



**ZELLER+GMELIN**

**wire**

Lubricants for the Wire Industry





## Zeller+Gmelin

The brand with the clear plus

Zeller+Gmelin is a medium-sized, international manufacturer of lubricants, printing inks and chemicals. The company with its head office in Eislungen/Fils, which was founded in 1866, is still family-owned. With 16 subsidiary companies and many partners, we are well connected throughout the world and deliver our high-quality products to more than 80 countries. We have understood and solved your problems for more than 150 years and will continue to do so in the future. This is how we create a tangible plus for our customers.

Because we understand the customer and develop solutions – reliably, flexibly and tailor-made.

The business unit WIRE features high quality solutions for your application in the wire industry.

## Wire

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Please take a look at the current MSDS for all products offered.  
The MSDS are always available on demand.





Business unit

## Wire

# WMI

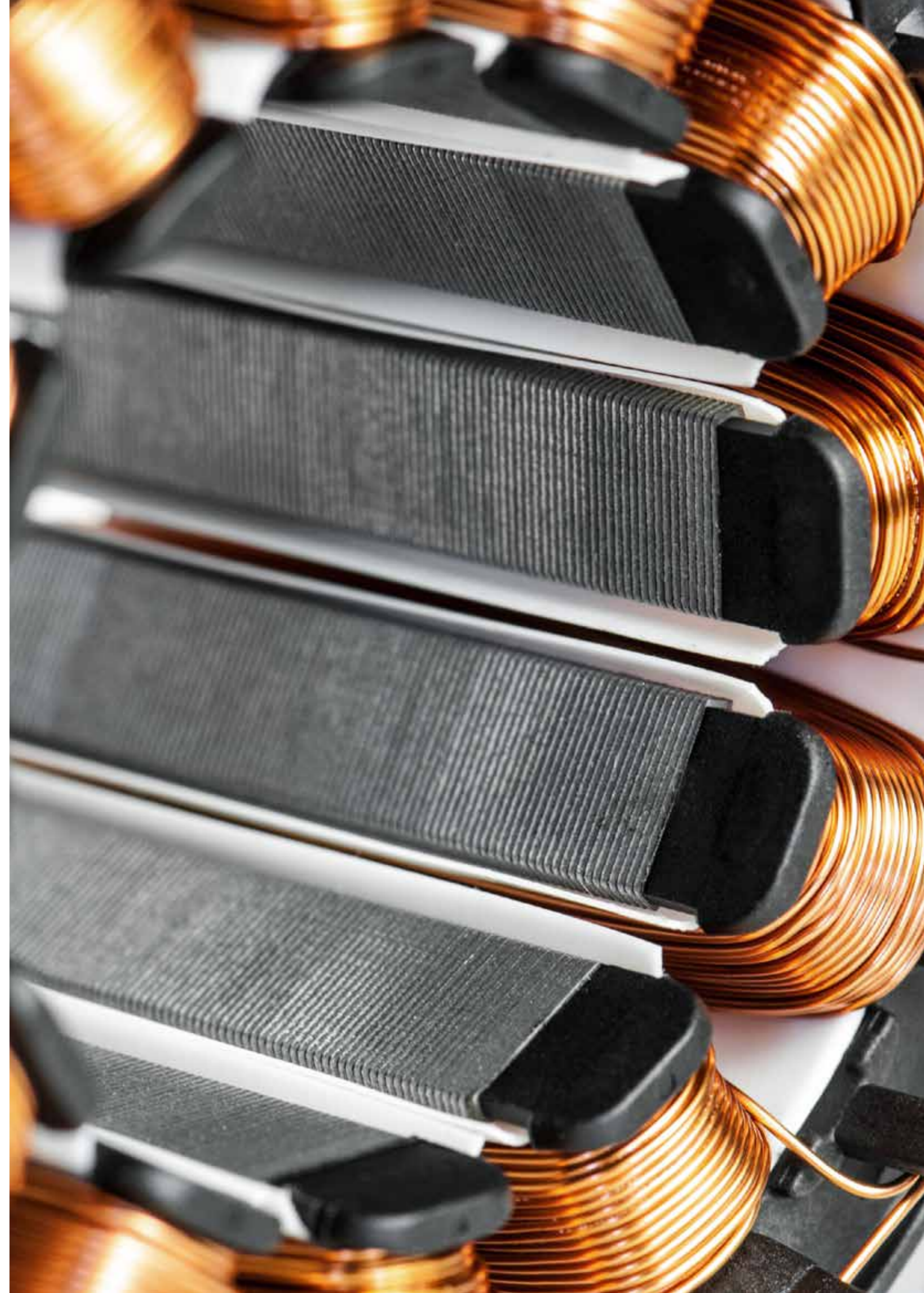
In the business unit wire, Zeller+Gmelin offers a large portfolio of different solutions for the wire production. Our customers' wires are used in a wide variety of industries and applications. From automobile, to electronics, to electrical energy transmission, the food industry, aviation and medical technology. We are the specialists, in terms of developing lubricants for demanding manufacturing processes. Our high-quality solutions are tailored to the different challenges of the wire industry. Our lubricants accompany the entire value chain, starting with copper cast rod through rod breakdown to fine drawing. In addition to our drawing lubricants, we also develop and manufacture industrial gear and hydraulic oils as well as lubricating greases.

