



Special lubricants
for the sheet forming industry



BECHEM
LUBRICATION
TECHNOLOGY

We shape sheet metal precisely

Evaporating punching and forming oils

The Beruform VSM range is used for simple to medium-heavy stamping and forming processes where low-residue or residue-free surfaces are required. The excellent cooling effect ensures low process temperatures and consistent precision in the production of stamped and bent parts on high-speed presses, for example. Parts produced with Beruform VSM forming oils can in many cases be further processed without subsequent cleaning. The selection of raw materials guarantees a high level of user acceptance.

Typical applications include modern materials such as copper and aluminum alloys or foils that require spot-free processing. The Beruform VSM series reliably prevents material build-up on cutting punches.

Non-water miscible, chlorine-free punching and forming oils

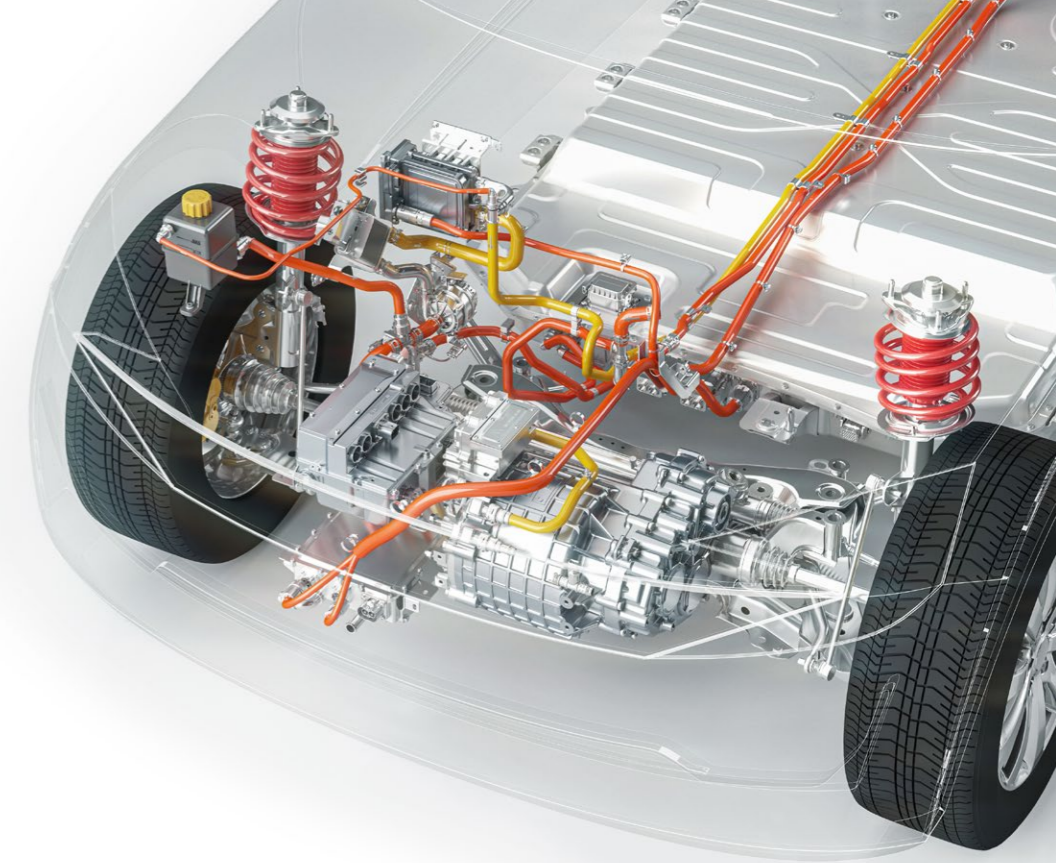
With the Beruform STO product series BECHEM offers products adapted to viscosity and performance: From forming media for simple machining processes to high-performance oils, which are an alternative to chlorine-containing products in the field of stainless steel machining. Besides process safety and economic efficiency, BECHEM makes an important contribution to sustainability by replacing critical ingredients in metalworking fluids. The Beruform STE series is always used where the focus is on cooling effect as well as good lubrication performance.

Water-miscible, chlorine-free punching and forming concentrates

The Beruform STE series has been designed for medium to heavy stamping and forming processes. The cleaning of the emulsifiable forming oils is carried out aqueous and is in many cases sufficient with clear, slightly tempered water. Thus BECHEM makes an important contribution to sustainability in production.

Chlorine-free pastes

Products from the Beruform STP product series have been specially developed for forming operations of highly demanding geometries. The pasty, water-washable products are cleaned with slightly tempered water to achieve a high surface quality and an economical production process.



High-precision fine cutting and stamping processes with long tool lifespans play an important role in the production of many automotive components. From an expert's perspective, even the smallest deviations from the defined geometries at the edges of the electrical steel used in the production of rotors and stators can result in unwelcome decreases in performance. Installing stators and rotors machined with worn tools in the motor cores leads to a reduced magnetization level and consequently lower motor efficiency. Ask about BECHEM solutions for complicated and challenging fine blanking operations.

Residue-free evaporation

Beruform VSM 9

Good residue behavior

Beruform STE 5023

Clean off with water

Beruform STP 50 CA

Enables high forming degrees

Beruform STO 3508

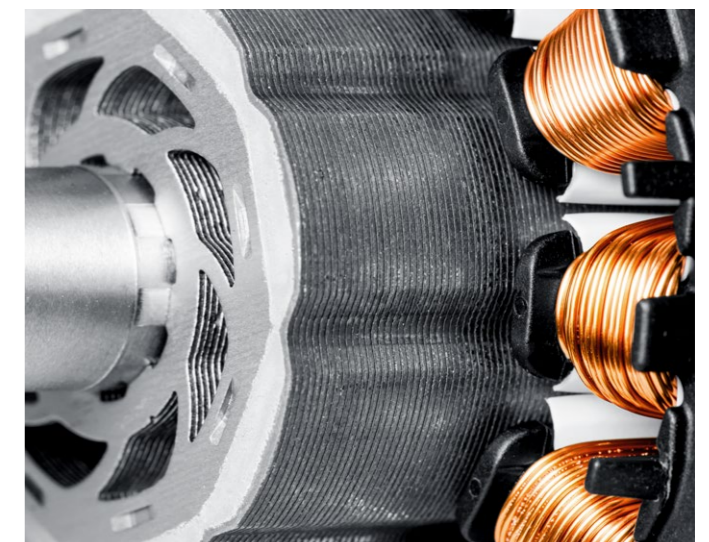


Examples of application

- Punching of thin and electrical sheets up to 1.0 mm
- Stamping of rotor/stator packages
- Battery cell housings
- Sheet metal and food packaging
- Electrical contacts
- Bipolar plates

Materials to be processed

- Steel alloys
- Stainless steel
- Aluminium alloys
- Non-ferrous metals
- Pure copper
- Pure aluminium



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LUBRICATION SOLUTIONS FOR INDUSTRY

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