NEWS RELEASE

Berlin Metals' New Ultra-Precision Slitter Slits 50-Cuts in .007"

Hammond, IN – Berlin Metals, LLC, a prime thin gauge ferrous and non-ferrous flat rolled coil distributor and coil processor has installed a new Ultra-Precision Double-Loop Turret Head™ Coil Slitting & Packaging Line in its Hammond, IN coil processing facility. The new Turret Head™ Slitting Line processes 40,000# x 60" wide cold rolled bare and coated carbon steel, tin & black plate, aluminum alloy, and stainless steel coil in gauges from .005" through .075" at processing speeds to 1,200 FPM. The new Ultra-Precision Slitting Line is Berlin Metals' second Turret Head™ Slitting Line.



40,000# x 60" Ultra-Precision Double-Loop Turret Head™ Slitting Line

The Slitting Line has four (4) distinct operating modes; *Double-Loop, Single-Loop, Tight-Line, & Push/Pull*, and 400 line horse-power, which allows Berlin Metals to deliver the highest quality product in the most efficient manner.

<u>Compact Hi Pass Line:</u> Berlin Metals' Slitting Line is an example of Braner/Loopco's high-performance compact high pass line arrangement that locates the Uncoiler and Recoiler at floor level with the equipment between installed at the largest coil OD elevation. The high pass line arrangement eliminates coil breaks from reverse strip bending, eliminates strip surface damage from strip deflector rolls, and improves strip tracking. The compact arrangement conserves floor space, allows quick and efficient coil threading, and produces tight straight side-wall slit coils.



Double-Loop Slitting Line Entry End

Entry End: An Entry Turnstile stages four 40,000# x 60" wide x 72" OD master coils ahead of the Slitting Line. Master coil IDs can range from 16" through 24". A Floor Level Coil Car with wireless control transports and loads coils onto a DC motor loop-control/pull-off Uncoiler. A Telescoping Peeler, Non-Marking Pinch Rolls, Side Guides, and Entry Shear thread and guide the coil to the Slitter. A non-contact hydraulic servo Edge Guide maintains coil alignment while running.

<u>Ultra-Precision Turret Head ™ Slitter:</u> A 2-head quick-change Turret Head ™ Slitter produces precise tolerance slit strips with minimum burr throughout the entire range of gauges and mechanical properties. Turret Slitter arbors are supported in precision machine tool quality bearings mounted in massive



one-piece stress-relieved and precision ground solid steel bearing housings. The rotatable Turret is mounted on a 300,000# capacity ring bearing, and the hydraulic cylinder positioned outboard arbor housing travels on zero-maintenance precision machine tool anti-friction bearing slides. Heavy aluminum-bronze blocks secure the vertically adjustable upper arbor bearing boxes and allow for zero axial arbor movement. Huge upper arbor bearing boxes are vertically positioned by motorized anti-backlash screw jacks with electronic encoder digital position readouts that provide precise quick vertical knife clearance adjustment. Because the exchangeable Slitter heads are never detached, shuttled, or disassembled, the Turret Head™ design is more rigid and precise than any other multi-head Slitter design. Access to the set-up arbors is unobstructed by frames and housings so re-tooling is accomplished faster than with any other slitter. A Turret Head™ Slitter exchanges heads in less



Turret Head™ Slitters offer quick tooling set-up, quick head change, and precise knife clearances



Strip surface inspection is accomplished at the Slitter Inspection Table

<u>Pushbutton Tooling Lock-Up:</u> Slitter tooling is locked onto the arbors by a pushbutton engaged hydraulic lock-up system. Threaded arbor nuts are eliminated. Pushbutton Tooling Lock-Up eliminates thread, grease fitting, and grease gun maintenance, and improves productivity

<u>Strip Tensioning:</u> Berlin Metals' Slitting Line is equipped with dual tensioning devices. A Pneumatic Pad Tensioner is employed for processing non-critical surface coil, and a Non-Mark-



Pushbutton Tooling Lock-Up eliminates arbor lock nuts. ing Roll Tensioner is utilized for processing critical surface coil. The Tensioners can be engaged together or employed independently. The Pad Tensioner doubles as a thin gauge strip threading device. It travels on rails and transports slit strips from the Slitter Inspection Table across the looping pit to the Roll Tensioner. The Roll Tensioner employs special coated rolls coupled to pneumatic brakes to generate critical surface coil tension. Top and bottom rolls are driven for strip threading. Motorized anti-backlash screw jacks with digital electronic position readouts provide precise roll squeeze force. A quick-change underarm separator guides the slit strips from the looping pit into the Tensioners.



Tandem Traveling Pneumatic Pad and Non-Marking Roll Tensioners



Thin gauge narrow strips guided into the Tensioners

Exit End: The Exit Shear, Pass Line Roll, and Overarm are mounted on an Exit Unit installed adjacent to the Recoiler. The compact high pass line arrangement places the Exit Pass Line Roll close to the Recoiler, which results in superb strip tracking and straight wall coils. The Overarm Separator is attached to the Exit Unit frame and is supported from inboard and outboard sides. The rigid support eliminates Overarm deflection that causes coil side-wall scuffing and oscillation. An Overarm side adjust feature allows the operator to adjust for minor Overarm set-up misalignment without having to make a new set-up.

Recoiler: Coils are wound onto the 16" diameter rewind drum or onto cardboard cores. Speed Load Fillers that load or unload in *one-minute* are employed to produce 20" ID coils. The rewind drum is constructed from custom forged 2" thick segments heat-



Braner USA, Inc., 9301 W. Bernice St., Schiller Park, IL 60176 Phone (847) 671-6210 Fax: (847) 671-0537 www.braner.com



Close coupled Pass Line Roll provides excellent strip tracking to the Recoiler.

treated to Rc 55. A 3" diameter solid steel gripper bar lock slit strips against a heat-treated serrated steel anvil.



Recoiler produces 16" and 20" ID coils with or without cardboard cores



Winding 50-cuts 5/8" wide x .007" into tight perfect slit coils

Rotary Deck Exit Coil Car: An Exit Coil Car unloads coils from the Recoiler and transports them to the Pack Line. The Car has a unique rotary V-deck that can position coils for CW or CCW orientation on the shipping pallet. The Car is operated from a wireless radio control.



Rotary Deck Coil Car with Wireless Control

<u>Quality</u>, <u>Performance</u>, <u>Bullet-Proof Reliability</u>, know-how from building nearly 600 Slitting Lines, plus superb technical support made Berlin Metals' selection of a Braner/Loopco Turret Head™ Slitting Line over all others a "<u>no-brainer</u>".



3200 Sheffield Avenue Hammond, Indiana 46327 Phone: (800) 754-8867 Fax: (219) 933-0692 www.berlinmetals.com