



Kluthe

TOTAL WIRE PROCESSING

HAKUFORM for copper and brass wire

METALWORKING&CLEANING

FORMING&PROTECTION

PRETREATMENT

PAINTSHOP

www.kluthe.com

HAKUFORM WIRE DRAWING PRODUCTS

FOR MANUFACTURING AND PROCESSING OF COPPER AND BRASS WIRE

The **HAKUFORM wire series** offers top performers which are optimizing your process for all applications in copper wire production. The use of selected and innovative raw materials improves the surface quality and increases the processing speed, thus creating the basis for the development towards e-mobility and the trend to decentralized energy supply.

HAKUFORM 70-4 OF is a formaldehyde-free EP coolant emulsion that is used for copper wire cold rolling and first drawing. This product is characterized by high forming performance, good surface quality and easy washability.

HAKUFLUID CWD is a clearly water-soluble, boron-free, full synthetic wire drawing agent for second and third drawing with a very good sliding effect and lubrication.

HAKUFORM 10-80s are paraffin-containing release agents and lubricants ("winding aids"), even the finest copper (enameled) wire can be wound up and down at the highest speed.

The **HAKUFORM Wire series** is not only suitable for copper, but in many cases also for brass, bronze, steel (bright or galvanized) and stainless steel wire. Frequent applications are the production of oxygen-free copper (OFC) or copper alloys, wire strands for electrical lines or "hairpins" for high-performance electric motors as well as thick wire or the finest enameled copper wire. Benefit from our application know-how by using perfectly coordinated HAKUPUR cleaners for pre-, intermediate and final cleaning.

ADVANTAGES

HAKUFORM 70-4 OF

- Optimal wetting and film formation
- High forming capability
- Formaldehyde-free
- High surface quality
- Free of chlorine, boron and secondary amines

HAKUFLUID CWD

- Very good corrosion protection
- Free of boron, nitrite and secondary amines
- Good sliding and lubricating properties

HAKUFORM 10-80s

- Low aromatic content
- Very mild odour
- Different paraffin contents, suitable for your application

This is #TotalWireProcessing.

For cold rolling, first drawing and cold forming	HAKUFORM 70-4 OF	Formaldehyde & solvent free, powerful, easy to wash off
For second and third drawing	HAKUFLUID CWD	High drawing performance & surface quality
Winding aids for fine wire and enameled copper wire	HAKUFORM 10-80s	Low aromatics, mild odor, with different paraffin content
Cleaner for pre-, intermediate and final cleaning	HAKUPUR CLEANER	Perfectly matched to the respective application