

Product Description

Anglomoil Tube Drawing Fluid is a high viscosity high performance cold metal forming lubricant designed to be used neat.

Anglomoil Tube Drawing Fluid is chlorine free and has been developed containing high levels of lubricity additives which are designed to protect tooling and improve surface finish in stainless steel and other metals inclusive of yellow metal in forming applications where high performance characteristics are required.

Product Features & Benefits

Anglomoil Tube Drawing Fluid Typical applications would include drawing, deep drawing, forming and bending operations in materials such as copper, brass, stainless steel and other metals. On more sensitive materials it is recommended that stain testing is carried out before entering high volume production.

Additional Information

Anglomoil Tube Drawing Fluid can be applied by hand, dip, swab, drip, pad or spray systems capable of handling a material of this viscosity.

Benefits and Qualities

- Suitable for most metals.
- Easy to apply (use neat as supplied).
- High level of EP additives and high film strength for severe drawing operations.
- Contains corrosion inhibitors for protection between operations.
- Contains no solids or "fillers" - no welding problems on treated parts.

Tube Drawing¹

Tube drawing is a metalworking process to size tube by shrinking a large diameter tube into a smaller one, by drawing the tube through a die. This process produces high quality tubing with precise dimensions, good surface finish, and the added strength of cold working. Because it is so versatile, tube drawing is suitable for both large and small scale production. There are five types of tube drawing: tube sinking, mandrel drawing, stationary mandrel, moving mandrel, and floating mandrel. A mandrel is used in many of the types to prevent buckling or wrinkling in the workpiece.

Tube sinking, also known as free tube drawing, reduces the diameter of the tube without a mandrel inside the tube. The inner diameter (ID) is determined by the inner and outer diameter of the stock tube, the outer diameter of the final product, the length of the die landing, the amount of back tension, and the friction between the tube and the die.

Rod drawing is the process that draws the tube with a mandrel inside the tube; the mandrel is drawn with the tube.

Fixed plug drawing, also known as stationary mandrel drawing, uses a mandrel at the end of the die to shape the ID of the tube. This process is slow and the area reductions are limited, but it gives the best inner surface finish of any of the processes. This is the oldest tube drawing method.

Floating plug drawing, also known as floating mandrel drawing, uses a mandrel that is not anchored whatsoever to shape the ID of the tube. The mandrel is held in by the friction forces between the mandrel and the tube. This axial force is given by friction and pressure.

Tethered plug drawing, also known as semi-floating mandrel drawing, is a mix between floating plug drawing and fixed plug drawing. The mandrel is allowed to float, but it still anchored via a tether.

¹ Wikipedia

Typical Characteristics

Physical Properties	
S.G @20°C	0.8866
KV @40°C	317 cSt
KV @100°C	28.4 cSt
VI	121

Anglomoil Superior Lubricants

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