WILCO
Model 1750
Automatic Brush Descaling System with Precoating
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: