WIRE LAB COMPANY WILCO



WILCO Model 1030 Water Jet Descaling System



Engineered Products for the Wire Drawing Industry

MODEL 1030 Water Jet Descaling System

INTENDED USE

The WILCO Model 1030 Water Jet Descaling System is intended for the continuous, in-line mechanical descaling and cleaning of hot-rolled steel wire rod.

SYSTEM CONFIGURATION

The Descaling System consists of a 3-sheave Scale Breaker and Water Jet Cleaner mounted on a common base plate. The Water Jet Cleaner includes a 50 gallon – 162 liter closed-loop wash water system and a magnetic separator for continuously removing scale residues from the wash water.

SYSTEM OPERATIONS

In operation, the rod is pulled through the Scale Breaker by the wire drawing machine. Essentially all scale, on rod properly made for mechanical descaling and with 0.5-0.75 wt % scale, is broken loose. 80-90% of the loose scale falls from the rod and collects in the Scale Breaker cabinet. The remaining 10-20% is loose but clinging to the rod due to the electrostatic charge. This undesirable scale residue is removed by the Water Jet Cleaner using a combination water wash/air dry.

The resulting rod is production clean and ready for drawing into wire.

SYSTEM CAPABILITY

Rod Composition – The WILCO Model 1030 is designed to mechanically descale low through high carbon hot-rolled steel rods.

Rod Sizes – The system is capable of processing rod sizes of 7/32 inch thru 1/2 inch – 5.5 mm-12.7 mm diameter.

The *standard* Model 1030 is equipped to process low through high carbon rod .218 through .266 inch – 5.5-6.75 mm diameter.

Rod Speed – Rod inlet speeds up to 850 fpm – 4.3 m/s can be properly descaled and cleaned.

Rod Condition – The Model 1030 is uniquely capable of processing **wet rod**.

Rod Line Height – The entire system is adjustable from 31 inches to 41 inches high – 79 cm to 104 cm.

SYSTEM SPACE REQUIREMENT

The Model 1030 footprint is 76 inches long by 68 inches wide – 1.9 m by 1.7 m (footprint drawing available).

EQUIPMENT UTILITY REQUIREMENTS

Scale Breaker – none required.

Water Jet Cleaner

Air: 22-24 cfm – 11 l/s at 90 psi – 6.2 bar

Water: initially 35 gal - 132 l

Electrical: 220 V, 60 Hz, 3 Ph.

all off-shore electrics available

For additional information please contact:

