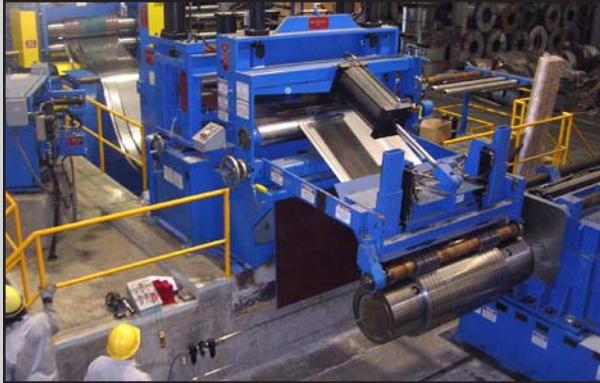


# NEWS RELEASE

## JFE Shoji Installs Double-Loop High-Strength Slitting Line

Tijuana, Mexico – JFE Shoji Steel de Mexico, a flat rolled steel distributor and coil processor has installed a compact heavy-duty Braner/Loopco *Double-Loop Turret Head™* Coil Slitting Line in its Tijuana Mexico coil processing facility. The new Slitting Line is capable of processing 20-ton x 1524mm (60”) wide high-strength hot rolled pickled as well as surface critical cold rolled bare and coated carbon steel coil in gauges from 0.35mm (.014”) through 3.20mm (.126”) at line speeds to 304 meters/minute (1,000 FPM). The Slitting Line has the ability to process high-strength steels with yield strength up to 66 Kg/mm<sup>2</sup> (93,000 PSI) in all gauges.



*20-Ton x 1524mm Double-Loop Turret Head™ Slitting Line processes hi-strength surface critical coil*

**Compact Hi-Pass Line:** The JFE Slitting Line is an example of Braner/Loopco’s “compact hi-pass line” design that conserves floor space, reduces manpower, threads quickly, and improves coil tracking. Despite being a “Double-Loop” Slitting Line, the system is less than 50’ from end to end. The compact foot print places all system elements as well as the entry and exit end coils clearly within the operator’s sight line, which results in improved safety and makes TV cameras and monitors unnecessary.

“Hi-Pass Line” locates the strip-processing equipment above the coil OD, which speeds high-strength coil thread-up and eliminates “reverse strip bending” as the strip is threaded and processed. Hi-pass line benefits include fast coil threading, elimination of equipment-induced coil-breaks, elimination of strip surface scuffing from entry and exit pass line rolls, produces straight sidewall slit coils, and offers exceptional productivity.



*Driven Loop-Control Uncoiler allows “tension-free” slitting for improved thin-gauge surface-critical coil quality*

**Single & Double-Loop Operation:** The JFE Slitting Line can process coils in 3-operating modes: *Tight-Line* mode is used for processing heavier gauge and side trimming coils; *Single-Loop* mode is used for slitting medium-gauge non-critical surface coil; and *Double-Loop* mode is used for slitting *thin-gauge surface critical* coil. In the Double-Loop mode, the Uncoiler, rather than generating back tension, drives the strip into a free-loop ahead of the Slitter allowing zero back-tension slitting. Driving the strip into a free-loop ahead of the Slitter for zero back-tension slitting reduces side trim requirements, generates tighter slit width tolerances, and eliminates strip surface defects caused by slitter tooling slippage and scuffing.

**Turret Head Slitter™:** A 9” arbor x 150 HP 2-head quick-change *Turret Head™* Slitter produces precise width tolerance slit strips with minimum burr throughout the entire range of gauges and mechanical properties. Turret Head™ arbors are supported in precision machine tool quality bearings mounted in massive one-piece stress-relieved and 6-side precision ground solid steel housings that weigh nearly one-ton each. The rotatable Turret housing is supported on a 300,000# capacity anti-friction bearing, and the hydraulic cylinder positioned outboard arbor bearing housing is mounted on zero-maintenance anti-friction precision machine tool slides. Huge aluminum-bronze gibs contain the vertically adjustable upper arbor bearing boxes and allow for “zero” axial arbor movement. Large one-piece upper arbor bearing boxes are positioned by motorized anti-backlash screw jacks equipped with electronic encoder digital position readouts for quick and accurate positioning. The Turret Head™ Slitter design is more rigid and precise than any other Slitter design, and because the arbors are easily accessed with no obstructions re-tooling and head changes are accomplished faster than with any other slitter design.



*Completely exposed and accessible arbors re-tool quickly. No frames or bases obstruct the removal or installation of the slitter tooling. Head are exchanged in less than 2-minutes.*

**Unique Strip Tensioning:** The JFE Slitting Line is equipped with two (2) Tensioners...a Pad Tensioner for processing HR pickled and cold rolled coil, and an “Acu-Trak” Tensioner for processing surface critical coil. The Pad Tensioner employs fabric covered quick-change “pads” pressed together by multiple pneumatic cylinders to generate rewind tension. The Pad Tensioner is utilized for processing non-critical materials. The entry strip separator is a lightweight aluminum alloy arbor that can be exchanged with pre-tooled arbors in 60-seconds. The “Acu-Trak” Tensioner employs a series of upper and lower tension belts to generate rewind tension. The Acu-Trak belts make a large surface contact area, which allows high friction

and high tension to be generated with minimal "squeeze" force. Rewind tension is controlled from the main operator console.



Quick-change Pad and Acu-Trak Tensioners generate enormous rewind tension



Acu-Trak Tensioner employ high friction non-marking belts to generate rewind tension for surface-critical materials

**Exit End Equipment:** The Overarm Separator is rigidly attached to the Exit Unit frame to eliminate Overarm deflection and resulting misalignment that causes coil side-wall scuffing and coil oscillation. A swing-out arbor allows a pre-tooled arbor to be installed in 2-minutes. The Overarm is adjustable sideways to compensate for minor tooling set-up misalignment, a unique feature that helps produce non-scuffed straight side-wall coils.



Exit end of JFE's Hi-Strength Turret Head™ Slitting Line



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A Hydraulic Feed Table acts in concert with an Overarm mounted deflector plate to form a threading "funnel" that guides slit strips directly from the Exit Pass Line Roll to the Recoiler gripper bar. The massive Recoiler drum is manufactured from custom forged 2" thick segments hardened to Rc 58. A 3" diameter solid steel gripper bar "bites" the slit strips against a heat-treated serrated steel anvil. A massive one-piece 250-HP parallel shaft helical gear reducer with integral 2-ratio gearing and a 14" diameter main shaft drives the Recoiler. Hydraulic "Tail-Hold-Downs" snub the outer wraps of the high-strength slit coils and prohibit dangerous coil clock-springing.



2" thick forged heat-treated Recoiler steel drum with 3" steel gripper bar

**Coil Loading & Unloading:** The JFE Slitting Line is equipped with Entry and Exit Coil Cars that are controlled by "wireless" radio controls instead of the common floor mounted or pendant controls. The wireless controls allow the operators freedom of movement and the ability to maintain a safe distance from the equipment and the coil. An additional benefit is the elimination of electrical pendant cable maintenance. The Exit Car removes slit coils from the Recoiler and travels to a Turntable that re-positions the Car travel 90-degrees.



"Wireless" controls are installed on both Entry & Exit Coil Cars. A Turntable redirects the Car travel direction.

**Productivity, Quality, & Reliability:** Heavy mill-duty construction, bullet-proof reliability, experience from building more than 560-Slitting Lines, and superb technical support make Braner/Loopco Slitting Lines the "no-brainer" choice for serious coil processors.



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