



The New Era in Aluminium Wire Drawing

BECHEM UNOPOL AL



BECHEM
LUBRICATION
TECHNOLOGY

BECHEM UNOPOL AL – The New Era in Aluminium Wire Drawing

The wire drawing lubricants of the UNOPOL series have since long been the worldwide recognized brand in the demanding wire drawing business. Their excellent drawing performance and service life satisfy wire manufacturers all over the world. The continuous development and research of BECHEM guarantees best results in quality and productivity in modern wire drawing.

Aluminium is replacing cupreous conductors in more and more applications. Its good availability makes it cheaper than copper, and the significantly lower weight provides advantages for the lightweight construction in the automotive and aviation industry.

Traditionally, aluminium wires are drawn with oil. Especially in rod breakdown processes relatively high-viscous oils have been the state of the art for a long time. The use of such oils leads, however, to a contamination of machines and surroundings; since filtration of the used oil is possible to a limited extent only, processing residues and oil will stick on the wire surface.

The use of emulsions offers various advantages:

- **improved cooling**
- **easy wash off**
- **low formation of residues**

The above benefits prove that emulsions are the best choice for enamelled wire production. Thanks to the intensive development work over the last years CARL BECHEM GMBH has created the UNOPOL AL series; the wire drawing lubricants of this series cover even the most demanding rod wire drawing operations.

In general, each aluminium wire drawing machine which is currently operated with oil can be adjusted to this new technology. Even copper wire drawing machines can be changed for the drawing of aluminium wires. BECHEM will support you when introducing this new technology in your plant.



With the introduction of the BECHEM UNOPOL AL series in aluminium wire drawing traditional theories could be disproved. Less oil residues, best lubrication and a considerably cooler wire guarantee extraordinary drawing performance, as well as system-dependent higher drawing speeds; less wire breaks and better efficiency of the machines are the result.

BECHEM UNOPOL AL 560

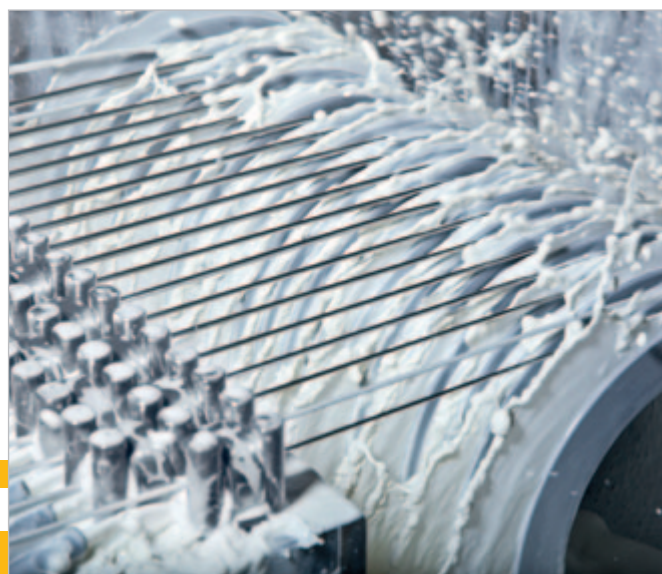
BECHEM UNOPOL AL 560 is a water miscible lubricant for drawing aluminium in rod and medium wire systems. This high performance product is suitable for processing EC- aluminium as well as most different aluminium alloys.

BECHEM UNOPOL AL 560 shows good foaming behaviour, even in soft water. Excellent cooling abilities and filterability ensure an outstanding performance in high demanding aluminium wire drawing processes. As the surface of the drawn wire is very clean, BECHEM UNOPOL AL 560 is also used for the production of enamelled wire. Diameters from 12 mm or 9.5 mm down to 2 mm are processed with BECHEM UNOPOL AL 560. Depending on the application it is commonly used in concentrations of 10-25 %.

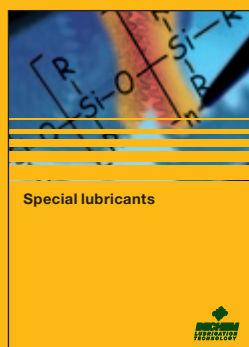
BECHEM UNOPOL AL 570

BECHEM UNOPOL AL 570 is a water miscible lubricant for drawing aluminium in medium and fine wire systems. Starting from 3.5 mm, final diameters down to 0.10 mm are drawn on single and multiwire machines with BECHEM UNOPOL AL 570.

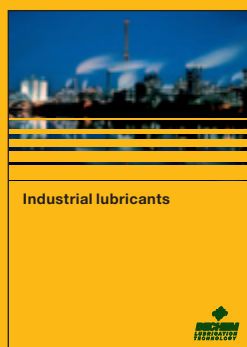
It combines good lubricity and cleanliness of the wire and the machine. Good filterability and low residues ensure a long service life and high wire quality. Emulsions of BECHEM UNOPOL AL 570 are applied in concentrations of 10-20 % depending on the application.



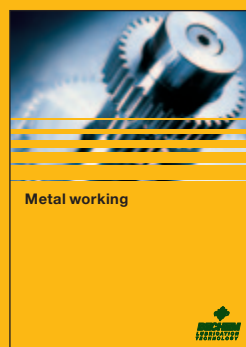
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Special lubricants



Industrial lubricants



Metal working



Forming technology