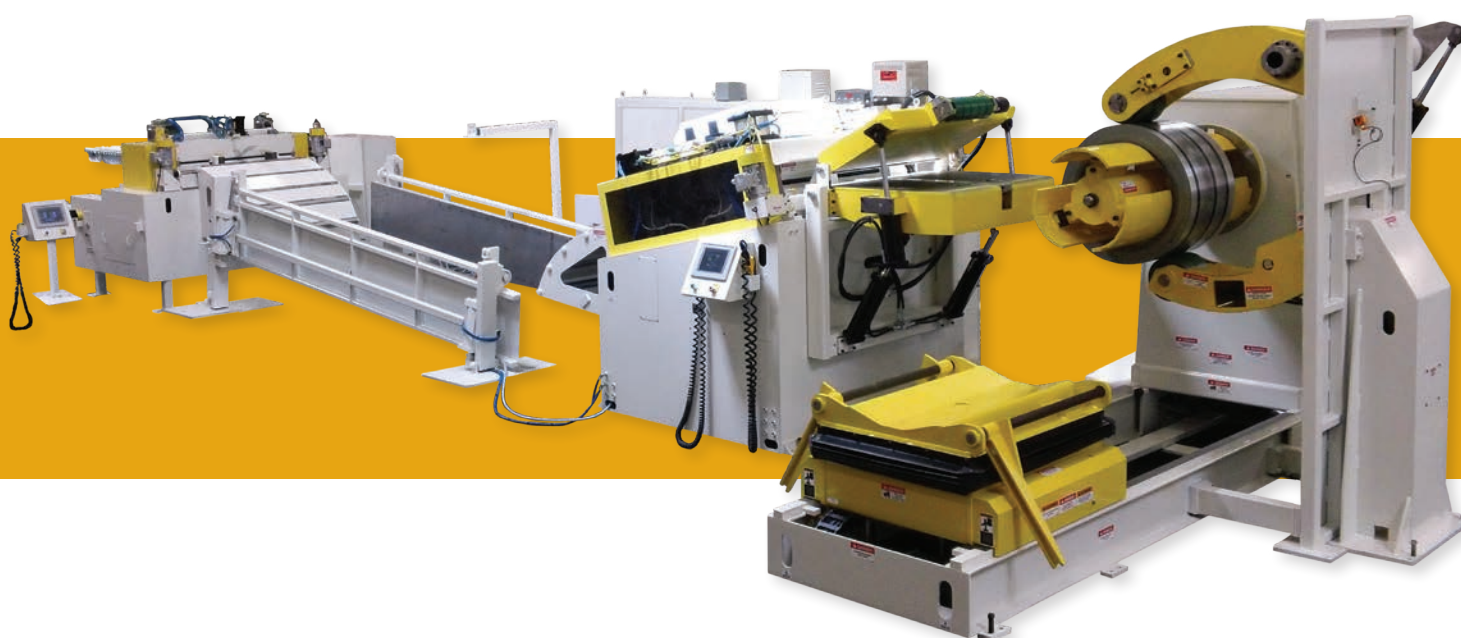




# COE Press Equipment Complete Solutions Catalog



At COE, we make it happen.

# A Heritage of Service



## Coil Processing Solutions That Position You For Success

COE Press Equipment designs and manufactures an extensive line of innovative coil processing solutions, all designed to boost your productivity. Whether you need a completely integrated line, an individual piece of equipment, or a simple controls upgrade, COE will meet your requirements with the right equipment and service.



Founded in 1976, COE Press Equipment has an established heritage of putting the customer first, ensuring that you get innovative solutions engineered for your needs. COE provides one-stop capability starting with our top-notch engineering staff focused on R&D right through to fabrication, machining, assembly, electrical, quality control, start-up and service.

## Ready to Go Wherever Business Takes You

COE supplies and services a wide variety of global markets and industries including automotive, appliance, lighting, metal processing, housewares, lawn and garden, contract stampers, tool and die builders and more. Financially stable and globally capable, we deliver and maintain systems no matter where you manufacture.

Beyond thousands of successfully delivered systems in North America, we have proven capability from Brazil to China, from



India to Mexico where we have over 160 installations. If you want standardized systems throughout your global manufacturing facilities, we can make it happen.

## Technology That Positions You For the Future

At COE, we believe there is always a better way. We're an engineering-driven organization with a dedicated R&D department focused on helping you do your job better. As an industry-leader, we have pioneered many coil handling and feeding solutions, both mechanical and electrical.



All our products are designed in SolidWorks® 3D modeling software and our Production Engineering staff utilizes the latest AutoCAD software to provide accurate proposal drawings, line layouts, and detailed designs. If you have a unique challenge, COE is the company that can solve it for you.

## Service You Can Count On

With COE Assurance, you get 24/7/365 technical phone support, ensuring you get the service and attention needed to keep your coil processing operations running at optimal capacity. Our field technicians support new equipment installations, troubleshoot production issues, provide preventative maintenance, equipment repairs and rebuilds, and make recommendations for reconditioned coil feed lines, replacements and upgrades. Additionally, our industry leading warranty provides unequalled assurance that our products will perform beyond expectations in our customers' plants.



# Conventional Coil Lines



Our conventional coil feed lines are designed to process the widest range of material types, thickness, yield strength, width and weight on the market today. We provide a wide range of standard models, as well as many optional features to customize the solution for each application. Complemented by our ServoMaster or PLC-based controls packages, our systems are both user-friendly and reliable in the most demanding stamping plants.

- Lines for progressive die feeding and blanking
- Feature-rich standard equipment with a variety of options
- Solutions for 6" wide x 2,500# to 78" wide x 60,000# lines
- Standard machine controls and fully-automated systems
- Processing of high strength steel, stainless and aluminum
- Wide range of material thickness and yield strength



.060" x 36" wide MCRS x 10,000# coil line



.187" x 72" wide HSLA x 60,000# coil line



.156" x 66" wide HSLA x 50,000# Coil Line

## FEATURES

- 1) Dual air cylinders w/air counterbalance circuit
- 2) Full width rolls with #3 matte chrome finish
- 3) Feed cabinet with motorized passline
- 4) Pivoting thread tables for effective threading
- 5) Laser loop control w/line speed averaging
- 6) 7-roll straightener in 3-over-4 arrangement
- 7) 5.0" straightener rolls and 6.7" pinch rolls
- 8) Heavy-duty peeler-threader-hold down
- 9) Material debender for threading heavy-gauge
- 10) Hydraulic mandrel expansion and threading
- 11) Coil hold-up w/motorized endwheel
- 12) Hydraulic traveling coil car w/18" lift

# SpaceMaster Compact Coil Lines



If your plant floor presents you with space constraints, then a COE Compact Coil Line is the a perfect solution for progressive die feeding applications. The three functions of unwinding, straightening and feeding of coil stock are designed into one piece of efficient, compact equipment. With this combination system, there is no need for a looping pit and coil threading times are generally less as the threading distance is shorter and the lines are provided with threading assist features.

