

MILD STEEL / LOW CARBON WIRE

Mild Steel / Low Carbon

Drawing of low carbon wires, either mechanically descaled or pickled, is usually done with a low fat calcium based dry drawing lubricant or a heat stable sodium based dry drawing lubricant.

If the wire is to be further treated after drawing, a water-soluble sodium-based dry drawing agent should be used – at least in the final drafts.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES: Fence wire | Nail wire | Construction steel | Binding wire

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	G40	General use	Calcium based, Borax free
	SL2522	General use	Sodium based, TiO ₂ free, Borax free
	C 4540	Fibre wire, PSC wire	Blended lubricant, high softening point, TiO ₂ free, Borax free
	SL 7010BXL	Fibre wire	Sodium based, TiO ₂ free, Borax free
	G 58	Fence wire, Nail wire	Calcium based, Borax free
	AT 10	General use	Calcium based, TiO_2 free, Borax free
Wet drawing lubricants	EHD 2800	Galvanized wire	General purpose
	Cortrax 60	Phosphated and bright wire	General purpose
	Plegolat HPC	bright wire	General purpose vegetable based paste
Coating agents	ZEL512	Generel use	Borax free
	ZEL565	bright wire	Borax-free, for finishing phosphatised and
			bare wire and inline









STEEL WIRE / HIGH CARBON

Steel wire / High Carbon

Calcium-based dry drawing lubricants with a medium fat content are mainly used for drawing steel wires.

When using pressure drawing dies versus normal drawing dies, the selection of the correct wire drawing agent may vary. Product selection is influenced by the drawing speed and roughness in the multiple draw, as well as possible reactions between calcium and sodium based dry drawing lubricants during the drawing process. For example: The higher the drawing speed, the higher the wire temperature, as well as drawing die temperature and the higher the adhesion and temperature stability of the drawing agent must be.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES:

Steel cord and bead wire | Rope wire | Spring wire | Saw wire

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	C 850	Spring wire, MD or pickled + coating	Sodium based, EP calcium, high softening point, Ti free, Borax free	0 ₂ Find your local
	CCF 6 SL 808 BS	Rope wire, phosphated and gal wire Saw wire, Steel cord and bead wire, Spring wire	Calcium based, TiO ₂ free, Borax free Pickled or phosphated, sodium based, high cleanability, low softening, TiO ₂ free, Borax free	sales partner:
	SL 7010 BXL SL 2010	Saw wire, Steel cord and bead wire Spring wire, Rope wire, Bead wire	Sodium based, TiO_2 free, Borax free Sodium based, TiO_2 free, Borax free Fine wire, General purpose	
	TR41B	Bead wire, PSC wire, technical spring wire	High up, calcium based, high softening, Borax free	
Wet drawing lubricants	EHD 235 EHD 580	Galvanized wire Phosphated black wire	General purpose General purpose	
Coating agents	ZEL565 ZEL503	Dipping phosphated and bright wire Spring wire	Borax free Inline, Borax free	a brand of LUBRICATION



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STAINLESS STEEL WIRE

Stainless steel wire

High performance calcium and sodium based dry drawing lubricants are used in the production of stainless steel wire.

Synthetic drawing lubricants protect the wire during the subsequent severe deformation process in the cold heading process. One of the most significant innovations is the use of emulsions based on vegetable oils and fats in the single draw. The result is optimum gloss and cleanability.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES:

Product areas (nails, bolts, screws, springs and others) with special requirements such as: corrosion protection and media resistance

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	1793	Welding wire Calcium based, TiO ₂ free, Borax free	
	TR 41 B	General use	Calcium based, heavy pick up, Borax free
	2149	Rope wire, Spring wire	Calcium based, TiO ₂ free, Borax free
	C 4550	General purpose	Sodium based, high softening, TiO ₂ free, Borax free
	V 60 B	General purpose	Sodium based, low softening, $\mathrm{TiO}_{_{2}}$ free, Borax free
Wet drawing lubricants	EHD 9000	Unsoluble oil for single pass	Vegetable based
	Cortrax 60	Single pass	Very clean water soluble
Coating agents	ZEL 570 ZEL 900	General purpose Bright skin pass in oil	Dipping and inline, Borax free Borax free









REINFORCING WIRE

Reinforcing wire

The forming process can be done either by rolling or drawing. It is important to choose a coating agent with uniform coverage for the rolling process.