The products in this brochure are an excerpt from our portfolio of specialized, tailor-made lubricant solutions that can be tailored precisely to the specific requirements of our customers.

We would gladly recommend on site a product the optimal lubricant for your individual needs and, if necessary, to develop it.

### **We offer a wide range of lubricants**

- + Continuous copper cast rod
- + Wire Drawing Lubricants for Copper, Aluminum, Steel and Steelcord
- + Gear and Hydraulic Fluids
- + Lubricating Greases





## Copper Cast Rod

The forming of a copper wire begins with continuous casting rolling. In the process, copper cathodes are melted and cast into an endless ingot using casting machines. The red-hot bar is then formed into a round wire between rollers. The lubricants from Zeller+Gmelin ensure lasting and consistent optimal lubrication, both on the rolling stands and the numerous other lubrication points. Our portfolio covers hydraulic oils, gear oils and special lubricating greases.

Our Multiroll CU series is used on rolling stands worldwide and reliably enables the production of the highest quality casting rod. High surface qualities can be achieved with low amounts of residual oxide. By applying our Multiroll Coating products, our customers receive reliable corrosion protection for their wire rod.

Our products are used reliably in all common manufacturing processes.

### A selection of our products:

- + Multiroll CU
- + Multiroll CU LF Special
- + Multiroll CU LF Ultra
- + Multiroll Coating
- + Multiroll Coating Special
- + Divinol HLP ISO Reihe
- + Divinol ICL ISO Reihe
- + Divinol Multitherm 2
- + Divinol PU Grease 2-100 LNG
- + Divinol PU Synthogrease 1.5-460 EP
- + Divinol Lithogrease G421





## Copper Wire Drawing

The Multidraw drawing lubricat concentrates are used from rod breakdown to fine drawing. Our global customers use our expertise in the production of copperbased wires, their alloys, and a wide variety of galvanic coatings. The finely tuned products are especially developed to achieve high surface quality, good drawing results, low working concentrations and excellent cleanliness of wire and machines.

### A selection of our products:

- + Multidraw CU ROD
- + Multidraw CU ROD X
- + Multidraw CU UNI S
- + Multidraw CU MF
- + Multidraw CU MF T
- + Multidraw CU SY Special
- + Multidraw CU SF
- + Multidraw CU SF Ag





# Aluminum Wire Drawing

In addition to non-water-miscible drawing lubricants, aluminum wires are also manufactured with water-miscible drawing lubricant concentrates. The products are ingenious to ensure the best lubrication performance for a long service life of the dies and cones.

