NEWS RELEASE Alliance Steel, LLC Installs 72" x ¼" Turret Head™ Slitting Line

Chicago, IL – Alliance Steel, LLC, a full service flat rolled steel service center headquartered in Bedford Park, IL (Chicago) has installed a new high-production Single-Loop Triple-Head *Turret HeadTM* Slitting & Packaging Line with a shape correction *Cluster LevelerTM* in its Bedford Park, IL headquarter facility. The new equipment has the capacity to slit and shape correct 60,000# x 72" wide hot rolled black, pickled, cold rolled, and galvanized carbon steel coils in gauges from .015" through .250" at processing speeds to 1,000 FPM.

Compact High Pass Line: Alliance Steel, LLC's Slitting Line is an example of Braner/Loopco's high-performance compact high pass line configuration where the processing section is elevated above the floor level Uncoiler and Recoiler. The high pass line configuration processes the strip without reverse bending against the natural coil set. High pass line benefits include quick and easy coil threading, elimination of reverse-bend coil-breaks, and elimination of strip surface damage from deflector roll scuffing. Compact high pass line allows the Uncoiler and Recoiler to be tucked-in close to the entry and exit equipment, which reduces the length of the line. The compact line conserves floor space, speeds coil threading, and provides outstanding coil tracking, which results in tight straight side-wall coils.



 $60,000\# \times 72" \times 1/4"$ Single-Loop Triple Turret HeadTM Slitting Line with a Computer Controlled Cluster LevelerTM produces precise tolerance slit coils while correcting edge-wave, center-buckle, and cross-bow strip shape defects.



With the strip wrapped securely on a deflector roll with no reverse bending, the high pass line configuration allows superb master coil tracking. A non-contact hydraulic servo Edge Guide automatically tracks and aligns the coil edge into the Slitter at all line speeds. Pushbutton adjustable Roller Guides with electronic position readouts make coil threading and tail-out fast and effortless. A Hydraulic Guillotine Shear crops coil heads and tails and collects the scrap in a Scrap Car for quick disposal.

Turret Head Slitter™: The 150-HP DC motor powered quickchange Triple Turret Head™ Slitter produces precise tolerance slit strips with minimum burr throughout the entire range of gauges and mechanical properties. With three slitter heads, Alliance Steel, LLC is able to conduct a highly efficient just-in-time production and delivery program, and respond quickly to customer's urgent needs.



Alliance Steel, LLC's Turret Head™ Slitter is equipped with three slitter heads supported in huge one-piece stress-relieved and precision machined solid steel bearing housings. The rotatable Turret is supported on a precision anti-friction ring bearing, which assures precise arbor alignment and allows effortless one-minute head changes. The slitter heads at the "set-up" station are wide open and accessible with no housings, bases, or structures to impede tooling removal and installation. Free and clear slitter head access and quick-change ability gives Turret Head™ Slitter users the ability to make more set-ups and head changes per shift than with any other multi-head slitter or tooling transfer design. Turret Head™ Slitters are equipped with multiple "integral" slitter heads that do not detach and uncouple in order to change heads. The one-piece integral design makes Turret Head™ Slitters more rigid, more precise, and more reliable than any other slitter or tooling transfer design.

Strip Guiding & Tensioning: Alliance Steel, LLC's Slitting Line is equipped with a Pad Tensioner that generates strip tension necessary to produce tight straight-wall slit coils. Tension is adjustable and regulated from the main operator station. Strip separator tooling is mounted on lightweight aluminum alloy arbors that exchange with pre-tooled arbors in 60-seconds. Unique "slide-out" tension pads exchange with re-surfaced pads in 60-seconds. A Hydraulic Guillotine Exit Shear squares coil tails and splits coil ODs. The Overarm Separator is firmly attached from both inboard and outboard sides to the Exit Unit frame. This design eliminates Overarm frame deflection and resulting misalignment that results in coil sidewall scuffing and coil oscillation.



Exit End equipment generates strip tension, crops coil tails, and guides slit strips onto the Recoiler.



Shape-Correction Cluster Leveler[™]: A precision Cluster Leveler[™] allows Alliance Steel, LLC to supply coil free of edge wave and center-buckle shape defects. Multiple diameter work rolls allow the Cluster Leveler[™] to correct strip shape defects throughout the .015" to .250" gauge range while maintaining precise slit width tolerances. Seven (7) adjustable back-up flights support the work rolls and provide roll bend ability for shape-correction. Automatic Leveler set-up is accomplished by a PLC controller after the operator enters gauge, yield strength, and defect data into a terminal.



With the ability to bend the work rolls via seven (7) adjustable back-up flights, the Cluster LevelerTM does not depend solely on tension for shape correction, and therefore will not "neck" the strip and destroy precision slit width dimensions. The patented corrective Leveler design employs multiple roll "clusters" that contain work rolls ranging in size from 1.500" diameter to 3.000" diameter for effective shape-correction of gauges from .015" through .250".



The Cluster LevelerTM is installed between the Slitter and Recoiler. In addition to its shape-correction ability, the Cluster LevelerTM effectively de-burrs the slit strips.



Compact high pass line configuration and precise tension control results in superb slit strip tracking, and allows Alliance Steel, LLC to produce tight straight side wall slit coils.



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



The Turret Head[™] Slitting Line is operated from this main control station. Design simplicity and efficiency are evident in the operator friendly HMI control scheme. Compact high pass line configuration creates excellent visual sight lines from the main control station with no cameras.

Slit Coil Packaging: Alliance Steel, LLC employs an automated Packaging Line to efficiently handle slit coils generated by the Slitting Line. The Packaging Line includes an "operatorless" Programmable Downender that automatically retrieves coils from the Turnstile and places them onto a conveyor line. A Coiltech semiautomatic Slit Coil Strapping Machine quickly applies radial strapping onto the coils.



Programmable "Operatorless" Downender automatically retrieves slit coils from 1" to 24" wide to 10,000# from the Turnstile.



10,000# Slit Coil Packaging Line with a Coiltech Semi-Automatic Strapping Machine.

<u>Design, Engineering, Performance, Bullet-Proof Reliability</u>, plus know-how from building 600 Slitting Lines made Alliance Steel, LLC's selection of a Braner/Loopco Turret Head[™] Slitting Line a *"no-brainer*".



6499 w 66th PL Bedford Park, IL 60638 Phone: (708) 924-0400 Fax: (708) 924-0200 www.alliancesteel.net