Transportability and weldability are important factors. Fibre wire/fibre rod is preferably produced on long drawing machines. It is necessary to use heat-stable sodium-based dry drawing lubricants, as high speeds are used. These dry drawing lubricants can be used with ordinary drawing dies and pressure drawing dies.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES: Fibres | Welded mesh

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	C 4540	Fibres, PSC wire	Sodium-Calcium based, TiO, free, Borax free
	SL 2020 BS	Fibres	Sodium based, TiO, free, Borax free
	DS 51 E	Welded mesh (rolling)	Sodium based, TiO, free, Borax free
	DS 608	Welded mesh (rolling)	Calcium based, TiO, free, Borax free
	DS 609	Welded mesh (rolling, drawing)	Calcium based, TiO ₂ free, Borax free
Wet drawing lubricants	EHD 580	wet drawing	Wet drawing
	EHD 235	Mesh wire	Wet spray of welded mesh
Coating agents	ZEL 520	ZEL 520, general purpose, inline coating, Borax free	Inline coating, Borax free
	ZEL 512	ZEL 512, Fiber wire, inline coating, Borax free	Inline coating, Borax free



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PSC WIRE STRAND

PSC wire strand

With prestressing steels it is important to achieve the lowest possible residues in the tempering furnace. Traxit Wire Lubrication offers both dry drawing lubricants for prestressing steel wire and strand wire with the highest heat stability.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES: PSC Wire and PSC Strand

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	G 80 CCF 8 GT 7 TR 41B8 C4540 F80 BXL	PSC wire/strand PSC wire/strand PSC wire/strand Heavy coating, first passes Last passes, high softening Last passes, low softening high heat resistance	Calcium based, MoS_2 , TiO_2 free, Borax free Calcium based, TiO_2 free, Borax free Calcium based, MoS_2 , TiO_2 free, Borax free Calcium based Sodium based, EP calcium, TiO_2 free, Borax free Sodium based, last passes, low softening, TiO_2 free, Borax free
Wet drawing lubricants	none	none	none
Coating agents	ZEL 565	Phosphated wire	Dipping or inline, Borax free









COLD HEADING WIRE (CHQ)

Cold Heading Wire (CHQ)

Carbon wire Cold heading is usually phosphated. After annealing, a sodium-based dry drawing lubricant with a small amount of fillers is suitable, which enables a longer service life of the machine parts of the subsequent cold forming and very low softening point.



USE IN THE FOLLOWING EXAMPLE INDUSTRIES:

Automotive | Screws | Bolts

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	Traxit 2	Stainless Steel, low softening	Synthetic based, TiO_2 free, Borax free
	2889	Bolts, Screws low softening,	Sodium-Calcium based, TiO ₂ free,
			Borax free
	KM 2	Bolts, Screws, very low softening	Sodium based, TiO, free, Borax free
	GT 7	for high reduction and	Calcium based, contains MoS ₂ , TiO ₂ free,
		phos-free wire	Borax free
Wet drawing lubricants	EHD 9000	Unsoluble oil for single pass	Vegetable based, water unsoluble
Coating agents	ZEL 565	Carbon steel, dipping or inline, phos- phated and bright wire, contains soap	Borax free
	ZEL 570	Stainless steel wire, dipping or inline	none







WELDING WIRE

Welding wire

For the wire drawing all passes sodium or a combination of adherent dry drawing lubricants based on calcium in the first drafts and on sodium in the latter draws is common.

