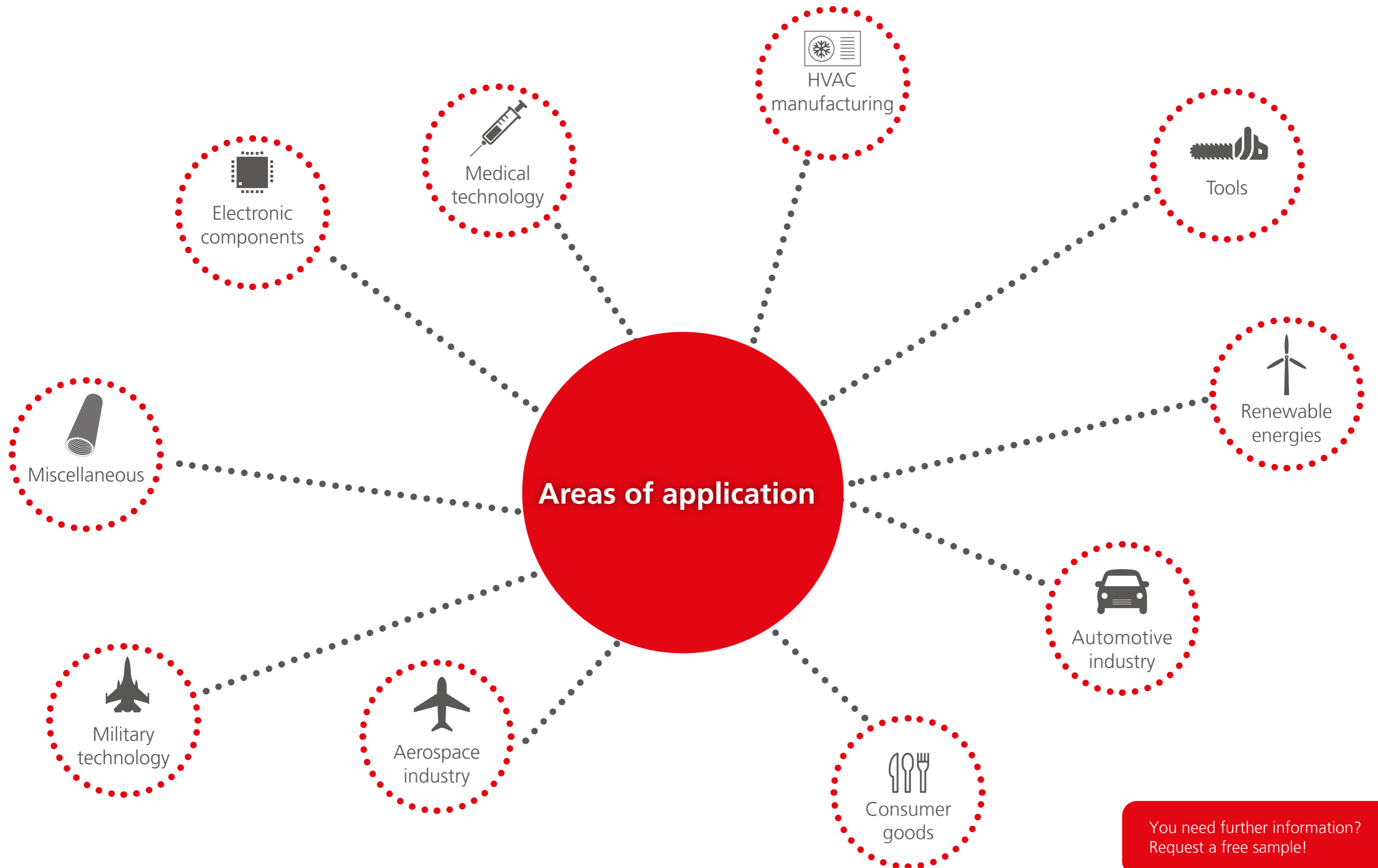
		Density at 15°C (g/cm³)	Flash point (°C)	Kin. visc. 40°C (mm²/s)	Copper alloys in mm	Aluminium in mm	Steel (alloyed / galvanized) in mm	Stainless steel in mm	Punching	Forming	Deep drawing	Fine cutting	Container size
water-soluble	AquaTec 1250	0,99	-	-	1	1	0,5	0,25	■	■	■	■	
	AquaTec DFS 5268	0,99	-	-	1,5	1,5	1	0,5	■	■	■	■	
Evaporating stamping, drawing and forming oils	DiaCut FMS 130	0,77	>63	1,3	0,5	0,5	0,5	0,2	■	■	■	■	
	DiaCut FD	0,77	>56	1,3	1,5	1	1	0,5	■	■	■	■	
	DiaCut CP1/63	0,78	>61	1,6	1,5	1,5	1,5	0,5	■	■	■	■	
	DiaCut CP 5	0,80	>56	1,7	2,5	2	2	0,5	■	■	■	■	
	DiaCut NCL	0,80	>63	3,4	4	5	3	2	■	■	■	■	
	DiaCut FAA 21	0,79	>63	2,1	2,5	2,5	2,5	1	■	■	■	■	
Punching, drawing and forming oils	DiaCut EMM 1000	0,87	200	10	3	3	3	2	■	■	■	■	
	DiaCut EMM 2500	0,90	>200	25	3,5	3,5	3,5	2,5	■	■	■	■	
	DiaCut EMM 4300	0,93	>200	43	6	7	6	4	■	■	■	■	
	DiaCut VSS 76	0,91	>180	76	X	4,5	5,5	4,5	■	■	■	■	
	DiaCut EMM 9000	0,96	>200	90	7	7	8	5	■	■	■	■	
	DiaPress CS 12000	0,94	>150	120	X	6,5	6	4,5	■	■	■	■	
	DiaPress TZE	0,96	>160	170	6	6	7	7	■	■	■	■	
	DiaPress ZHO	1,04	>180	160	X	6	9	9	■	■	■	■	
	DiaCut MBT 50000	0,92	>200	500	10	10	10	10	■	■	■	■	