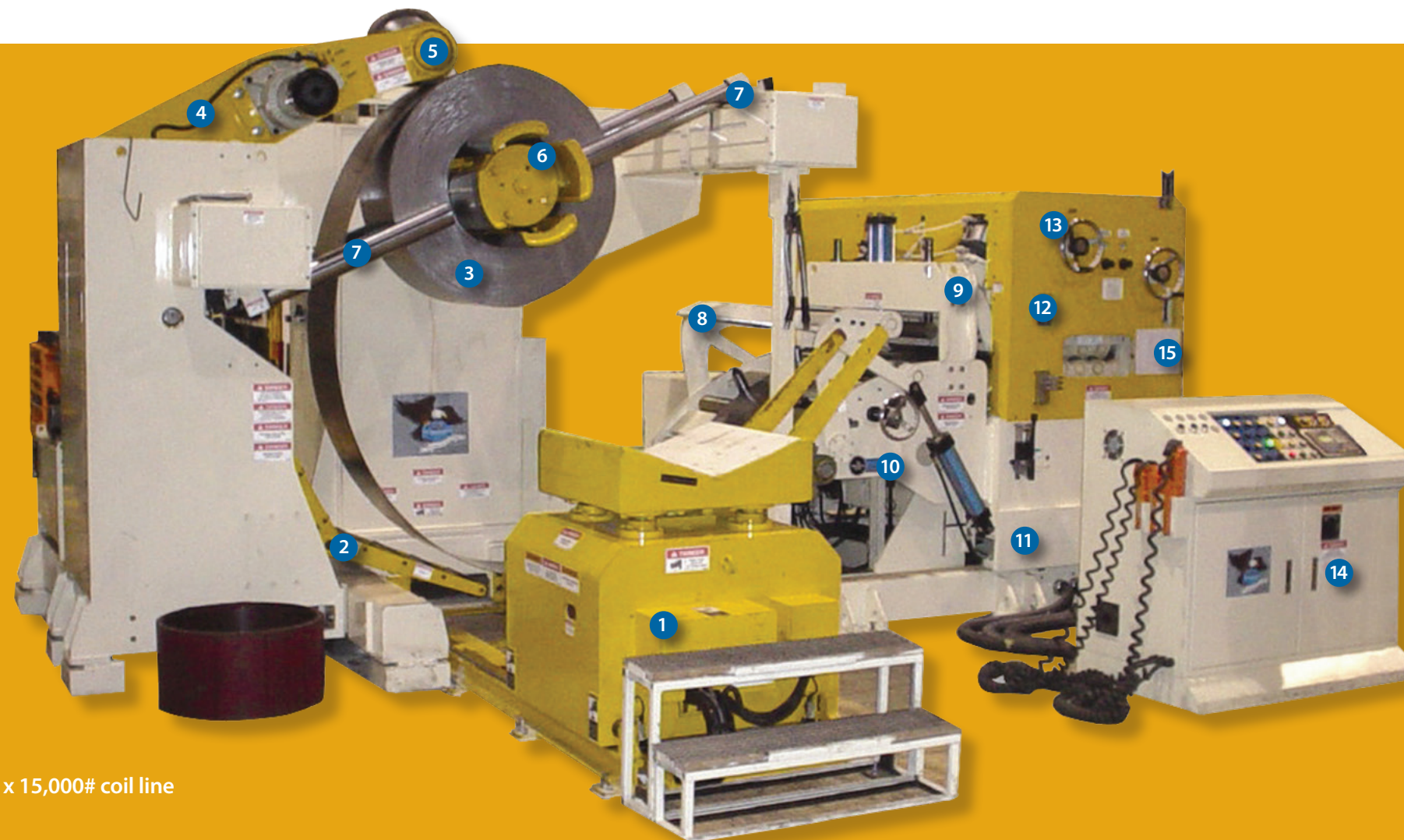
- Combined unwinding, straightening and feeding
- Compact machine design saves valuable floorspace
- Standard models process coil widths of 12" – 64" wide
- Coil weight capacity of 6,000# - 40,000# weights
- Effective coil containment and threading assist
- Driven feeder-straighteners with true pilot release
- Typical coil line overall length of 15' – 17'



.100" X 24" wide MCRS x 6,000# coil line



.156" X 30" wide HSLA x 20,000# coil line



.125" x 40" wide HSLA x 15,000# coil line

## FEATURES

- 1) Hydraulic traveling coil car
- 2) Hydraulic hold-up for threading
- 3) Motorized coil reel for payoff
- 4) Hydraulic hold-down arm
- 5) Motorized endwheel
- 6) Hydraulic mandrel expansion feature
- 7) Dual roll coil guide assembly
- 8) Threading assist roll assembly
- 9) Threading debender roll assembly
- 10) Dual roll entrance edge guides
- 11) +/- 4" powered passline height
- 12) 7-roll straightener – 4-over-3
- 13) Pilot release of feed and straightener rolls
- 14) ServoMaster Touch Controller
- 15) Single roll exit edge guides

# Cut-to-Length Lines



If you are looking for a productivity advantage, investment in your own Cut-to-Length line from COE can help you better control your manufacturing process and keep work in-house to gain a competitive edge. Whether you are processing light gauge material in a high production facility or heavy-gauge hot rolled materials in a low volume fabricating environment, we can design and build a system to meet your specific requirements.

