

# WIRE LAB COMPANY

## **WILCO Model 1750 Automatic Brush Descaling System with Precoating**



**Engineered Products for the Wire Drawing Industry**

# MODEL 1750

## Automatic Brush Descaling/Precoating System

### INTENDED USE

The WILCO Model 1750 Automatic Brush Descaling/Precoating System is intended for continuous in-line descaling, aggressive brush cleaning and precoating of hot-rolled steel wire rod.

### SYSTEM CONFIGURATION

The System consists of a 3-sheave Scale Breaker, Automatic Rod Brusher and Cleaner/Precoater mounted on a common base plate.

The Rod Brusher consists of 2 halves each with 4 brushes oriented 90° to the rod direction. The Brusher controls automatically maintain a selectable brush contact pressure with the rod.

The Cleaner/Precoater includes a tubular head, a 60 gal – 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, rod is pulled through the Scale Breaker by the wire drawing machine breaking loose the scale. The 10-20% of loose scale that sticks to the rod is removed by the Automatic Rod Brusher which also removes any adherent patches of hot-rolled scale, red rust and secondary scale. **As brushes wear, the controls automatically advance the brushes to maintain the selected brush contact pressure setting.** The Cleaner/Precoater, using a heated precoat solution, washes residues from the rod, simultaneously coating and immediately drying the rod.

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

### SYSTEM CAPABILITY

*Rod Composition* – The WILCO Model 1750 is designed to mechanically descale, brush and precoat 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* set-up is for rod .218 through .266 inch – 5.5-6.75 mm diameter.

*Rod Speed* – Rod inlet speeds up to 350 fpm – 1.8 m/s can be descaled, aggressively brushed, cleaned and coated.

*Rod Condition* – The Model 1750 is capable of processing rod with adherent scale patches, red rust and secondary scale.

*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 1750 has a footprint of 108 inches long by 92 inches wide – 2.74 m by 2.3 m (footprint drawing available).

### EQUIPMENT UTILITY REQUIREMENTS

#### *Automatic Brusher*

Electrical: 440 V, 60 Hz, 3 Ph

#### *Cleaner/Coater*

Electrical: 440 V, 60 Hz, 3 Ph

Air: 11-12 cfm–5.5 l/s at 45 psi–5.5 bar

All off-shore electrics available.

*For additional information please contact:*

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