In addition to classic mineral oil-based products, our portfolio also includes fully synthetic drawing agents, whose higher performance enables longer service lives of drawing tools and better surface quality. The better viscosity-temperature behavior ensures faster drawing speeds at a low drawing medium temperature.

## A selection of our products:

- + Multidraw ALM 250
- + Multidraw ALM 120
- + Multidraw ALF 60
- + Multidraw ALF 20
- + Multidraw ALF 5
- + Multidraw ALG 40
- + Multidraw ALG 12
- + Multidraw ALG 3





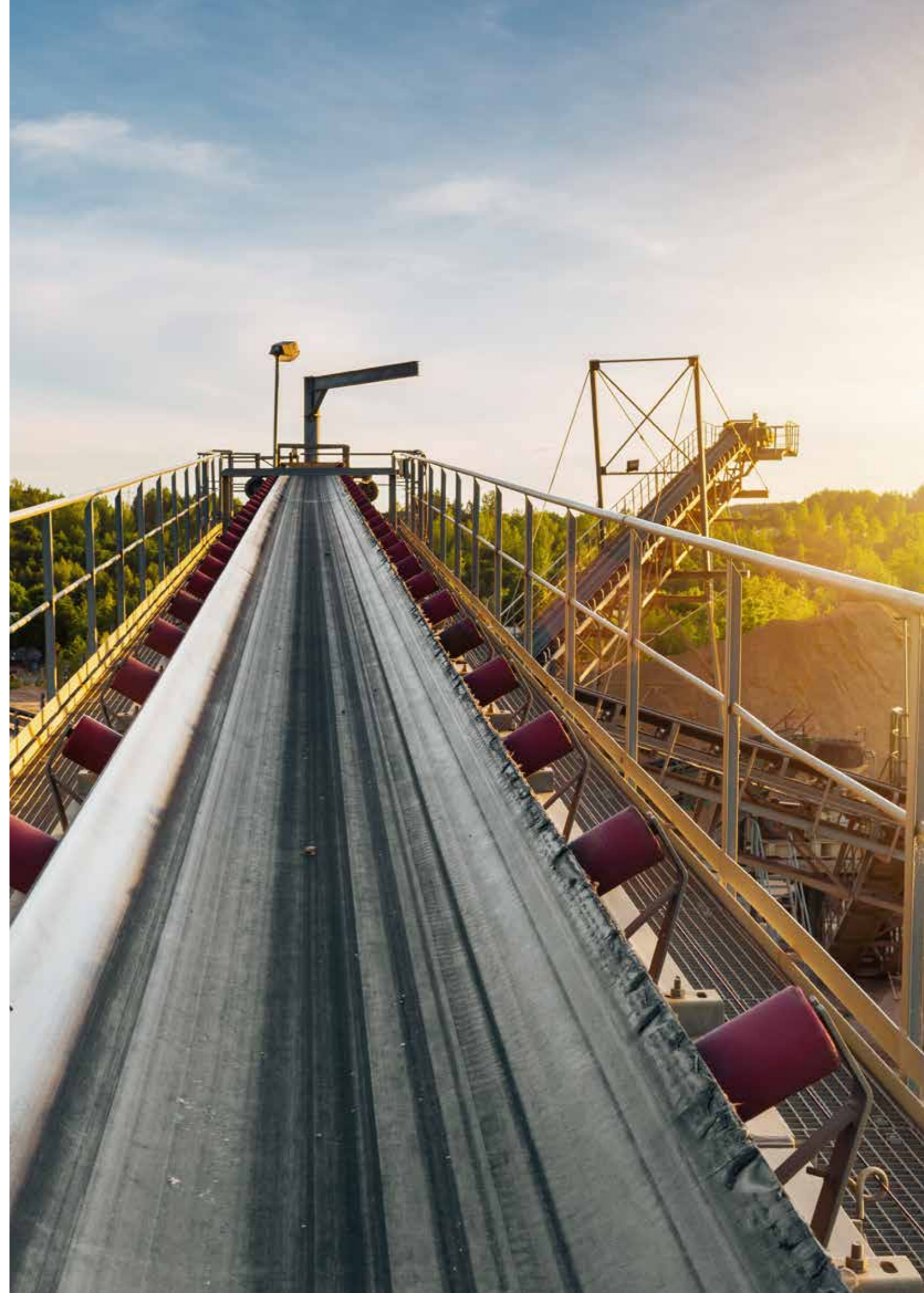
# Steel Wire Drawing

Zeller+Gmelin offers high-quality lubricants for the production of fine steel wires in wet drawing. These wet drawing agents are filled into the drawing chamber or sprayed onto the drawing cones or dies. Our products can of course also be used on straight drawing machines with appropriate drawing boxes.

Our liquid drawing agents are used in the fine-drawing and super-fine drawing of steel and stainless steel and enable very good surface qualities and easy wire cleaning. Even special applications such as galvanized steel wire can be carried out efficiently with the help of our drawing materials. All of our lubricants offer very good lubricating properties for optimized die service life.

## **A selection of our products:**

- + Multidraw ST Grease Spezial
- + Multidraw ST Grease
- + Multidraw ST 500 Extra
- + Multidraw ST WM
- + Multidraw ST 60
- + Multidraw ST 30
- + Multidraw ST 10 Extra
- + Multidraw ST 5
- + Multidraw ST ZN Spezial





## Steelcord

Zeller+Gmelin lubricants support the production of steel cord and hose wire through the excellent performance characteristics of the drawing agent concentrates. The lubrication performance enables long service lifetimes of the drawing tools and thus reduces downtimes. The very good emulsion service life reduces downtimes and ensures long-lasting clean drawing machines. Brass-plated steel wires drawn with Multidraw have very good rubber adhesion. The usual tensile strengths can be drawn and stranded with an additional lubricant.

### **A selection of our products:**

- + Multidraw VSV 77R
- + Multidraw STC 05
- + Multidraw STC Extra
- + Multidraw STC 09 WD
- + Multidraw Strandoil







**Wire**

Drawing agents  
for the  
wire production

**WVI**



# Product overview for the Business Unit Wire

## Product selection Continuous Copper Cast Rod

Product	Item no.	Description
Multiroll CU LF Special	26500	Fully synthetic special product for manufacturing of continuous cast wire rod
Multiroll CU LF Ultra	30210	Fully synthetic special product with optimised anti-foam properties
Multiroll Coating	23520	Aqueous corrosion protection agent for continuous cast wire rod
Multiroll Coating Special	27720	Wax emulsion like Multiroll Coating with a thinner protection layer, which prevents the coiled wire rod from slipping
Multiroll Additive R	26010	IPA-substitute for reducing of residue oxide in casting rolling unit
Multiroll Cu Protect	22620	Additive for the cast rod emulsions for enhanced corrosion protection and better filterability
Divinol ICL ISO 46, 100, 150, 220	on request	Industrial high-pressure gear oils, zinc-free. Especially for heavily loaded industrial gears with recirculating lubrication as well as immersion bath gears with spur and bevel gears and worm gears acc. to DIN 51517-3.
Divinol HLP ISO 46	48870	High-pressure hydraulic oils for all hydraulic power units (e.g. stationary hydraulic systems) acc. to DIN 51524-2.
Divinol Multitherm 2	29880	Roller bearing lubricating grease for thermal high-charged lubrication spots, reliable wear protection for high process safety, excellent water resistance. DIN 51825: KP 2 N-20
Divinol PU Grease 2-100 LNG	32910	Roller bearing lubricating grease for thermal high-charged lubrication spots, very good work stable, DIN 51825: K 2 R-30