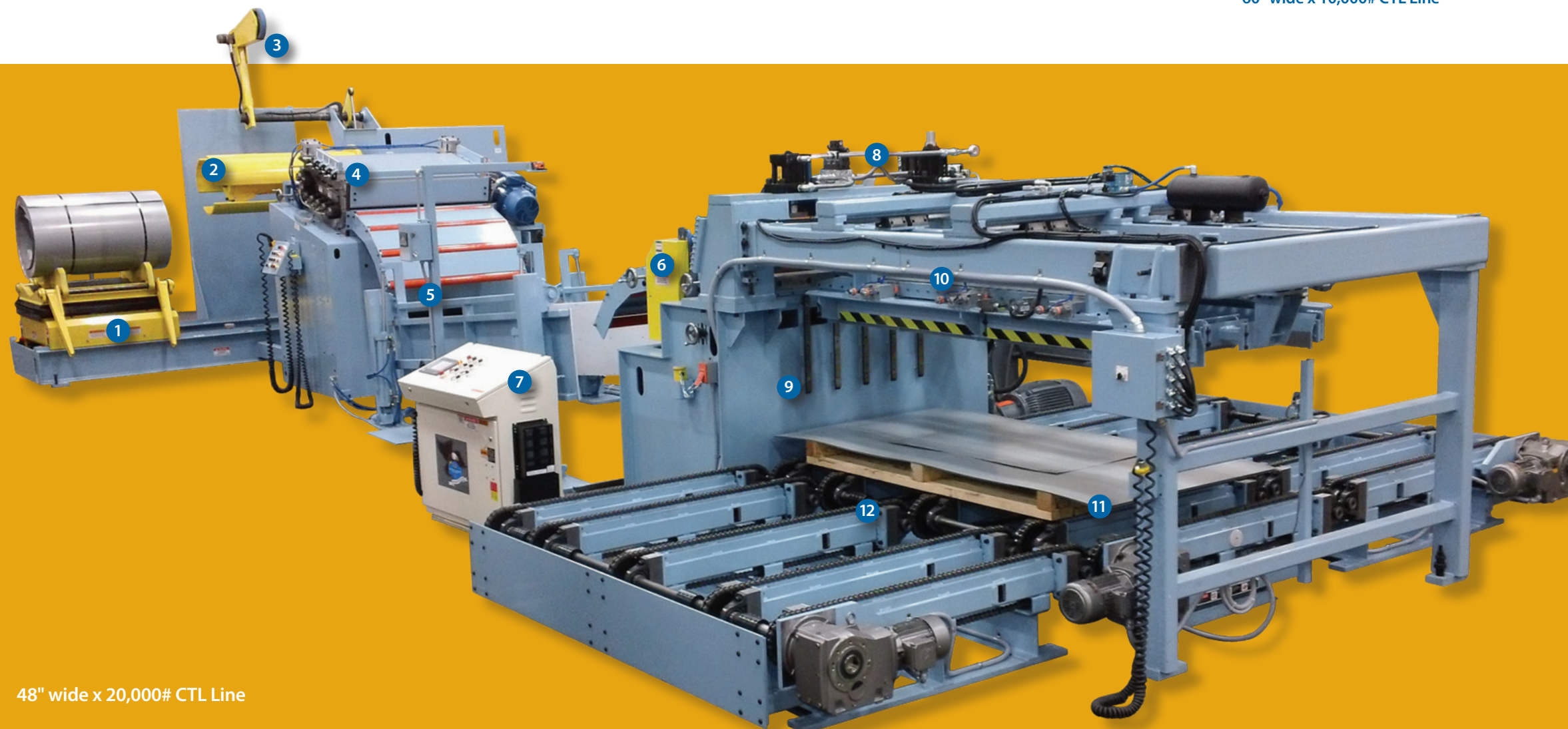
- Custom-engineered solutions for all material types
- Solutions for .010" – .250" material thickness
- Coil sizes up to 78" width and 60,000# weight
- Processing speeds up to 60 SPM and 250 FPM
- Close-centered precision straighteners assure flatness
- Hydraulic, mechanical and oscillating shears available
- Stacker types available – drop, air, finger, and magnetic



60" wide x 10,000# CTL Line



60" wide x 20,000# CTL Line



48" wide x 20,000# CTL Line

## FEATURES

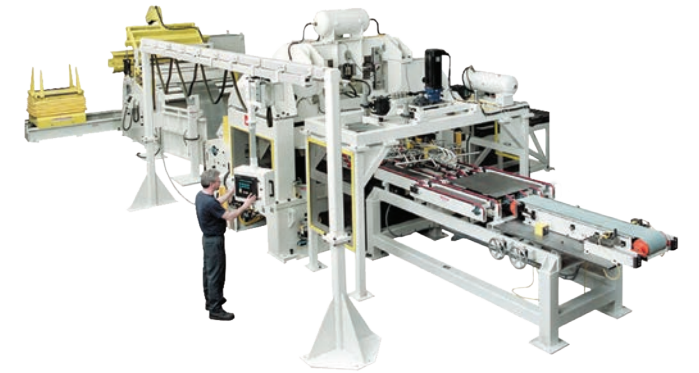
- 1) Hydraulic traveling coil car w/18" lift
- 2) Hydraulic mandrel expansion and threading
- 3) Air operated hold down w/motorized endwheel
- 4) 9-roll straightener in 4-over-5 arrangement
- 5) Laser loop control w/line speed averaging
- 6) Servo roll feed w/entrance and exit guides
- 7) ServoMaster Touch Controller w/CTL program
- 8) Dual cylinder hydraulic production shear
- 9) Shear configured for straight drop of blank
- 10) Finger drop stacker w/urethane rollers
- 11) Hydraulic scissor lift maintains stack height
- 12) Chain conveyor stack handling system

# Transfer Press Feed Lines

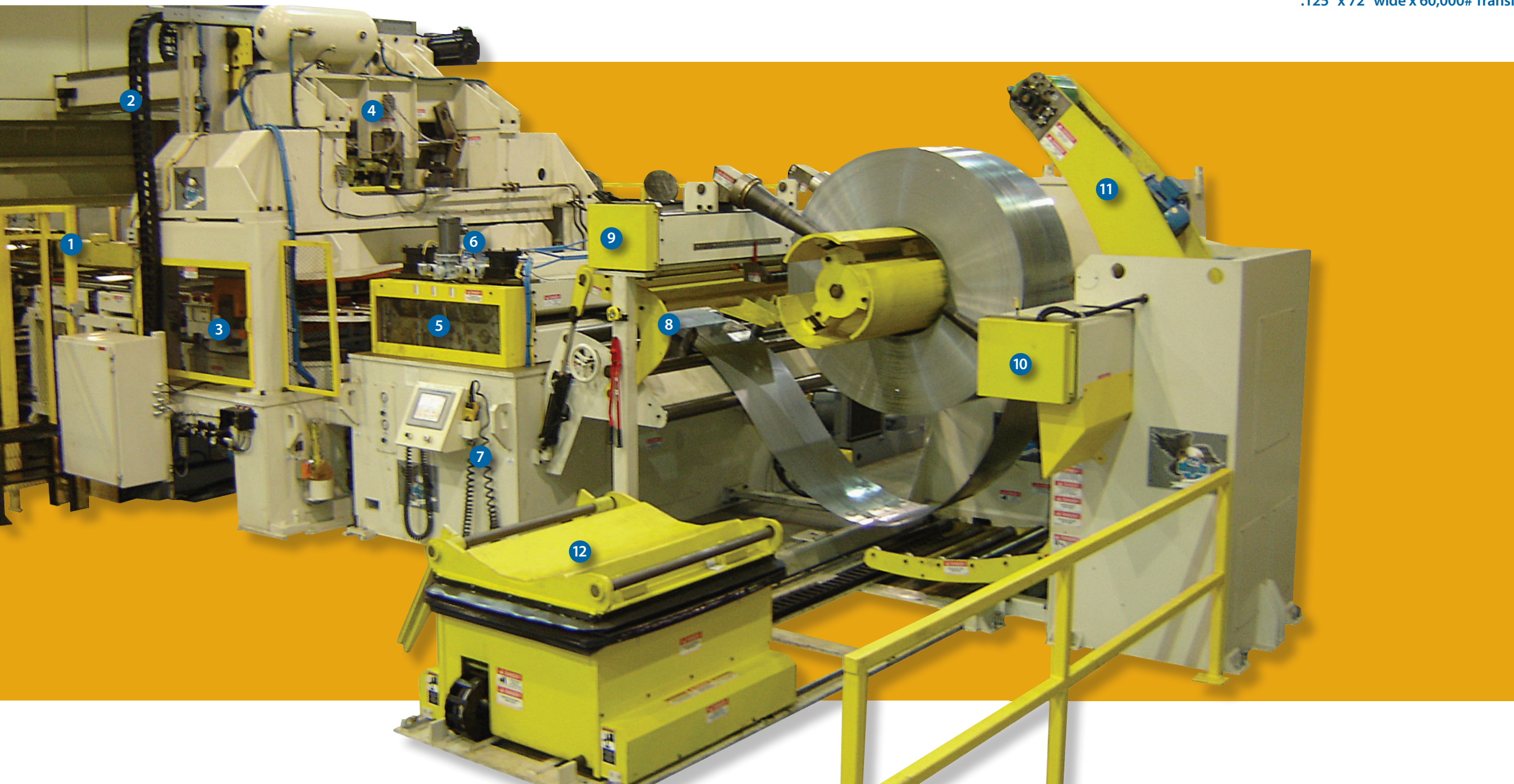


Get coil feeding efficiency combined with the flexibility of blank feeding in a single solution with a COE transfer press feed line. Available as conventional or space saving lines, our most advanced systems combine our oscillating shear press and blank destacker into one system capable of processing both blanks and coils strip. These lines offer reduced material cost, improved quality, lower material handling requirements, cycle time reduction, and less labor, dunnage and scrap.

- Efficiency of coil feeding and flexibility of blank feeding
- Available for coils up to 78" wide x 60,000# weight
- Six different modes of feeding material to the press
- Coil feed line and shear in compact layout
- Square-cut and oscillating shears available
- Option for blank destacking of developed shapes
- Available as conventional or compact lines



.125" x 72" wide x 60,000# Transfer Line w/Oscillating Shear Press



## FEATURES

- 1) Servo-driven pickup conveyor w/powered adjustment
- 2) Overhead destacker module for developed blanks
- 3) Oscillating shear press for trapezoid shaped blanks
- 4) Hydraulic toggle mechanism for shear ram
- 5) Servo-driven 7-roll feeder-straightener
- 6) Motorized and encoded straightener roll positioning
- 7) PLC machine controls and touchscreen HMI's
- 8) Debender assembly for hands-free threading
- 9) Powered upper coil guides
- 10) Powered lower coil guides
- 11) Hold down with motorized endwheel
- 12) Hydraulic traveling coil car w/18" lift

# Space Saving Lines



## SpaceSaver Line

With today's focus on cost-control, efficient utilization of plant floor space is critical. To meet this need, COE offers numerous space-saving coil line options to fit your particular situation.

- Process coil width up to 78" wide
- Material thickness to .250" thick
- Coil weight up to 60,000#

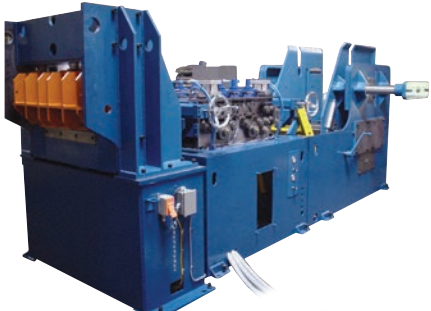


48" wide x 10,000# SpaceSaver Line w/Motorized Reel and Coil Car

## Cradle-Feeder-Straightener (CFS)

Our compact cradle-feeder-straightener (CFS) processing lines can fit within 15 feet of space and are designed to uncoil the material while holding the coil OD and feeding the material with a combination feeder-straightener.

- Process coil width up to 60" wide
- Material thickness .060" – .500"
- Coil weight up to 50,000#



24" wide x 15,000# CFS w/Hydraulic Production Shear

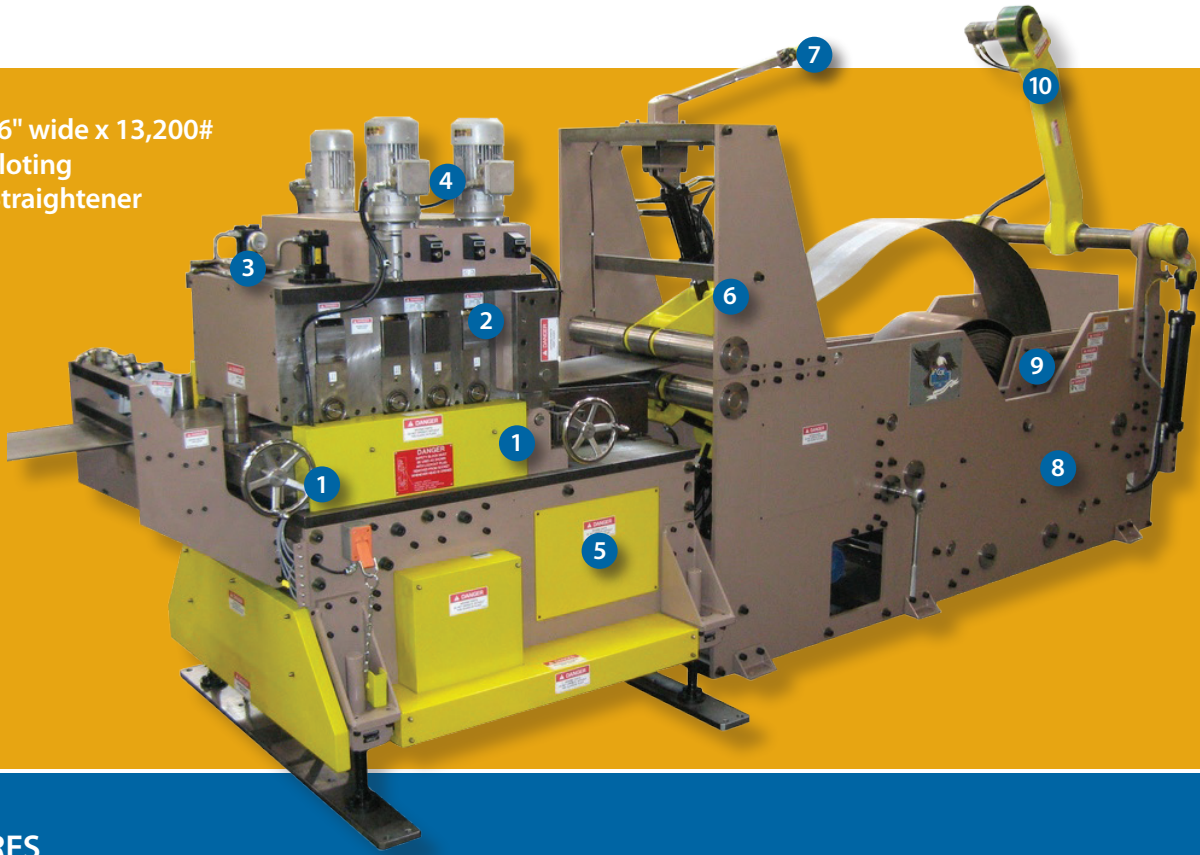
.125" x 18" wide x 10,000#  
SpaceSaver Line with Servo Feed  
and Pull-Thru Straightener



### FEATURES

- |   |  |
|---|--|
| 1) ServoMaster Controller                         | 6) Free-standing peeler-threader-hold down   |
| 2) Heavy-duty cabinet w/motorized passline        | 7) Centralized operator controls station     |
| 3) Full width feed rolls w/#3 matte chrome finish | 8) Motorized coil reel w/hydraulic expansion |
| 4) Heavy-duty 7-roll pull-thru straightener       | 9) Hydraulic traveling coil car w/18" lift   |
| 5) Powered threading rolls w/air raise-lower      | 10) Coil car vee-deck w/narrow coil supports |

.250" x 26" wide x 13,200#  
CFS w/Piloting  
Feeder-Straightener



### FEATURES

- |  |   |
|--|---|
| 1) Entrance and exit self-centering edge guides    | 6) "Alligator" peeler-debender for threading  |
| 2) 7-roll feeder-straightener w/true pilot release | 7) Ultrasonic variable speed loop control     |
| 3) Hydraulic raise of upper feed roll              | 8) Powered cradle w/heavy-duty nest rolls     |
| 4) Motorized upper rolls w/digital readouts        | 9) Powered adjustment of cradle inside plates |
| 5) Heavy-duty cabinet w/motorized passline         | 10) Hydraulic hold-down w/motorized endwheel  |

# Servo Roll Feeds



## ServoMaster Series Feeds

COE Press Equipment combines intelligent design, high quality components and precision assembly to produce a full range of dependable and versatile servo roll feeds. The ServoMaster Series Feeds offer modular design and

construction at the most competitive market prices. Rugged and precise construction of the feed head and exceptional quality of components make this series of servo feed lines the “best value in the industry.”

ServoMaster	Series 1	Series 2	Series 3	Series 4
Roll Diameter	2.25"	2.63"	3.0"	4.0"
Machine Width	6" – 24"	6" – 30"	12" – 42"	12" – 54"
Material Thickness	.010" - .156"	.010" - .187"	.020" - .210"	.020" - .250"
Max. Velocity (FPM)	392	580	367	396
Motor Peak Torque (in. lbs.)	160	240	630	1200

Note: Feed accuracy of 1.003". Actual feed performance is determined by drive ratio and feed angle allowed. Consult COE factory for actual performance.

## Heavy Duty Feeds

COE Press Equipment offers a complete line of heavy duty servo-driven roll feeds to meet the demands of heavy gauge material and wide coil stock feeding applications. These feeds combine rugged construction features

and machine tool precision to deliver torque, speed and accuracy. Standard features and select options are combined to meet a wide range of applications in the toughest stamping and processing environments.

Heavy Duty	500 Series	600 Series	700 Series	800 Series
Roll Diameter	5.0"	6.0"	7.0"	8.0"
Machine Width	18" – 60"	24" – 72"	36" – 78"	36" – 78"
Material Thickness	.020" - .250"	.020" - .280"	.030" - .310"	.040" - .350"
Max. Velocity (FPM)	409	362	296	319
Motor Peak Torque (in. lbs.)	1406	1406	1800	1800

Note: Actual feed performance is determined by drive ratio and feed angle allowed. Consult COE factory for actual performance.

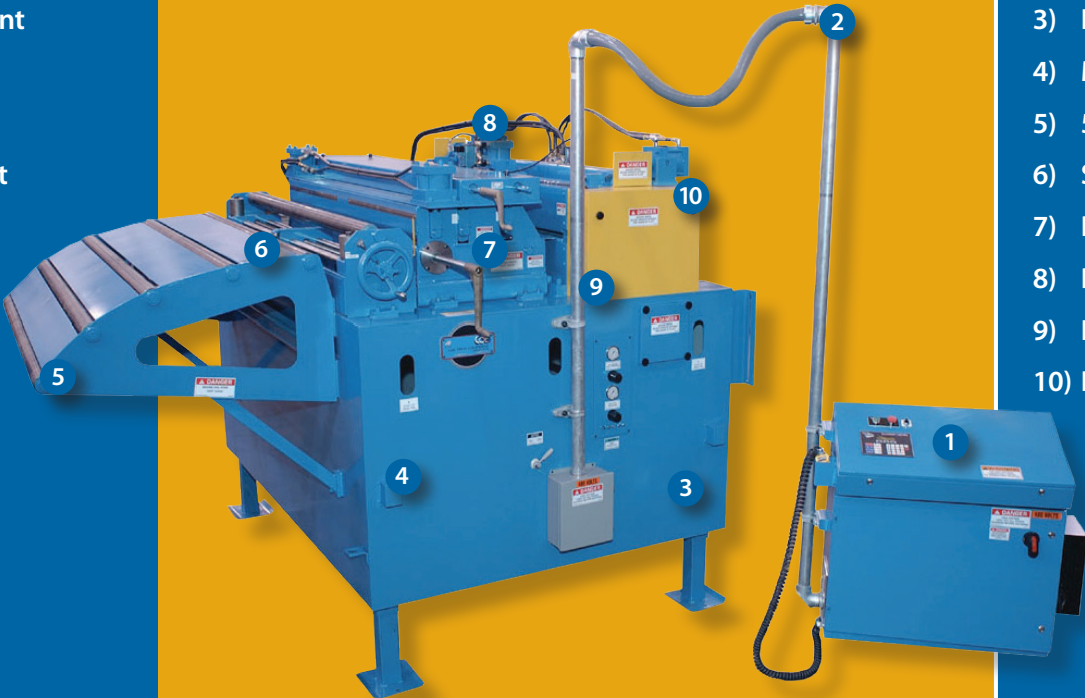
ServoMaster CPRF-SM4-24 Feed  
w/Adjustable Height Mounting Bracket



### FEATURES

- 1) ServoMaster Controller w/5.7" color touchscreen
- 2) Pre-wired cable set in flexible sealtite conduit
- 3) Press mounting bracket with +/-3" adjustment
- 4) Low inertia belt and sheave drive system
- 5) Precision cluster gear-driven upper roll
- 6) Single air cylinder w/ pilot stroke adjustment
- 7) Air regulator for variable roll force
- 8) Dual roll self-centering edge guides
- 9) 4-roll catenary section for material support
- 10) Fully-funneled material stock path

Heavy Duty CPRF-672 Servo Feed  
w/Pull-Thru Straightener and O/H Cable Set



### FEATURES

- 1) ServoMaster Controller w/5.7" color touchscreen
- 2) Overhead cable set keeps floorspace clear
- 3) Heavy-duty cabinet with +/-5" adjustment
- 4) Motorized passline height adjustment
- 5) 5-roll catenary section for material support
- 6) Self-centering and independent edge guides
- 7) Pull-thru straightener for light-gauge materials
- 8) Dual air cylinders w/pilot stroke adjustment
- 9) Low inertia belt and sheave drive system
- 10) Precision cluster gear driven upper roll

# Power Straighteners



## Standard Duty Power Straighteners

No matter what your requirement, COE Press Equipment has a power straightener to fit your need. Featuring modular design and construction, COE's standard-duty power straighteners are recognized as the "best value in the industry"

and are available with a long list of standard features and available options to meet a wide range of applications. Our direct mounted motor and reducer provide the most efficient power transmission method.

Power Straightener	250 Series	350 Series
Breaker Roll Diameter	2.5"	3.5"
Pinch Roll Diameter	3.5"	5.0"
Number of Breaker Rolls	7/9/11	7/9/11
Material Thickness Range	.010" – .187"	.020" – .310"
Material Width	12.0" – 30.0"	12.0" – 48.0"
Pull-off Capacity	20,000#	30,000#
Speed Range	0 – 150 FPM	0 – 200 FPM
Maximum HP	7.5 HP	20 HP

Note: Actual straightener performance is determined by HP and gear ratio. Consult COE factory for actual performance.

## Heavy Duty Power Straighteners

COE offers a full line of heavy duty power straighteners capable of processing material from 1.0" to 78.0" wide and from 0.10" to .500" thick. Straighteners are available to handle high yield strength coil stock and provide

hands-free material threading. A variety of options and custom engineering can be provided to meet applications in automotive, appliance, HVAC, heavy gauge lines, lawn and garden, steel processing and more.

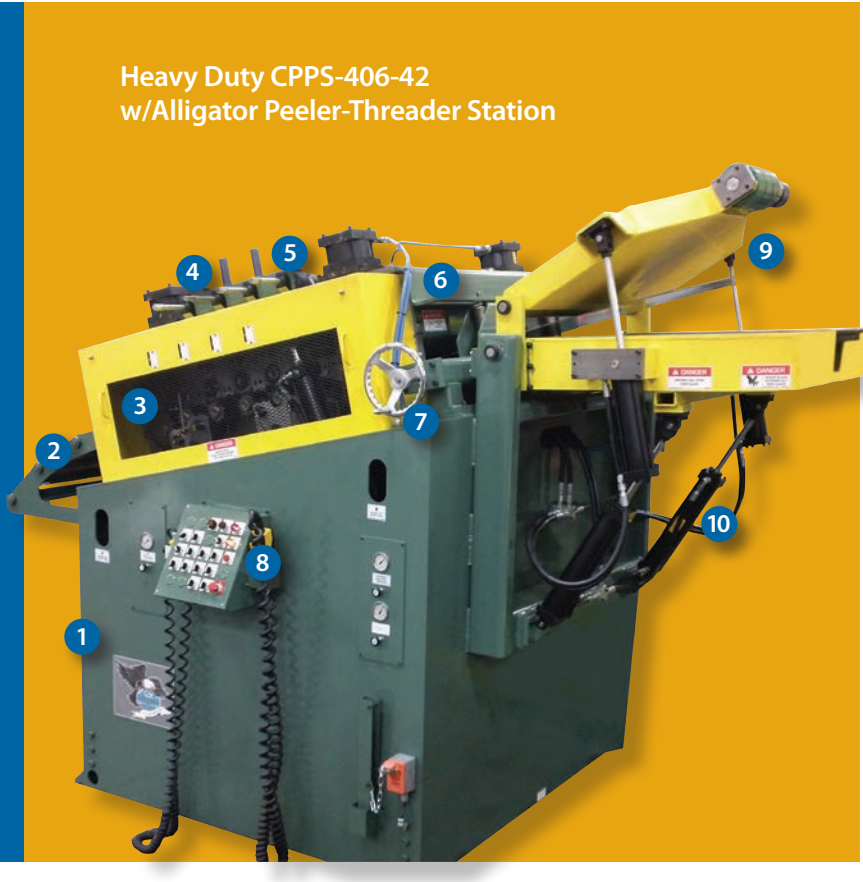
Power Straightener	305 Series	406 Series	507 Series
Breaker Roll Diameter	3.0	4.0	5.0
Pinch Roll Diameter	5.0	6.0	7.0
Number of Breaker Rolls	7/9/11	7/9/11	7/9/11
Material Thickness Range	.010" – .100"	.020" – .300"	.030" – .500"
Material Width	18" – 78"	18" – 78"	18" – 78"
Pull-off Capacity	10,000# – 60,000#	10,000# – 60,000#	10,000# – 60,000#
Speed Range	0 – 250 FPM	0 – 250 FPM	0 – 250 FPM
Maximum HP	50 HP	75 HP	100 HP

Note: Actual straightener performance is determined by HP and gear ratio. Consult COE factory for actual performance.



### FEATURES

- 1) Heavy-duty welded machine base
- 2) Trabon automatic lubrication system
- 3) Reel to straightener tie-in brackets
- 4) "Alligator" peeler-threader system
- 5) Self-centering handcrank edge guides
- 6) Large-bore air cylinders on pinch rolls
- 7) Cluster gear-driven lower straightener rolls
- 8) Worm gear adjust of upper straightener rolls
- 9) SIKO digital upper roll height indicators
- 10) 4-roll catenary section supports material



### FEATURES

- 1) Heavy duty welded machine base
- 2) 5-roll catenary section support material
- 3) Cluster gear-driven lower straightener rolls
- 4) Precision screw jack adjust of upper rolls
- 5) Heavy-duty bridge supported backups
- 6) Entrance and exit pinch rolls w/matte finish
- 7) Self-centering handcrank edge guides
- 8) Centralized operator control station
- 9) "Alligator" peeler-threader system
- 10) Hydraulic operation of threader system

# Coil Reels



## Standard Duty Reels

COE Press Equipment manufactures standard duty reels in a variety of capacities and configurations to provide a lifetime of reliable operation. These reels are typically matched with our ServoMaster Series roll feeds and standard duty power straighteners.

For increased productivity, hold downs, hold downs with motorized endwheels, coil keepers, power coil guides, and automatic backtension systems are also available. Options for coil handling include traveling coil cars, coil lifts, traveling upenders, coil storage racks and turnstiles.

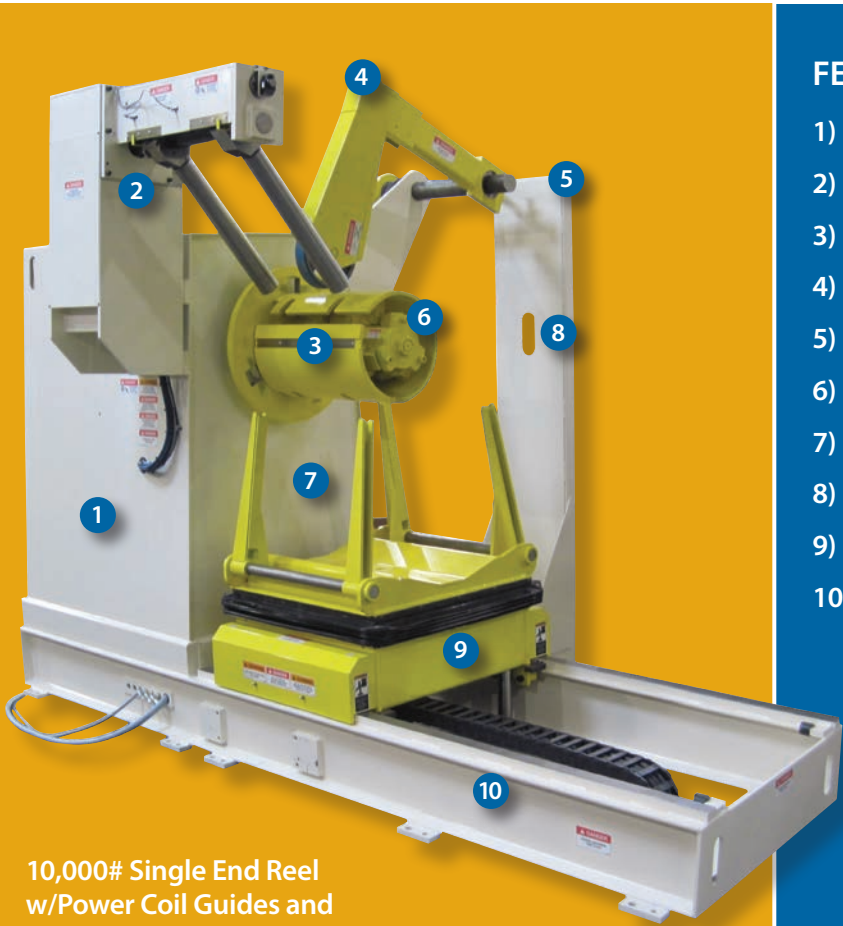
- 4,000# – 10,000# coil weight capacity
- 12" – 36" coil width range
- 16" – 21" coil I.D. range
- 60" maximum coil O.D.
- Pull-off and motorized operations available
- Single-end and double-ended reel configurations
- Stationary and traveling configurations
- Hydraulic expansion and threading available

## Heavy Duty Reels

COE Press Equipment manufactures heavy duty coil reels in a variety of capacities and configurations to provide a lifetime of reliable operation. These reels are typically matched with our heavy duty feeds and power straighteners.

For increased productivity, hold downs, hold downs with motorized endwheels, coil keepers, power coil guides, and automatic backtension systems are also available. Options for coil handling include traveling coil cars, coil lifts, traveling upenders, coil storage racks and turnstiles.

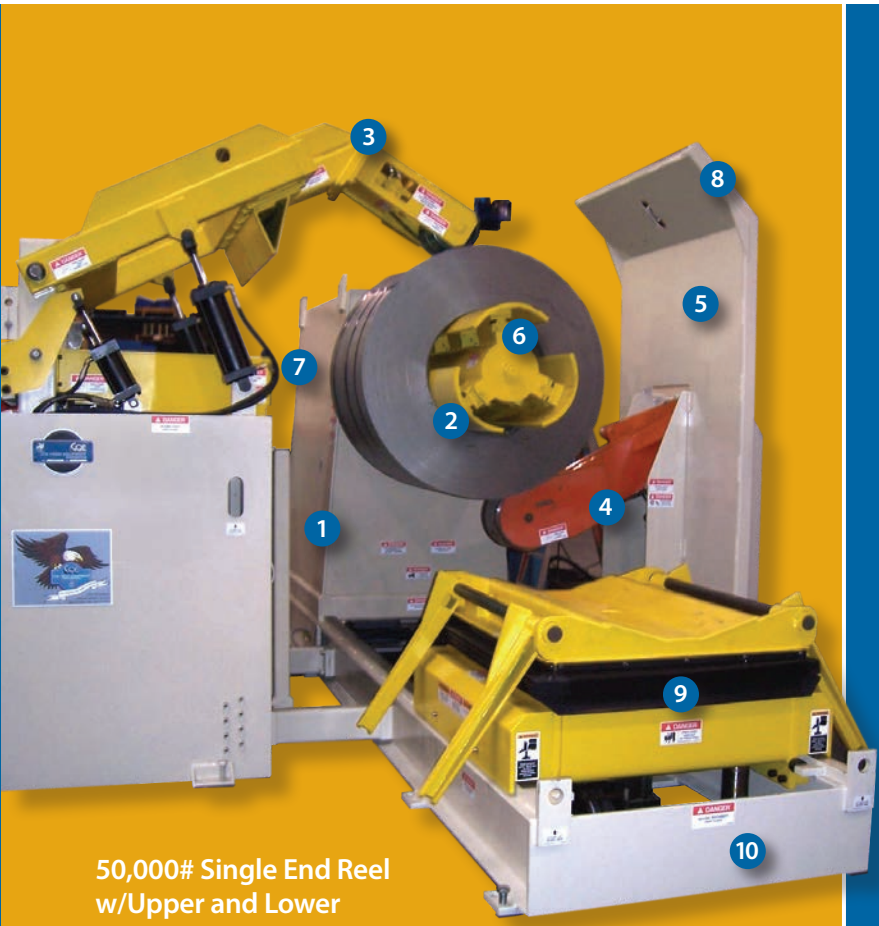
- 10,000# – 60,000# coil weight capacity
- 18" – 78" coil width range
- 20" – 24" coil I.D. range
- 72" maximum coil O.D.
- Pull-off and motorized operations available
- Single-end and double-ended reel configurations
- Stationary and traveling configurations
- Hydraulic expansion and threading standard



10,000# Single End Reel  
w/Power Coil Guides and  
Hold Down w/Motorized  
Endwheel and Coil Car

### FEATURES

- 1) Heavy-duty welded machine base
- 2) Power coil guides for coil containment
- 3) Full radius mandrel pads contact I.D.
- 4) Hold-down w/motorized endwheel
- 5) Clockspring guard for coil containment
- 6) Hydraulic expansion and threading
- 7) Fail-safe drag brake prevents over run
- 8) Automatic brake control by laser
- 9) Hydraulic traveling coil car w/18" lift
- 10) Coil car mounted on structural beam



50,000# Single End Reel  
w/Upper and Lower  
Containment and  
Hydraulic Coil Car

### FEATURES

- 1) Heavy-duty welded machine base
- 2) Full radius mandrel pads contact I.D.
- 3) Hold-down w/motorized endwheel
- 4) Hold-up w/motorized endwheel
- 5) Clockspring guard for coil containment
- 6) Hydraulic expansion and threading
- 7) Fail-safe brake prevents coil over run
- 8) Automatic drag brake control by laser
- 9) Hydraulic traveling coil car w/18" lift
- 10) Coil car mounted on structural beam

# Shear Technology

COE Press Equipment offers a number of shear equipment options that provide cost-effective solutions for cutting continuous coil into blanks in order to optimize production efficiency and material utilization.



## Hydraulic Production Shears

- Heavy-duty welded and gusseted construction
- Hydraulic shear stroke rates up to 35 SPM
- Single or dual cylinders based on application
- Single rake or bow-tie blade designs available
- Shimmed or adjustable blade gap adjustment



## Mechanical Production Shears

- Heavy-duty welded and gusseted construction
- Mechanical shear stroke rates up to 60 SPM
- Eccentric drive shaft of shear ram and blade
- Single rake or bow-tie blade designs available
- Shimmed or adjustable blade gap adjustment



## Oscillating Shear Dies

- Used in blanking presses for trap blank production
- Shear die oscillates up to +/- 45° each press stroke
- Servo driven rack and pinion oscillating mechanism
- Programmable blade angle and speeds up to 60 SPM
- Entrance support table and magnetic exit conveyor



## Oscillating Shear Presses

- Hydraulic drives for speeds up to 35 SPM
- Mechanical drives for speeds to up 65 SPM
- Servo-driven oscillating mechanisms up to 45°
- Available automatic die change and clamping
- Production of straight-cut and scallop-cut blanks

# Stacking Technology

COE also offers a variety of stackers for integration into Cut-to-Length and Blanking Lines. Depending upon your budget, material types and throughput requirements, we

can provide a solution that best fits your coil processing needs. Stack handling solutions include powered tables, powered chain and rollers, and X-Y bi-directional systems.



## Drop Stackers

- Simple yet effective method for stacking of blanks
- Variable speed belt conveyor indexes blanks from shear
- Air float assist available for light gauge materials
- Adjustable side guides and endstop for various blanks
- Hydraulic lift table maintains common stacking height



## Finger Drop Stackers

- Efficient stacking method for commercial size blanks
- Indexing support fingers hold blanks during shearing
- Straight drop or conveyor drop designs available
- Hydraulic lift table maintains common stacking height
- Stack handling by powered tables, chains or rollers



## Combination Finger/Magnetic Stackers

- Efficient stacking method for wide light gauge blanks
- Indexing support fingers hold blanks during shearing
- Magnetic assist supports wide light gauge blanks
- Straight drop or conveyor drop designs available
- Hydraulic lift table maintains common stacking height



## Magnetic Stackers

- Most productive and flexible stacking system
- Blanks are indexed by overhead magnetic conveyors
- Programmable magnets control blank stacking
- Motorized positioning of endstops and side guides
- Stack handling by powered tables, chains or rollers



# Tailout Technology

COE Press Equipment offers a variety of solutions for optimizing coil threading and tailout operations. Our tailout technology can be provided fully integrated into new coil lines or installed as a retrofit to upgrade your



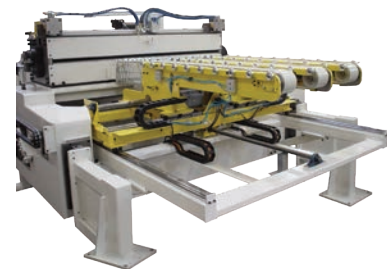
## Roller Type Tailout – New

- Tailout feeder mounted to exit side of servo feed
- Used for blanking line and progressive press lines
- Tailout feed rolls telescope over bolster area
- Minimizes the amount of scrap from each coil
- Can be setup for feed to length or jog mode



## Roller Type Tailout – Retrofit

- Tailout feeder retrofit to existing coil feed line
- Minimizes the amount of scrap from each coil
- Tailout feed rolls telescope over bolster area
- Can be setup for feed to length or jog mode
- Optional hydraulic crop shear station shown



## Magnetic Conveyor Tailout

- Electro-magnet conveyors index coil strip
- Minimizes the amount of scrap from each coil
- Tailout conveyors telescope over bolster area
- Provides servo indexing at tailout press speed
- Motorized and programmed lane width by recipe



## Overhead Roll Tailout

- Tailout feeder for retrofit to existing transfer press
- Tailout feed rolls positioned at edge of bolster
- Set-up for continuous running at normal press speed
- Powered adjustable width lanes by job recipe
- Powered hold down roll for tailout operations

existing operations. Tailout feeds effectively support the leading edge of the coil strip during initial threading operations, and then are used to index the tail of the coil strip after it exits the primary feeder.

# Controls Technology



## Servo Controls

The COE ServoMaster Touch™ Controller is provided as standard on our servo feeds and can integrate with press controls to provide a complete controls system with “single point entry” for all job specific parameters. Six different drive sizes are available to meet varying torque and speed requirements for servo feeds up to 8" in diameter and 78" in width. Interfaces are available for Wintriss, Link Systems, and many others.



**ServoMaster Touch™ Controllers**  
User-friendly 5.7" VGA color touchscreen interface has customizable operator screens.



**Complete Drive Package**  
Robust Yaskawa drives tuned and ready to run right out of the box. You'll be up and running in hours.



## Advantages

- “Feed Advisor” calculates job set-ups
- “On the Fly” length micro adjust
- 500-job memory storage
- Inch or metric programming
- Serial communications capability
- Ethernet communications capability
- Password protected parameters
- English or Spanish language
- Step-programmable option
- Batch control with output
- Servo feed automation option
- FSP-PSF mode option

## PLC Machine Controls

Our PLC controls are the most advanced on the market today and designed to work with hardware from a variety of controls suppliers. PLC-based operating systems and touchscreen operator interfaces make our systems easy to operate and graphically appealing. Automation functions can include feed passline height, straightener breaker roll positions, breaker roll “on the fly” adjust, coil center position on reel, loop depth position, calculated linespeed control, automatic brake tension and modulation, tailout operations and more.





**COE Press Equipment Corp.**

40549 Brentwood

Sterling Heights, MI 48310

Tel (586) 979-4400

Fax (586) 979-2970

Email [info@COEpress.com](mailto:info@COEpress.com)

**[www.COEpress.com](http://www.COEpress.com)**