# WIRE LAB COMPANY WILCO



**Engineered Products for the Wire Drawing Industry** 

# MODEL 1060 Mechanical Descaling System with Precoating

#### **INTENDED USE**

The WILCO Model 1060 Mechanical Descaling/ Precoating System is intended for the continuous, in-line descaling, cleaning, coating and drying of hot-rolled steel wire rod.

### SYSTEM CONFIGURATION

The Descaling System consists of a 3-sheave Scale Breaker and a Cleaner/Precoater mounted on a common base plate. The Cleaner/Precoater includes a 60 gallon – 227 *liter* closed-loop, heated fluid system and a magnetic separator for continuously removing scale residues from the hot cleaning/coating solution.

### 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 Cleaner/Coater which simultaneously coats the rod with any one of a variety of commercial precoat compounds. The rod is instantaneously dried on-the-fly.

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

### SYSTEM CAPABILITY

*Rod Composition* – The WILCO Model 1060 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 1060 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 descaled, cleaned, coated and thoroughly dried.

*Rod Condition* – The Model 1060 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 1060 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.

Cleaner/Coater

Air: 45 psi – 3.1 bar in quantity of 11-12 cfm – 5.5 l/s.

Water: initially 50 gal - 189 /

Electrical: 440 V, 60 Hz, 3 Ph. all off-shore electrics available

For additional information please contact:

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