## Product selection Copper and Copper alloys

Product	Item no.	Description
Multidraw CU ROD X	22330	Drawing lubricant for rod breakdown to an outlet diameter of 0.9 mm with excellent lubrication, long-term stability and with high content of renewable raw materials
Multidraw CU ROD	95720	Drawing lubricant for rod breakdown to an outlet diameter of 0.9 mm with excellent lubrication and emulsion stability
Multidraw CU UNI S	29760	Drawing emulsion for rod breakdown and intermediate drawing, till 0.1 mm end wire diameter with optimized lubricating properties and bacterial stability
Multidraw CU UNI Spezial	20820	Drawing emulsion for rod breakdown and intermediate drawing, till 0.1 mm end wire diameter with excellent long-term stability and very good electrolyte stability
Multidraw CU MF	95320	Drawing emulsion for multiwire machines up to 0.07 mm finished wire diameter, also suitable for tin-plated copper wires
Multidraw CU MF T	22060	Drawing emulsion for multiwire machines up to 0.07 mm finished wire diameter with high lubrication properties, excellent long-term stability, especially for tin-plated wires
Multidraw CU MF C	27680	Comparable to Multidraw CU MF with optimized capability to carry dirt, especially for brass-plated copper wires
Multidraw CU MFE	07000	Drawing emulsion, chiefly for enameled wire machines for inline processes up to 0.07 mm finished wire diameter



# Product overview for the Business Unit Wire

## Product selection Copper + Copper alloys

Product	Item no.	Description
Multidraw CU SF	29350	Fully synthetic drawing agent with excellent lubrication performance and machine cleanness esp. for nickel-plated wires
Multidraw CU SF Ag	36570	Fully synthetic drawing agent with excellent lubrication performance and low foaming tendency esp. with silver and nickel-plated wires
Multidraw CU SY	97220	Fully synthetic drawing agent with good corrosion protection, excellent machine cleanness
Multidraw CU SY Spezial	20490	Like Multidraw CU SY, but with optimised lubrication performance
Multidraw CU GWZ	21980	Special product for continuous annealing, good corrosion protection, good windability
Multidraw CU CAS	30740	Fully synthetic special product for continuous annealing, avoids discolouring of wires
Multidraw CU Grease	83600	Special product for first draw on rod breakdown lines
Multidraw CU Spool	04390	Sprayable lubricant as a spool aid
Divinol ICL ISO 68, 100, 150, 220	on request	Industrial high-pressure gear oils, zinc-free. Especially for heavily loaded industrial gears with recirculating lubrication as well as immersion bath gears with spur and bevel gears and worm gears acc. to DIN 51517-3.
Divinol GWA ISO 22, 32, 46, 68	on request	Zinc-free multi-purpose oils for bearings, gears and hydraulic systems according to DIN 51517-2.
Divinol T 6 EP ISO 68	81910	CGLP alloyed guideways and slideways oil with excellent demulsifying properties, high film strength and adhesion properties
Divinol Fett EP 2	85430	Multipurpose EP grease for various purposes in industry, trade and commerce, suitable for use with increased mechanical load, DIN 51825: KP 2 K-30
Divinol Fett MTS 2	08951	Semi-synthetic, lithium based grease for smooth running of very fast rotating bearings





# Product overview for the Business Unit Wire

## Product selection Aluminum + Aluminum alloys

Product	Item no.	Description
Multidraw ALM 1650	90670	High-viscosity drawing-oil, suitable for dipping machines
Multidraw ALM 250 Multidraw ALM 120	04740 94760	Durable drawing oils suitable for all aluminium alloys, depending on viscosity applicable for spraying or dipping lubrication. Drawing oils can be mixed among each other.
Multidraw ALF 60 Multidraw ALF 20 Multidraw ALF 5	31670 31660 96600	Fine drawing oil for wire range approx. 0.05 mm, especially used for welding wire
Multidraw AL WM	95721	Water-miscible drawing agent for aluminum and its alloys. The excellent lubrication performance and emulsion stability enables good drawing results over a long period.
Multidraw AL Grease SYN	31760	Drawing grease for single and multi-drawing, suitable as first draw grease
Multidraw ALG 200 Multidraw ALG 80	26020 21270	Drawing oil for hard alloys for large demands on drawing performance, suitable for wire first draw in dipping machines, ALG 200 for wire diameter > 10 mm
Multidraw ALG 40 Multidraw ALG 17 Multidraw ALG 12	94802 20191 31440	Drawing oils with very good viscosity/ temperature characteristic, high aging stability, in thermal treatment no residues, ALG 17 is esp. suitable for spraying
Multidraw ALG 8 Multidraw ALG 3	20372 22720	Drawing oil which is highly suitable for spray application, in thermal treatment no residues. For the plurality of products are safety declarations available as per the German Food and Commodities Act.





