



WIRE DRAWING
COLD FORMING
SHEET METAL FORMING
ROLLING

METAL FORMING LUBRICANTS



PETROFER
industrial oils and chemicals

METAL FORMING LUBRICANTS

The range of products for metal forming operations includes neat oils, emulsions, dispersions, synthetic products and pastes. Our products are individually developed to meet any requirements for metal forming processes thus guaranteeing the user the highest productivity and quality in these operations.

The PETROFER product line does not only offer stamping oils which evaporate free of residues, but also metal forming lubricants for wire drawing, cold forming, fine blanking, deep drawing as well as sheet metal rolling.



A WIRE DRAWING

COPPER WIRE DRAWING

PRODUCT GROUP	APPLICATION RANGE	WIRE	CONC.
DRAWLUB C 100	Emulsions, especially for copper and copper alloys ROD-BREAKDOWN and intermediate machines	> 0,15 mm < 15,0 mm	8,0% 20,0%
DRAWLUB C 200	Emulsions, especially for coated and plated copper wire MULTI-WIRE and intermediate machines	> 0,15 mm < 8,00 mm	5,0% 15,0%
DRAWLUB C 300	Emulsions, especially for intermediate and fine wire MULTI-WIRE and INLINE magnet wire	> 0,10 mm < 3,50 mm	5,0% 15,0%
DRAWLUB C 400	Fully synthetic fluids for fine wire and extra fine wire MULTI-WIRE and INLINE magnet wire	> 0,015 mm < 0,45 mm	1,0% 11,0%
DRAWLUB C 500	Semi-synthetic fluids for intermediate, fine wire and extra fine wire. Optimum cleaning and lubricating performance	> 0,05 mm < 1,20 mm	1,0% 11,0%
DRAWLUB C 900	Drawing neat oil for copper and Cu-alloys TROLLEY profile wire	> 0,10 mm < 20,0 mm	100,0%

ALUMINIUM WIRE DRAWING

PRODUCT GROUP	APPLICATION RANGE	WIRE	V40 [mm ² /s]
ISOLUBE 4640 ISOLUBE 4660	Semi synthetic high performance oils for pure aluminium and AL-alloys MULTI-WIRE and intermediate machines Very good resistance against oxidation, low consumption	> 0,15 mm < 6,50 mm	40 61
ISOLUBE 4600	High performance wire drawing neat oils for aluminium and AL-alloys ROD-BREAKDOWN and intermediate machines	> 0,90 mm < 9,50 mm	130 170 530
ISOLUBE MG GREASE	GREASE for single-block wire drawing machines Aluminium and AL-alloys	> 0,90 mm < 9,50 mm	*TP +51°C V100 16,0

*Melting-point according DIN ISO 2176

STEEL WIRE DRAWING

PRODUCT GROUP	APPLICATION RANGE	WIRE	CONC.
DRAWLUB ST 100	Water miscible lubricants for wet wire drawing of steel wire, bare as well as zinc and copper coated	> 0,07 mm < 4,0 mm	3,0% 15,0%
ISOFORM 900	V/40 = 10,0–500 mm ² /s Wire drawing neat oils, free from chlorine Iron and steel alloys up to Cr-steels and spring steel	> 0,10 mm < 12,0 mm	100%
DRAWLUB TD	V/40 = 25,0–3000 mm ² /s Wire drawing neat oils, contains chlorine Stainless steel wire as well as nickel and titanium	> 0,10 mm < 12,0 mm	100%

B COLD FORMING

COLD FORMING OILS

PRODUCT GROUP	APPLICATION RANGE	V40 [mm ² /s]
ISOFORM 911	High Performance - Concentrates For heavy duty forming operations on steel and stainless steel e.g. splined shafts, piston pins, drive shaft parts, ignition plug shells, wheel nuts	59
ISOFORM 922		68
ISOFORM 933		62
ISOFORM 944	All-Round cold forming oils Cold forming operations on steel and steel alloys e.g. nuts, bolts and studs as well as for thread forming	85
ISOFORM 955		95
ISOFORM 966		110
ISOFORM 988	Cold forming oils For cold forming and thread forming on steel e.g. self-tapping and DIN-standard screws and all types of rivets	86
ISOFORM 999		46

MULTIFUNCTIONAL COLD FORMING OILS

PRODUCT GROUP	APPLICATION RANGE	V40 [mm ² /s]
ISOFORM 950 ISOFORM 960	Multi-purpose cold forming oils For steel, aluminium, copper and alloys, as well as titanium Partially suitable as machine lubricant	ISO VG-Class
ISOFORM 970	Aluminium cold forming oils Fittings, screws, bolts and nuts as well as thread rolling and drawing	ISO VG-Class

SOL-GEL

PRODUCT GROUP	APPLICATION RANGE	V20 [Seconds]
ISOFORM 9100	Dispersion (sol-gel) Cold and Semi Hot forging of power train parts e.g. bearing for constant velocity joint	20 s*
ISOFORM 9200		60 s*

*Flow time, Ford Cup, Nozzle 4mm, 20°C



C SHEET METAL FORMING

FINE BLANKING + DEEP DRAWING

PRODUCT GROUP	APPLICATION RANGE	V40 [mm ² /s]
DRAWLUB S	Fine blanking and sheet metal forming neat oils, free from chlorine For a wide application range, e.g. gearbox components, hinges, fire extinguisher etc.	> 30 < 300
DRAWLUB R	Low evaporation metal working neat oils – Versatile application range – Multifunctional properties – Environmental friendly – Well-suited for microlubrication systems	> 5 < 1500
DRAWLUB TD	Chlorinated metal working neat oils For a wide application range. Also suitable for stainless steel wire drawing	> 8 < 6000
DRAWLUB 3000	Emulsions, solutions, water based pastes and dispersions for various applications	

BLANKING + STAMPING

PRODUCT GROUP	APPLICATION RANGE	FLASH POINT
ISOLUBE V 72 ISOLUBE V 73 ISOLUBE V 74 ISOLUBE V 75	Solvent based blanking oils Punching / stamping / perforating of sheet metal – Thermal vaporisable without residues – Compatible with refrigerants (CFC, R134a) – Self-evaporating, cleaning partly unnecessary	> 55 °C < 100 °C
ISOLUBE V 76	Semi-synthetic blanking oils Punching / stamping / deep drawing of sheet metal – Vaporisable without residues – VOC-free according to EU-directive 1999/13/EC – Compatible with refrigerants (CFC, R134a)	> 100 °C
ISOLUBE 3400	Low viscous blanking / stamping / deep drawing oils For light duty and medium duty punching and metal forming operations	* (V/40) > 4 mm ² /s < 50 mm ² /s

*Kinematic viscosity at 40°C

ROLLING EMULSIONS

PRODUCT GROUP	APPLICATION RANGE	CONC.
ISO-MILL K 9	Emulsions for cold and hot rolling of aluminium + AL-alloys e.g. for wire rod continuous casting mills	5,0 % 20,0 %
ISO-MILL RS	Emulsions and neat oils for cold rolling operation on steel and steel alloys e.g. for roll forming mills	5,0 % 20,0 %
ISO-MILL CU	Emulsions and neat oils for hot and cold rolling of copper and copper alloys e.g. for cold pilger mills and (CCR) continuous casting and rolling lines	1,0 % 25,0 %

ROLLING NEAT OILS

PRODUCT GROUP	APPLICATION RANGE	V40 [mm ² /s]
ISO-MILL CBA	Cold rolling neat oils ready for use for steel-, aluminium and copper sheet metal e.g. for cold formed profiles and flat-oval tubes	> 2 < 50
ISO-MILL RS	Emulsions and neat oils for hot and cold rolling operation on steel + steel alloys e.g. for rail bar mills	> 20 < 300

ROLLING ADDITIVES

PRODUCT GROUP	APPLICATION RANGE	TYPE
ISOADD	Additive program to control droplet-size, lubrication and surface properties e.g. for ISO-MILL hot and cold rolling emulsions directly in the system	ADDITIVE
ISOLUBE CR	Additives for cold rolling base oils to control lubrication and flashiness of the sheet metal. Cold rolling oils ready for use offered as ISO-MILL CBA	ADDITIVE





PETROFER
industrial oils and chemicals

PETROFER Chemie | H.R. Fischer GmbH + Co. KG | Post box 10 06 45 | D-31106 Hildesheim | Germany
Phone +49 5121 76 27 0 | Fax +49 5121 5 44 38 | Mail info@petrofer.com | www.petrofer.com