X = not suited for non-ferrous metals

- very well suited
- Conditionally suitable
- not suitable

Let us know your application and processed materials to receive the right product recommendation!

Our products are used successfully:



You need further information?
Request a free sample!

Our hero of tomorrow...



...is your partner for the future

DiaCut EMM series

Advantages

- Your product for all stamped, formed and deep-drawn parts
- Suitable for minimum quantity lubrication
- Suitable for deep drawing
- Highest performance in the stamping/forming process
- Suitable for all metals, non-ferrous metals and special metals
- Easily biodegradable (passed OECD 301B)
- PERC-compatible
- No pictograms or classifications (CLP not classified)
- Toxicologically harmless

DiaCut EMM series

- DiaCut EMM 1000
- DiaCut EMM 2500
- DiaCut EMM 4300
- DiaCut EMM 5400
- DiaCut EMM 9000

Bio-degradable



DiaCut EMM-1E series

The DiaCut EMM-1E series is a next iteration of the DiaCut EMM series. It can also be cleaned off very easily

washable with water



DiaCut EMM-1E

- DiaCut EMM 1001 E
- DiaCut EMM 2501 E
- DiaCut EMM 4301 E
- DiaCut EMM 9001 E





Seminars - Punching, bending and forming technology

oelheld offers free seminars throughout the year to help you find the perfect medium for your punching, bending and forming process. This allows you to get even more out of your tool and increase productivity!

Numerous factors such as the individual requirements for the machining medium, the cutting gap, the type of application and the downstream processes such as cleaning and coating the components play a decisive role. All these and numerous other points are discussed in the seminar.

Seminar 1: Basics

The seminar includes the following topics:

- Structure of punching oils (evaporating)
- Structure of punching oils (non-evaporating)
- Advantages and disadvantages
- Requirements
- Special features of the respective oils
- Areas of application
- HUTEK - Man, nature and machine

Seminar 2: The perfect choice for your process

The seminar includes the following topics:

- Discussion of the individual components of your production and the oils used for this purpose
- General conditions
- How to recognise an unsuited punching oil
- Relationship of tool, component and punching oil, cleaning/residues and subsequent further treatment of the components

We are happy to visit you at your premises and do the seminar on site.

