

## 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 coppercoated and zinc-galvanized wires. Designed to be operated at low concentrations to allow for the optimum cooling properties, these lubricants provide for 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

۲

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 reducing consumption and waste (including disposal costs).

#### PASTES

۲

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 such as  $MoS_2$  for the most demanding applications (heavy draw reductions).

			Carbon Steel	Stainless Steel	Zinc Coated	Aluminum & Alloys	Copper alloys Copper coated	
	Liquid Soaps	SL 3400	•		•		•	Versatile.
		SL 3500	٠		٠		۰	Versatile. High bath life.
		SL 4492 L	•		•			Zinc galvanised. Clean bright finish
z	Disper- sions	SL 3600	٠				٥	High performance applications. Saw wire and $\mbox{CO}_{\mbox{\tiny 2}}$ wire (final skin pass).
	Emulsions	SL 4095	•					Last die. Wire cleaning in line.
VIC/		SL 1613 - SL 2000	۰		۰			Low carbon steel (fine wires)
		SL 380 - SL 4604	•		•			$\ensuremath{\text{CO}}_{\ensuremath{\text{z}}}$ wire. Skin pass. High life (resistant to acid pollution)
		SL 2868		٠				High perfomances. Containing EP additives.
		SL 550				•		High performance, no stairing
		WC 6C	٠		٠		•	Weaving compound (any coating: nylon, zinc,).
z	Pastes	SP 466 - SP 6	٠		•			Skin pass drawing : bright finish, low residues.
VICAFIL		SP 1358 - SP 1360	•					Skin pass, high duty (cold heading, plating quality).
VIC		SP 1356 G	•	•				Skin pass, very high duty (poor surface preparation, high reductions).

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







## PROVIDING INNOVATION TO YOUR INDUSTRY

۲

CONDAT



# 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

۲

- semi-synthetic
- synthetic

### GREASES

۲

Condat developed 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  $\checkmark$  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	
		TFH 12 - TFH 1432	•		•	•	•	Low viscosities. Rolling and drawing. Low residues.
		TFH 660 - TFH 1158	٠		•		٠	Low viscosities. Rolling and wet drawing.
		TFH 1218 - TFH 1167 - TFH 1460				•		Aluminum welding wire. High resistance to oxidation.
		TFH 376	۰					Wire straightening & protection.
	Neat oils	TFH 1058 - TFH 4002	•		•		•	Large diameter wire or bar drawing. No residues after annealing.
		TFH 429 - TFH 1551 - TFH 200	۰					Skin pass drawing. Cold heading. Bar drawing.
VICA		TFH 81	٠					High duty. No residues after annealing.
		TFH 223	۰	۰	۰			Versatile. Very small diameters. High speed. Synthetic.
		TFH 1039 - TFH 4036 - TFH 432 TFH 237		۰				Difficult drawings. EP additives. Low viscosities.
		TFH 4557- TFH 4321		۰				Difficult drawings. EP additives.
		TFH HCB - TFH 486 - TFH 4065		٠				Difficult drawings. EP additives. High viscosities.
	Greases	TFG 879	•		•			Skin pass before wet drawing. Drawing of baked Flux Core wire.
E E		TFG 741	•		•			Skin pass drawing (cold heading, drawing before jacketing).
VICAFIL		TFG 4298	•	•	•		٠	Bar drawing, no residues after annealing.
		TFG 4295 - TFG HCE		•				Skin pass drawing (cold heading, bars & profiles).

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





۲