# Product overview for the Business Unit Wire

## Product selection Stainless steel, Steel + Steelcord

Product	Item no.	Description
Multidraw ST 500 Extra	32200	Special drawing oil with excellent lubricity for stainless steel bars at diameters of approx. 60 to around 30 mm
Multidraw ST 60 Multidraw ST 30 Multidraw ST 10 Extra	23850 26970 21970	Special drawing oils with EP additives for stainless steel wires in the extra-fine drawing range, ST 60 from approx. 2.0 mm to approx. 0.3 mm ST 30 from approx. 1.2 mm to approx. 0.1 mm ST 10 Extra from 0.9/0.8 mm to approx. 0.08 mm
Multidraw ST WM	30270	Water-miscible drawing agents for high-tensile steel wires for diameter < 2 mm
Multidraw ST Grease Spezial	90080	Pigmented drawing grease for large-size steel and stainless steel wires
Multidraw S 20	30770	Coating agent for metal wires for stranding and twisting
Multidraw MS 5	83680	Non-water-miscible special drawing oil for brass alloys at high drawing rates
Multidraw CU ROD	95720	Water-miscible drawing agent with excellent lubrication performance and emulsion stability for brass alloys from approx. 2.8 to 0.1 mm wire diameter
Multidraw ST Grease	83420	Water-miscible drawing grease for iron and steel wires, electro-plated wires, copper-plated welding rods etc.
Multidraw ST ZN Spezial	22780	Emulsion concentrate for zinc-plated iron and steel wires with excellent lubrication, for high-tensile steels, guarantees optimised machine cleanness
Multidraw VSV 77 R Multidraw STC 05	06510 25200	Water-miscible drawing agents EP-alloyed for steelcord wires, excellent rubber adhesion. Multidraw STC 05 also suitable for hose wires.
Multidraw Strandoil	20670	Non-water-miscible drawing oil for bunching the wire on the stranding machine, e.g. for steel cord wires and for regreasing after fine drawing

## Product selection Cleaners

Product	Item no.	Description
Divinol Cleaner 1277 Al	12770	Slightly alkaline cleaner for aluminium, steel and nonferrous metals by spraying, dipping method or ultrasonic cleaning
Divinol Cleaner 1296	12962	slightly alkaline cleaner to remove of drawing oils from steel and non-ferrous metals by dipping method or ultrasonic cleaning. Also for aluminium
Divinol Cleaner 9337	09337	Environmentally friendly, VOC-free, solvent-based cleaning agent for removing oils, greases and waxes
Divinol Cleaner 9343	93430	Environmentally friendly, VOC-free, solvent-based cleaning agent for removing oils, greases and waxes with a lower evaporation rate
Divinol Cleaner 7041 MA	70410	Based on modified alcohol, good dissolving power for polar and non-polar impurities



# At home + Abroad

We are your plus.

Zeller+Gmelin has got offices worldwide, plus its head office in Eislingen in Baden-Württemberg. Our name stands for reliability and quality, at all times. Our subsidiaries and partners with all their employees ensure this on a worldwide basis.

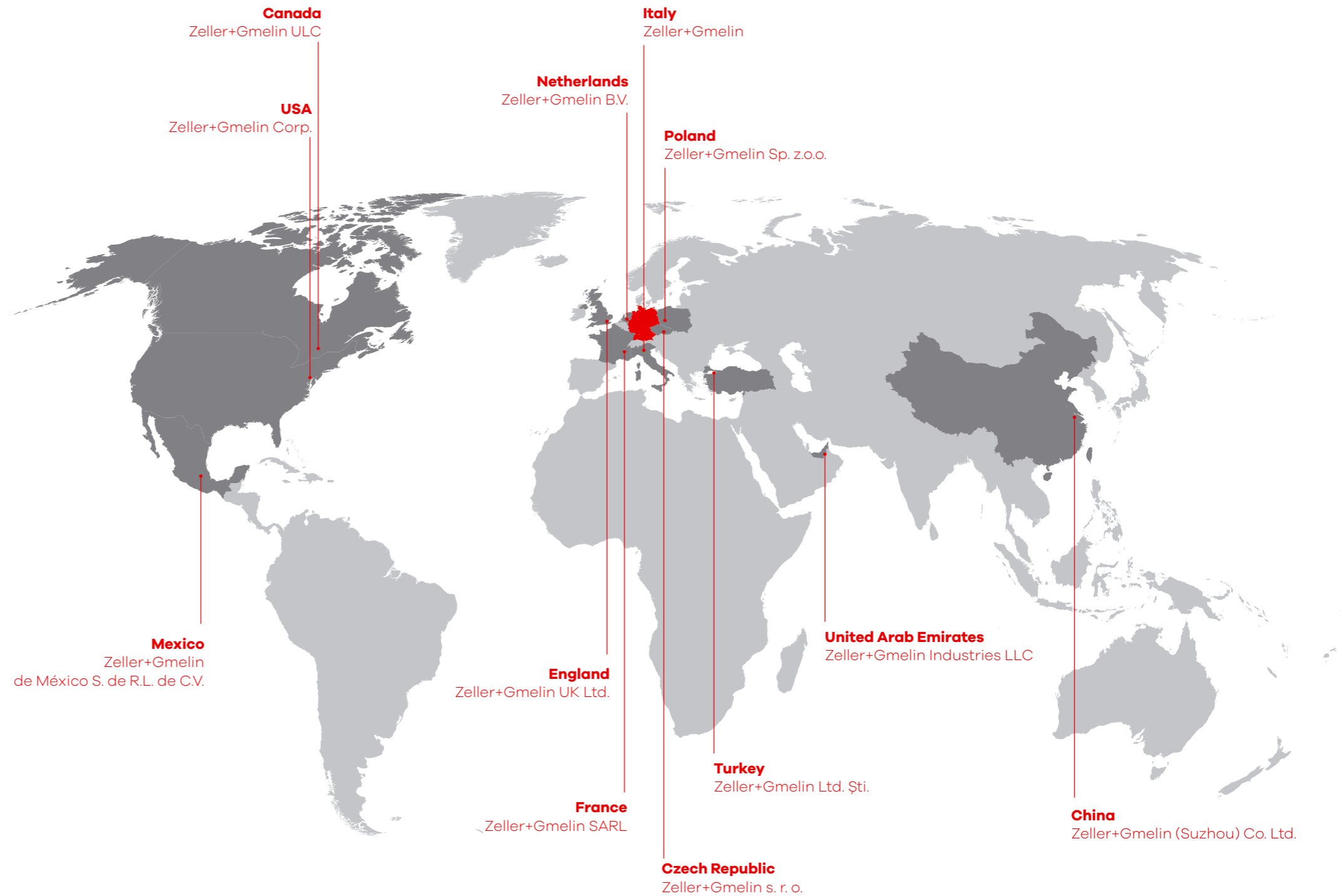
The distinct expertise of our sites and our smooth cooperation are beneficial not just to us, the company as a whole – but also to you, the customer.

The concentrated competence and understanding of processes, application and development, coupled with problem-solving skills and personal advice, are what make Zeller+Gmelin a global figure when it comes to understanding and solving your problems.



## Germany

Zeller+Gmelin GmbH & Co. KG  
ZG Fluidmanagement  
SÜDÖL Mineralöl-Raffinerie GmbH  
SÜDÖL GmbH  
SÜDÖL Recycling GmbH





# ***EXPERTLY DONE.***

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