After the training there is the possibility to visit oelheld production plant.

Registration is possible at any time. Additionally oelheld offers separate training courses for larger groups according to your needs!

Application:

You can find all current dates on our website:
www.oelheld.com/en/service/seminars

We look forward to seeing you!



Brochures



Scan the following QR code to receive access to all oelheld product brochures :



English



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



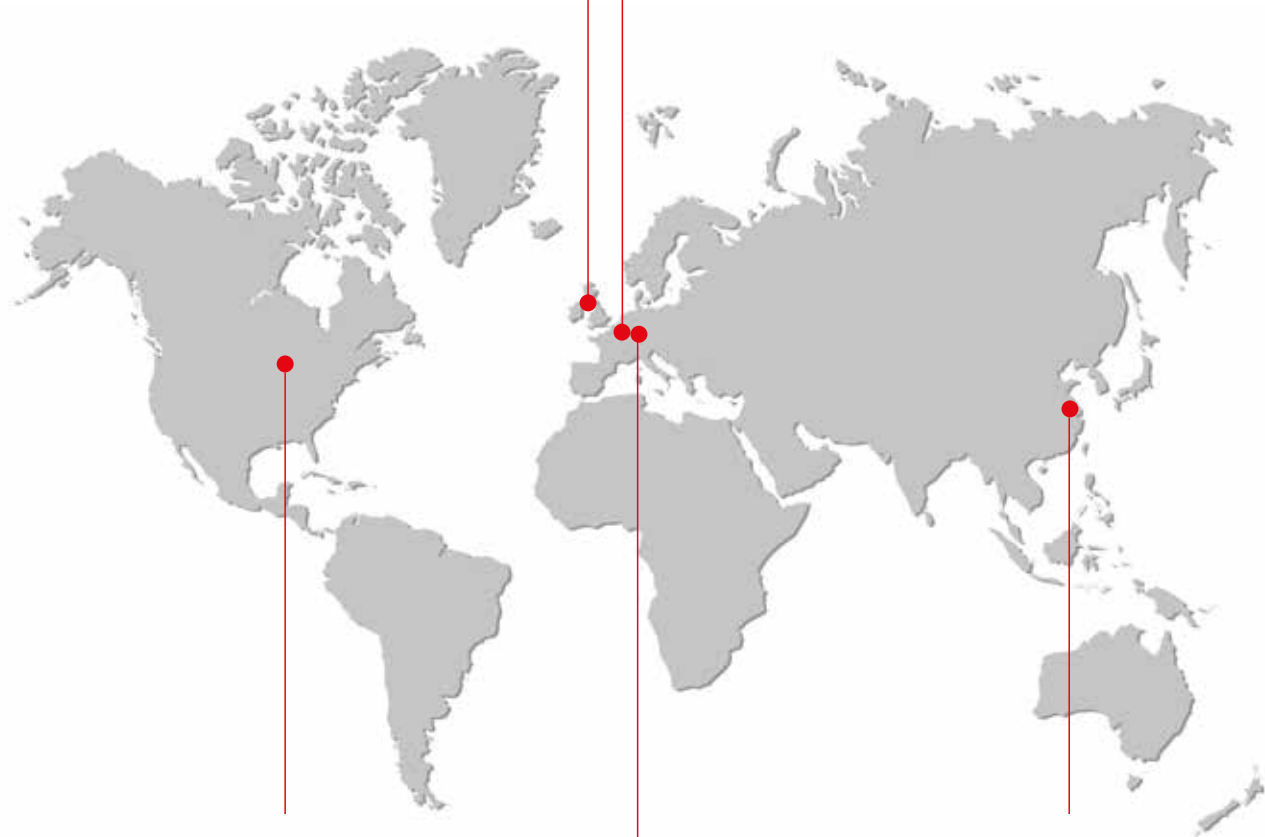
High-tech products for machines – worldwide!

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