



## **TUBE DRAWING LUBRICANTS**

**RichardsApex** offers a complete line of products for application in the Tube Drawing Industry. RichardsApex's experience and flexibility in the manufacturing of metal working lubricants allows us to formulate compounds to meet the demands of a variety of metals, processes, equipment, and finish requirements. Whatever your particular application - nonferrous, ferrous or alloys - our technically trained Field Representatives can recommend the products that fulfill your specified needs.

### **NONFERROUS METALS**

- TDS-10** A paste-form, water-soluble, soap-fat product with excellent wetting properties for use on copper and aluminum. Lubricity properties improve when lubricant film is dried prior to drawing. Contains polar lubricity agents, anti-oxidants and biocide.
- DW-20ST** An emulsifiable, paste-form, inhibited lubricant for bright annealed copper and brass tubing. Provides protection against oxidation, stain and tarnish in storage or shipment. May be used in prelube dip tank or pumped directly on tubing at the bench.
- TDP-681** Light viscosity, synthetic base, clean burning oil for use as I. D. lube on small diameter copper, brass, and cupro-nickel tubing.
- TDP-682** Medium viscosity, synthetic base oil containing extreme pressure and fatty lubricity additives for use as both an O. D. and I. D. lubricant on copper, brass and aluminum. Formulation provides clean burn off of residual lube during annealing process.
- TDP-90X** Low cost, mineral oil lube, fortified with polar fatty lubricity agents, synthetic oils, and a viscosity index improver. Utilized in the sinking and drawing of copper tubing on a bench.
- TDP-30N** High viscosity, clean burning, synthetic-based lube. Recommended for use on severe draws of aluminum, copper, and possibly some light reductions on stainless tubing.

## PRODUCT DATA



[www.RichardsApex.com](http://www.RichardsApex.com)

Phone: 215-487-1100

## FERROUS METALS

**TDP-51MTR** A medium viscosity, oil-form compound fortified with extreme pressure additives which will provide for maximum die life and fatty lubricity agents to aid in heavy wall carbon steel draws.

**SCO-13AR** A lighter viscosity, low smoke generating oil with E. P. additives and rust inhibiting properties, for use on carbon steel. Leaves a film on metal surface to protect against corrosion during limited storage.

**SRC-4** A synthetic, oil free, water soluble product with good rust inhibiting properties. Recommended for roll forming welded steel tubing. Leaves a rust inhibiting film on metal surface to protect against corrosion while in process.

## ALLOYS

**201** A viscous, chlorinated oil for "general purpose" block and bench drawing of stainless and alloy tubing.

**FR-300** Clear, viscous, "201" type oil, with lube emulsifier added to enhance aqueous cleaning operations. Similar universal application use for stainless and alloy tubing.

**227-WX** A yellow, moderately heavy, viscous lube, fortified with chlorine and fatty additives for plug and mandrel drawing stainless steel and nickel alloys. Emulsifiers have been incorporated into the compound to improve soil removal during aqueous cleaning.

**236-WX** A high viscosity, chlorinated oil formulated with E.P. and fatty lubricity agents to maintain lubrication and viscosity during severe drafting applications. Recommended for use on both bench and block drawing. Additives incorporated to facilitate aqueous cleaning.

**260-WX** A barely pourable, polymer-filled product for difficult draws of stainless, alloys and uncoated stock. Contains emulsifiers to aid in subsequent aqueous cleaning or solvent degreasing processes.