NEWS RELEASE Maverick Tube Installs 90,000# x 84" x 5/8" Slitting Line

Armorel, AR – Maverick Tube has installed a massive Braner/Loopco slitting line to produce high-strength heavy-gauge slit coil at its Armorel, AR structural tube facility. The new *"Turret Head"* slitting line is designed to process $90,00\# \times 84"$ wide 100,000 PSI yield strength hot rolled coil in gauges from 5/8" down to 14 gauge. More than 1,100 HP is employed to process the high-strength heavy-gauge coils at line speeds to 420 FPM.



90,000# x 84" x 5/8" Slitting Line

Coil Storage & Loading: 90,000# x 84" OD master coils are staged at the entry end of the line on coil saddles. A hydraulic coil buggy retrieves coils from the saddles and loads the coils onto a Cone Uncoiler. The cones handle 20"-34" ID coils. A massive Coil Hold-Down anchored to the floor snubs the coil outer wrap and assists threading the coil. The powered hold-down roll "floats" in its frame to allow the coil to be laterally positioned while the roll is engaged.

Entry Section: The lead end of the coil is peeled and fed into Entry Pinch Rolls and a 5-Roll Straightener. The Straightener removes coil set curvature allowing for faster



Entry Coil Saddles and Cone Uncoiler

strip threading, and removes the coil "tail hook" during tail-out. Electronic digital readouts indicate the motorized screw jack straightening roll elevations, while quickopen hydraulic cylinders open and close the flattening rolls without changing the roll gap setting. The flattened strip is advanced into the Cropping Shear where the coil head end is cut square. The Cropping Shear is equipped with powered "ejector rolls" to eject the scrap coil tail into the Scrap Cart. Scrap generated from head and tail end cropping is collected in a Self-Dumping Scrap Cart that allows for hands-free scrap disposal. Two (2) sets of hydraulic cylinder positioned hardened tool steel Roller Side Guides are employed to guide the strip as it feeds into the Turret Slitter.



5-Roll Quick-Open Straightener

Turret Slitter: A huge 15" arbor x 84" two-head quickchange *Turret Head*TM Slitter is included to slit the highstrength 5/8" to 14-gauge strip. 14" thick precision machined solid steel plate bearing housings weighing more than 7,000# each support the arbors in tapered roller bearings. 150 ton motorized screw jacks are attached to the bearing housings to support the slitter arbors. Power for threading and loop slitting lighter gauges is provided by a 400 HP-DC drive.



15" x 84" x 400HP Turret Head™ Slitter



Dual Rotor Helical Scrap Chopper: Scrap edge trim is automatically directed into a Dual Rotor Scrap Chopper. Independent inboard and outboard heads are equipped with upper and lower rotors fitted with helical cutters. Upper and lower rotors are geared with zero-backlash gearing for perfect rotational synchronization. A 200 HP DC motor synchronized with the slitter speed drives inboard and outboard Chopper heads. Chopped scrap is collected and discharged into a scrap bucket via hinged steel belt conveyor.



5/8" Dual Rotor Scrap Chopper

Strip Tensioning: A hydraulic Threading Table carries the slit strips over the looping pit, through a set of strip separators, and into a Hydraulic Strip Tension Stand. The two-sets of quick-change strip separator arbors are positioned for off-line set-up and running by hydraulic cylinders. The slit strips are supported on a large pass line roll at the exit side of the Tension Stand and fed into a Hydraulic Threading Funnel that directs the strips into the Recoiler drum gripper bar. A hydraulic Overarm Separator with hydraulic tail hold-downs guide the strips onto the Recoiler.



5/8" x 84" Threading Table & Tension Stand



Braner USA, Inc., 9301 W. Bernice St., Schiller Park, IL 60176 Phone (847) 671-6210 Fax: (847) 671-0537 www.braner.com **Recoiling:** The slit strips are rewound on a massive Recoiler drum with 2" thick heat-treated forged steel expanding segments and a solid 3" diameter hydraulic gripper bar. A floor mounted Outboard Support engages the free end of the Recoiler drum to eliminate deflection while winding 90,000# coils. A huge multiple ratio parallel shaft helical gear reducer and DC motor generates over 1.1 million inch pounds of torque to rewind the high-strength heavy-gauge material. After the slit coils are securely banded, they are unloaded from the Recoiler by Coil Car and transferred to a 4-Arm Coil Storage Turnstile.



90,000# x 84" x 400HP Recoiler w/Outboard

Line Operation: The slitting line can be operated in any of three slitting modes. The "push-pull" mode is utilized for slitting 5/8" down to 7/16". The "pull-thru" mode is utilized for slitting 3/8" to 3/16". Lighter gauge coil is processed in the "single-loop" mode. All slitting modes employ the hydraulic Tension Stand to produce tightly wound slit coils. Constant slitting speed and Scrap Chopper synchronization is maintained throughout the build-up of the coil on the Recoiler.



Unloading 90,000# x 84" x 5/8" Slit Coils



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