



Tube drawing Steel

Starting from a sheet coil or hollow, tube drawing is required to create exact diameters, inside and outside, right through to complex cross sections. Principally comparable with wire drawing, the "inside and outside" aspect (higher friction) here additionally needs to be taken into account for selecting the optimal lubrication system.

Beneath these lubrication systems there are phosphate coatings created with innovative products of the latest generation: approx. 20-80% less sludge formation, reduced area-related consumption, and optimal tuning to the respective forming process and lubricants used. One principal rule applies: thinner phosphate coatings and softer lubricants for welded tubes, thicker phosphate coatings and harder lubricants for seamless tubes.

The lubricants continue to be predominantly soaps, but polymers can replace them with improved results, depending on the application. Solid lubricants are generally not suitable for tube drawing because of the high friction coefficients.

ZWEZ is one of the world's most innovative manufacturers with a broad range of products. Experienced experts are available for technical support of your application.

	Steel			
■ = standard □ = alternative ◆ = as required	Welded tubes (also hollow profiles)	Seamless tubes	Drawing of hollow bodies (tube processing)	SLS process <u>without</u> phosphating
ZWEZ-Clean Cleaning/degreasing	◆	◆	◆	
ZWEZ-Acid Pickling	■	■	◆	
ZWEZ-Cond Activating	■	■	■	◆
ZWEZ-Coat Zinc phosphate - thin - medium	■	■ □	■	
ZWEZ-Rinse Neutralizing	■	■	■	
ZWEZ-Lube Soap lubricant Polymer lubricant	■ □	■ □	■ □	■