

# SOLUBLE LUBRICANTS & PASTES SELECTION GUIDE





### **WET LUBRICANTS**

This range of water-soluble lubricants has been developed to cover the majority of ferrous wire applications, including copper-coated and zinc-galvanized wires. Designed to be operated at low concentrations to allow optimum cooling properties, these lubricants provide anti-wear and/or extreme pressure lubrication in the wire deformation zone.

Chemically, the range includes a number of formulations consisting of dispersions, emulsions or true solutions. They can generally be classified by their appearance in water as follows:

• Milky: emulsions or dispersions

• Translucent: micro-emulsions

• Transparent: solutions

Our extensive range encompasses all water-based technologies, and covers the vast majority of cold drawing applications for a wide range of materials and surface preparations. Specific product recommendations are made according to the material type and the severity of the forming process, combined with knowledge of

the final wire applications. Our technical and lab support team can assist with initial make-up recommendations and subsequent in-use bath monitoring, including routine analysis reporting if required. These support functions are aimed at providing the customer with a product that yields the optimum service life and performance (die life etc): all tailored to optimize total production costs and reduce consumption and waste (including disposal costs).

## **PASTES**

Based on combinations of soaps and fatty-matter, our range of pastes are typically designed for single pass drawing, to provide high levels of lubrication, while leaving a clean and low residual film on the drawn wire surface. This is particularly beneficial for secondary applications such as electro-plating (EPQ wires etc.). Some products offer enhanced corrosion protection additives, and also specialty additives for the most demanding applications (heavy draw reductions).

			Carbon Steel	Stainless Steel	Zinc Coated	Copper alloys Copper coated	
	Micro-emulsions	SL 2500	•		•	•	Wet drawing of zinc electro plated steel.
		SL 3440 - SL 3500 - SL 4492 L	•		•	•	Wet drawing. Versatile. High bath life. (CO <sub>2</sub> , Fiber,)
		SL 2868		•			Forming, wet drawing. EP additives.
		SL 436	•				Forming of Flux Cored Wire.
VICAFIL™	Liquid soaps	SL 4604				•	CO <sub>2</sub> copper coated wire, skin pass, high life (acid resistant).
VICA		SL 4096	•	•			Bright wire, skin pass.
		SL 4095	•				Wet drawing, last die: In line wire cleaning.
		SL 2000 - SL 1613	•		•		Wet drawing of low carbon steel (fine wires)
	Disper- sions	SL 3600	•		•	•	Steelcord, saw wire, CO <sub>2</sub> wire (skin pass).
VICAFIL™	Pastes	SP 466 - SP 6	•		•		Skin pass drawing : bright finish, low residues.

Please refer to our complementary additives range to help you manage your lubricant lifetime and performance.











## NEAT OILS & GREASES SELECTION GUIDE





## **NEAT OILS**

CONDAT offers a wide range of lubricants with different types and levels of additives mainly used as follows:

- chlorinated for stainless steel
- sulphurized for carbon steel
- fatty ester for aluminum and copper

A large range of viscosity is available to fit most of the cold forming applications ranging from ferrous to non ferrous materials.

Chemically neat lubricants can be also classified by their base oil:

- mineral
- semi-synthetic
- synthetic

## **GREASES**

Condat proposes a specific range for applications where a very viscous product is required to provide a thick lubricant film enabling strong deformation. These products are typically used for single pass / skin-pass drawing for cold heading applications or prior to wet-drawing, as well as for drawing bars (round and profiles) and tubes.

			Carbon Steel	Stainless Steel	Zinc Coated	Aluminum & Alloys	Copper alloys Copper coated	
	Neat oils	TFH 12 - TFH 1432	•		•	•	•	Low viscosities. Rolling and drawing. Low residues.
		TFH 660 - TFH 1158	•		•		•	Low viscosities. Rolling and wet drawing.
		TFH 1218 - TFH 1167 - TFH 1460				•		Aluminum welding wire. High resistance to oxidation.
		TFH 376	•					Wire straightening & protection.
		TFH 1058 - TFH 4002	•		•		•	Large diameter wire or bar drawing. No residues after annealing.
VICAFIL"		TFH 429 - TFH 1551 - TFH 200	•					Skin pass drawing. Cold heading. Bar drawing.
VICA		TFH 81	•					High duty. No residues after annealing.
		TFH 223	•	•	•			Versatile. Very small diameters. High speed. Synthetic.
		TFH 4036 - TFH 432 TFH 237		•				Difficult drawings. EP additives. Low viscosities.
		TFH 4557- TFH 4321		•				Difficult drawings. EP additives.
		TFH HCB - TFH 486 - TFH 4065		•				Difficult drawings. EP additives. High viscosities.
	Greases	TFG 879	•		•			Skin pass before wet drawing. Drawing of baked Flux Core wire.
		TFG 741	•		•			Skin pass drawing (cold heading, drawing before jacketing).
VICAFIL"		TFG 4298	•	•	•		•	Bar drawing, no residues after annealing.
		TFG 4295		•		•		Skin pass drawing (cold heading, bars & profiles).

Please refer to our complementary additives range to help you manage your lubricant lifetime and performance.



