



H.C. CARBON GmbH

Lubricants for metal forming

Massive forming, Billet coating and Mandrel-bar lubrication.

MECHANO-LUBE™

customised solutions for many applications



**Steel, Stainless steel, Titanium alloys, Aluminum,
Billet coating, Mandrel-bar lubrication**

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H.C. Carbon GmbH is specialized in water-based lubricants. With over 30 years of experience in the field of graphite and its application, we are able to produce high performance lubricants using the outstanding technologies. With our knowledge and exceptional service, we face the ever more demanding and complex forging processes.



Environment and occupational safety

In all our developments, we always follow the basic idea:

"As much chemistry as necessary, as little chemistry as possible"

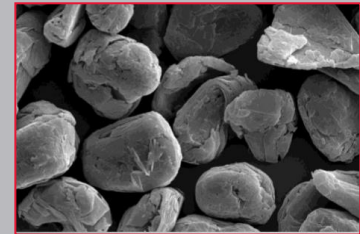
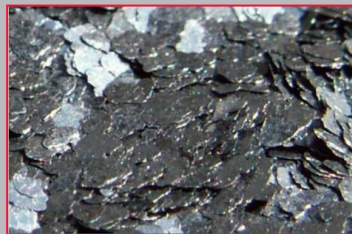
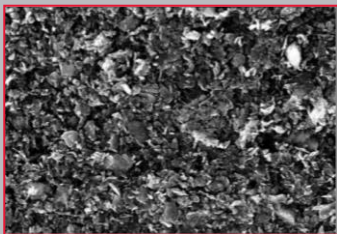
That means:

- All our lubricants are water based
- We do not use any oil products
- All our lubricants are VOC and APEO free
- We pass of ammonia
- We consider the health risk which can be produced from decomposition products and dusts during the forging process



What makes us different

- We only use high-purity, crystalline graphite.
- With our milling technology, MECHANO-DESIGN™, we can not only adjust the particle size, but also the particle shape.



- We have found a unique combination between the chemical additives and the manufacturing process.



Advantages for you

- Increased tool life
- Excellent cooling, releasing and lubricating properties
- Immediate wetting of the dies (no Leidenfrost phenomenon)
- Extremely short drying time (no blowing out necessary)
- Suitable for all spray systems (air spraying, airless)
- Easy cleaning of the dies (no sticking of the ejector)
- Improved part quality
- Low environmental impact
- No toxic decomposition products
- High efficiency due to reduced downtimes
- Can be reused if damaged by frost *

* according specification of HCC

Our Products

Through consistent research and development and the study of deformation processes, we have managed to solve a large number of tasks with just a few products and this protects the customers from a large variety of products.

Steel



MECHANO-LUBE™ 1VP12

Water-based universal lubricant based on graphite for many applications.

Dilution ratio: Simple transformation = 1:25 – 1:30, difficult transformation = 1:8

MECHANO-LUBE™ 1VP568

Water-based graphite lubricant for extremely deep dies and very high cycle times.

Dilution ratio: 1:8 – 1:12

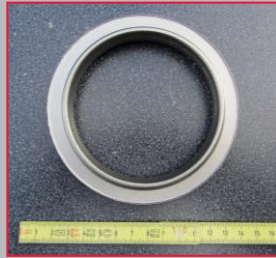
MECHANO-LUBE™ 1D88

Water-based graphite lubricant for simple transformations and for price-sensitive forging.

Dilution ratio: 1:8 – 1:15



Stainless steel



MECHANO-LUBE™ 1VP12

Water-based universal-graphite lubricant.

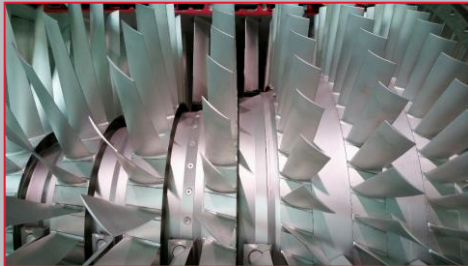
Dilution ratio: 1:8 – 1:15

MECHANO-LUBE™ 1VP568

Water-based universal-graphite lubricant for extremely poor flowing stainless steels.

Dilution ratio: 1:8 – 1:10

Titanium alloys



MECHANO-LUBE™ 1VP12

Water-based universal-graphite lubricant. According to the form, as solo lubricant or together with glasscoating.

Dilution ratio: 1:8 – 1:10

MECHANO-LUBE™ 1VP568

Water-based graphite lubricant according to requirements. According to the form, as solo lubricant or together with glasscoating.

Dilution ratio: 1:8 – 1:10

Aluminum



MECHANO-LUBE™ 1VP574

Water-based graphite lubricant with special additives. In almost all cases it can be used to replace oil lubricants.

Dilution ratio: 1:10 – 1:15



Billet-Coating

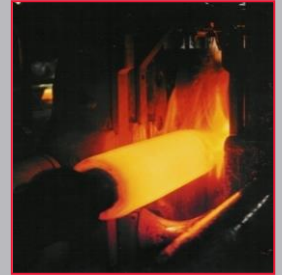


MECHANO-LUBE™ 1VP19

Water-based graphite lubricant for Billet-Coating. Special additives either completely prevent or greatly reduce scale formation during passage through the induction furnace. The dispersion is suitable for spray application or dipping (dip process).

Dilution ratio: 1:1 – 1:5

Mandrel bar lubrication



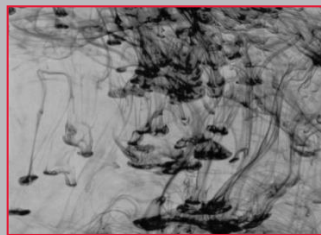
MECHANO-LUBE™ 1M2

Lubricant powder in instant form. Extremely low dust. Contains all additives and is easy to convert into an aqueous dispersion. Also suitable for chromium-plated mandrels. Especially for MPM, FM and Assel.

Powder transfer in dispersion



Instant powder



powder + water



stirring– ready

Special products



If extreme oxidation and temperature resistance are required, hexagonal boron nitride is used. HCC has both, an aqueous dispersion and the powder component. For stable coatings in the foundry process, as a release agent and solid lubricant. As surface protection in welding technology as well as in glass forming.

MECHANO-LUBE™ 6D1

Water based boron nitride dispersion with very high adhesion on many substrates.

MECHANO-COND™ 6P3

Hexagonal boron nitride powder. Solid lubricant. High thermal conductivity.



Delivery forms



1100 kg IBC



220 kg steel barrels



25 kg pails



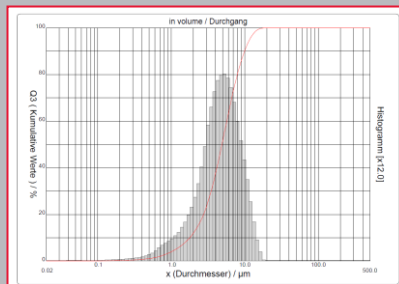
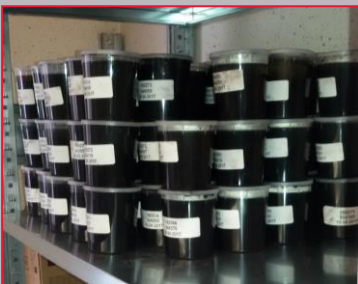
300 kg Big- Bags
lubricant powder

Customized services



- On request, we accompany the forging trials and help you to optimize. Of course, free of charge.
- We offer you a state of the art dilution machine.
- We help you with the analysis (determination of the actual dilution ratio). No conductive measurement.

Quality



- All our products are final filtered to avoid impurities.
- We provide a certificate of analyses for all deliveries
- After analysis, the containers are sealed.
- For each batch we hold a return sample for 3 years.

“we are pleased to support you “