

NEWS RELEASE

Western Flat Rolled Installs Slitting Line with Shape Correction Leveler

Stockton, CA – Western Flat Rolled Steel, a division of Schaeffer Industries, Inc., a large distributor and processor of flat rolled carbon steel coil, has installed a new high-speed slitting line with an automatic slit coil-packaging line in its new plant in Stockton, CA. The new equipment system, designed and manufactured by Braner USA, Inc., Schiller Park, IL, is capable of processing 50,000 lb x 60" wide hot rolled and cold rolled coils in gauges from .010" through ¼" at line speeds up to 1,500 FPM. The coil packaging line will handle slit coils from 1" through 24" wide and automatically sort and palletize coils into packages weighing up to 10,000 lbs.



High Pass Line: The new slitting line employs the latest "high pass line" equipment arrangement that positions the strip processing components above the coil OD rather than at floor level common with older slitting lines. The high pass line arrangement allows the coil to be unwound, threaded through the line, slit, and rewound without being "reverse bent" against the natural coil-set. High pass line benefits include: faster coil threading, elimination of cross-breaks, improved coil tracking as the Uncoiler and Recoiler are positioned closer to the pass line rolls, and better surface quality as the strip rides "over" all pass line rolls rather than "under," as is the case with older floor level lines.

Turret Head Slitter: The Western Flat Rolled slitting line includes a quick-change precision "Turret" slitter equipped with three 9" x 60" slitter heads. Turret Head slitters are designed to virtually eliminate slitter head change down time. All three slitter heads are mounted in a massive precision-machined one-piece rotatable "turret" housing supported on a 300,000 lb capacity rotation bearing that maintains perfect alignment of all slitter heads at all times. Slitter head exchange time is one minute. Arbor parallelism and knife vertical clearance is displayed on large character electronic readouts interfaced with precision electronics encoders. Vertical arbor adjustments and outboard bearing travel are pushbutton operated to reduce changeover time.



Cluster Leveler: The line includes a “Cluster Leveler,” a patented shape correction roller leveler designed to improve, upgrade, or salvage coils with less than desirable strip shape. The Cluster Leveler eliminates strip shape defects such as *center buckle*, *wavy edges*, and *cross-bow*, while minimizing slit edge burr. The Cluster Leveler, equipped with work rolls mounted on close centers supported by multiple independently adjustable back-up flights, employs a combination of close-center work rolls, roll-bending, and strip tension technology to accomplish shape correction. This technology dramatically reduces the strip tension required for shape correction, and as a result strip “necking” (reduction in strip width caused by extreme tension) and “camber” (also caused by extreme tension) is eliminated. The Cluster Leveler is uniquely equipped with work rolls arranged in two “clusters”; a large work roll cluster utilized to level heavy-gauge and high-strength materials, and a small work roll cluster employed to level thin-gauge. Because of its ability to selectively engage large or small work rolls, the Cluster Leveler is able to shape correct a wide range of gauge and yield strength materials without strip necking or inducing camber.



Positioned for coil threading



Positioned for leveling heavy gauge



Positioned for leveling light gauge

Industrial duty PLC controls are utilized for full automatic roll positioning based upon gauge and yield strength specifications. Leveler set-up parameters utilized on previously processed coils can be automatically duplicated via job number memory recall, reducing set-up time and reducing trial and error scrap.

Slit Coil Packaging: Slit coils are efficiently packaged for shipment on a Braner USA Automatic Coil Packaging Line capable of handling coils from 1” to 24” wide, weighing up to 10,000 lbs. A Coil Unloading Car removes slit coils from the Recoiler and transfers them to a 4 Arm Turnstile. A Downender removes slit coils one at a time from the Turnstile and places them eye axis vertical onto a power conveyor. Coils are conveyed to a Coiltech/Signode semi-automatic Strapping Machine where multiple $\frac{3}{4}$ ” radial straps are quickly applied to each coil. The strapped coils are discharged from the Strapping Machine directly into an ID-OD Coil Stacker that automatically stacks the coils. A 20’ diameter multi-station Turntable is utilized to sort various orders. Completed slit coil packages are discharged from the Turntable onto a Weigh Station and Runout Conveyor where packages are weighed, tagged, wrapped, and stored awaiting shipment.



Strapping Machine & automatic Coil Stacker

Schaeffer Industries, headquartered in Mira Loma, CA, operates coil slitting, leveling/cut-to-length, welded structural tube manufacturing, and coil pickling facilities in Lindon, UT, Mira Loma, CA, and Stockton, CA.



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