We additionally offer special calcium-sodium mixed products that can be used in all drafts. For the wet draw and/or only the final wet draw, special emulsions have been developed that offer optimal properties. The emulsions clean the wire from the dry drawing lubricant and lubricate at the same time. The Skin Pass emulsion has the positive property of neutralizing residual acid from the copper plating and protecting against corrosion.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES:

MIG welding | MAG welding | SUB ARC welding Flux core (flux cored welding) | Electrodes (stick welding wire)

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	G 41	MIG and MAG welding	Calcium based, heavy coating, Borax free
	SL 7010 BXL	MIG and MAG welding	Sodium based, TiO ₂ free, Borax free
	2830	Flux cored welding (non-baked)	Sodium based, TiO, free, Borax free
	C8510	MIG, MAG, direct drawing	Sodium-calcium based, TiO, and Borax free
	AT 10	Stick electrodes carbon wire	Calcium based, TiO, free, Borax free
	1793	Stick electrode SST	TiO ₂ free, Borax free
Wet drawing lubricants	EHD 580	Multi pass drawing	none
	EHD 600SK	Skin pass copper coating and copper free	none
Coating agents	ZEL 520	General purpose	Inline, Borax free
	ZEL 565	Dipping	Borax free









ROPE WIRE

Rope wire

Rope wire requires dry drawing lubricants with a high fat content.

This high-strength wire is usually phosphated or galvanised. Initially, a calcium-based dry drawing lubricant is required for maximum absorption, followed by a sodium-based dry drawing lubricant with additives for the highest speeds in the final draws of the machine. As a result of the friction and speed of the process, high temperatures are reached in all drawing dies of the machine, which require temperature-stable dry drawing lubricants.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES: Bridges | Elevators

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	GT 65	Galvanised and zinc/aluminum	Calcium based, TiO ₂ free, Borax free
	GT 50	Phosphated	Calcium based, TiO, free, Borax free
	CCF 6 (F)	Galvanised	Calcium based, TiO_2 free, Borax free
	SL 2522	Phosphated wire	Sodium soap, high softening, titana and Borax free
	SL 2010 BX	Phosphated fine wire	Sodium based, low softening, TiO ₂ free, Borax free
	V 15 SEC	Galvanised wire	Sodium based, TiO ₂ free, Borax free
Wet drawing lubricants	EHD 235	Galvanized wire	none
	EHD 580	Phosphated	none
Coating agents	ZEL510L	MD	Inline process, Borax free
	ZEL565	Phosphated, dipping process	none



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RUBBER APPLICATIONS

Rubber applications

For wire types with high tensile strength, temperature-stable sodium-based dry drawing lubricants are used. Both the dry drawing lubricant and the coating must have a high cleanability and may only have a few residues.

In the industry, there is a change in pre-treatment from pickling to mechanical descaling. This process can also change the choice of drawing lubricant.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES:

Hose wire | Conveyor belts | Steel cord | Bead wire

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	F 80 BS	Steel cord, Bead wire	Sodium based, lof softening, TiO ₂ free, Borax free
	SL 205 BX	Steel cord, Bead wire, second	Sodium based, low softeing, TiO ₂ free, Borax free,
		urawing small misir ulameter	
	SL 7010 BXL	Hose wire, Bead wire, Steel cord,	Sodium based, TiO ₂ free, Borax free
		Conveyor belts	
	SL 2025 BXL	Hose wire, Bead wire, Steel cord,	Sodium based, TiO ₂ free
		Conveyor belts	-
	C4540	1st pass	Sodium based with EP calcium, titania and Borax free









OIL TEMPERED WIRE

Oil tempered wire

For high quality high carbon wire it is important to achieve an appropriate structure after the annealing process. The surface, which has partial oxidation, requires a calcium-based dry drawing lubricant with high adhesion and stability.

USE IN THE FOLLOWING EXAMPLE INDUSTRIES: Technical springs / automotive Springs

PRODUCT RECOMMENDATIONS:

Dry drawing lubricants	TR 40	For automotive springs, for shaving die, phosphated and phosphate free coating, multi pass, Calcium based, TiO ₂ free, Borax free	
	GT 45 B	Automotive springs, phosphated and phosphate free coating, Calcium based, Borax free	
	GT 65	Technical springs, annealed and MD, low dust, Calcium based, TiO, free, Borax free	Find yo
	GT 70	Technical springs, annealed and MD, low dust, Calcium based, $Mo\tilde{S}_2$, TiO $_2$ free, Borax free	sales
Wet drawing lubricants	none	none	回殺
Coating agents	ZEL 503	Technical and automotive spring wire, inline process, silicate based, Borax free	
	ZEL 760L	Technical and automotive spring wire, inline process	





