

NEWS RELEASE

Lapham-Hickey Installs New Slitting Line with Shape Correction Leveler

Chicago, IL – Lapham-Hickey Steel, a full-line specialty steel service center with processing and distribution facilities in Chicago, IL, Oshkosh, WI, Eagan, MN, St. Louis, MO, Memphis, TN, Pawcatuck, CT, and Columbus, OH, installed a new high production close tolerance single loop coil slitting line with shape correction leveling in its flagship facility in Chicago. The new slitting line, Lapham-Hickey's 14th, is capable of processing 40,000# x 60" wide coils in gauges from .015" through 1/4" at speeds to 1,000 FPM. Designed, built, and installed by Braner/Loopco, Schiller Park, IL, this new line includes a number of features designed to produce high quality close tolerance slit coil in a highly efficient manner.



Slitting 10 Cuts in .135"

Three Slitter Heads

The new line is equipped with an efficient "Turret Head" Slitter equipped with three slitter heads, which allows Lapham-Hickey to prepare new set-ups on two heads while operating with the third slitter head. Turret Head slitters feature freely accessible arbors that allow faster tool removal and installation, with the ability to change slitter heads in about one minute. Each slitter head is equipped with 10" diameter arbors driven by a 250 HP motor, giving Lapham-Hickey the ability to slit 8 cuts in 1/4" and up to 20 cuts in .135" and thinner materials.

Shape Correction

A "Cluster Leveler" allows Lapham-Hickey to eliminate strip shape defects such as wavy edge, center buckle,

and slitter knife induced cross-bow throughout a gauge range of .015" through 1/4". The Cluster Leveler is a patented "adjustable back-up" roller leveler equipped with multiple diameter work rolls arranged in "clusters". The gauge capacity of a roller leveler is directly proportional to its work roll diameter and roll centers, with light gauge requiring small work rolls mounted on close centers, while heavier gauge and high strength materials demanding larger work rolls on relatively wide centers. The "rule of thumb" is that a roller leveler has an effective gauge range of between 3x to 4x the minimum gauge, with diminished shape correction ability outside that range. The Cluster Leveler solves the gauge range limitation problem by incorporating a se-



1/4"-.015" Shape Correction Leveler

ries of work rolls ranging from 1.500" diameter through 3.000" diameter, allowing the user to effectively shape correct throughout a wide range of gauge and yield strength material. The Cluster Leveler is able to apply small work rolls on light gauge material, and apply large rolls on heavier gauge and high strength material. The work rolls are supported on multiple back-up flights, all of which are adjustable for work roll bending. Roll bend is required to effect precise strip shape correction without employing extreme "stretcher" tension. Excessive strip tension may cause slit strips to "neck" (become narrower than the slitter set-up), and also induce camber. An onboard computer automatically selects the appropriate work roll cluster and establishes the appropriate work roll position based upon material gauge and yield strength input by the operator.





Duplex Roll Tensioner

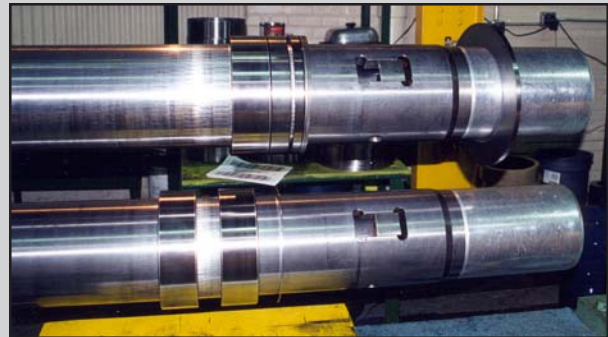
Tensioning Equipment

Two separate and distinct strip tension devices are incorporated into the line to generate winding tension for a wide variety of products. A Pad Tensioner, ideal for processing non-critical surface coils of all gauges, employs pneumatic cylinder positioned replaceable felt faced pads to generate winding resistance. A Roll Tensioner, utilized for processing surface critical coils, employs non-marking tension rolls to generate winding tension. The Roll Tensioner is a quick-change “*Duplex*” design equipped with two independent sets of tension rolls; polyurethane set with a special non-grooved “*Suregrip*” surface ideal for tensioning dry material, and a 3M set designed to provide the traction necessary for tensioning oily surface materials. The patented *Duplex* design exchanges roll sets in about one minute without the need for an overhead crane.

Push-Button Tooling Lock-Up

The knives and spacers are secured on the triple head Turret Slitter with a new time saving pushbutton operated *Power Tooling Lock-Up System*. In place of the traditional “spin-on” tooling lock nut, a set of hydraulically actuated locking fingers is built into each arbor to lock and secure the slitter tooling onto the slitter arbors. The locking fingers disappear below the arbor periphery to allow quick tooling set-up, and after the tooling set-up is completed, the locking clamps are engaged to lock the tooling against the arbor shoulder. The system generates enormous force sufficient to flatten thin dished spacers and eliminates any gaps between the pieces of tooling. The new *Power Tooling Lock-Up System* reduces slitter set-up time, eliminates

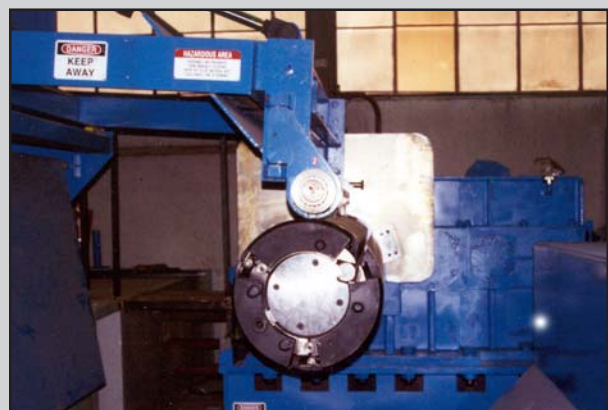
arbor thread and lock nut maintenance, provides consistent tooling locking force for uniform knife clearances, and eliminates messy grease guns and clean-up time.



Locking Fingers Retracted

Speed-Load Recoiler Fillers

The line is equipped with Braner/Loopco’s patented “*Magnetic Speed-Load Recoiler Filler*”, a super efficient apparatus that allows Lapham-Hickey to switch the Recoiler from 16” ID to 20” ID in a matter of a few minutes, a huge improvement over the time required to deploy conventional “bolt-on” Recoiler fillers. Bolt-on Recoiler fillers normally consist of 3 or 4 difficult to handle segments that are attached to the Recoiler drum by a series of 18 or more bolts. The mounting and dismounting process is extremely time consuming with 15-20 minutes of production time lost for every coil ID change. The new “*Magnetic Speed-Load Filler*” is a one-piece apparatus that is Coil Car loaded onto the Recoiler drum with one “draw bolt” that secures the Speed-Load Filler to the drum. One person can mount or dismount the Magnetic Speed Load Filler in less than 2 minutes.



20” Speed Load Fillers on 16” Drum



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