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:

WIRE LAB COMPANY WILCO

15300 Industrial Parkway Cleveland, Ohio 44135 PH: (216) 362-0800 FAX: (216) 433-0007 E-mail: e-mail@wirelab.com WEBSITE: www.wirelab.com