



# COIL LINE DUCT PROCESSING SYSTEMS



**PROUDLY MANUFACTURED IN THE USA**



WHERE SUPERIOR DUCT WORK BEGINS<sup>™</sup>

VICON is the industry leader of the complete automation of the duct fabrication process. Our patented features and innovative solutions are specifically designed to meet your manufacturing requirements. Proudly designed, manufactured, and supported entirely in the United States, our cutting-edge machinery ensures precision and efficiency while minimizing costs and material waste.

Our product portfolio encompasses HVAC, Fabrication, and Precision Systems, offering advanced solutions to address a wide range of manufacturing needs. Each VICON machine is supported by a dedicated team of experienced machine tool experts who are committed to delivering exceptional customer service.

Our knowledgeable sales team is focused on fully understanding and addressing your needs. Following the sale, our professional technicians provide ongoing support. All VICON machines are accompanied by an industry-leading warranty and complimentary lifetime telephone support.

At VICON, we don't just build machines – we build partnerships.  
It's that simple!

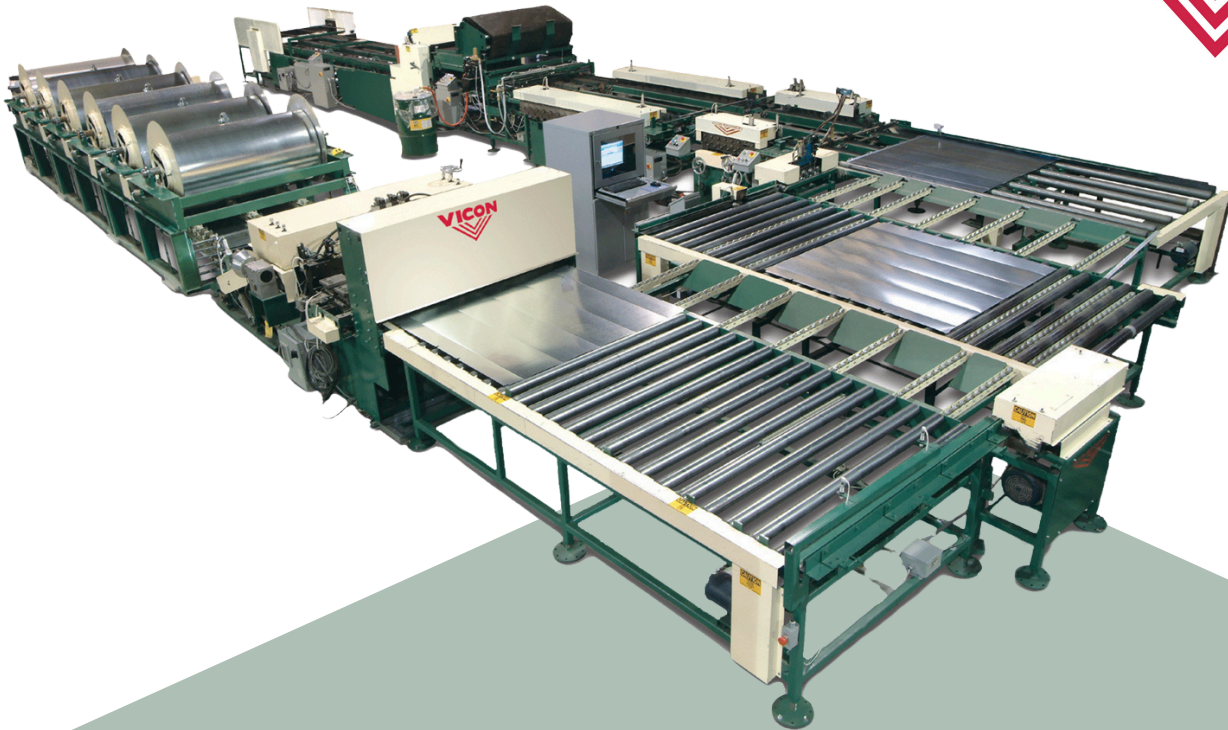




# COIL LINE

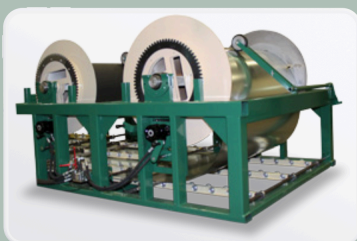


## COIL LINE

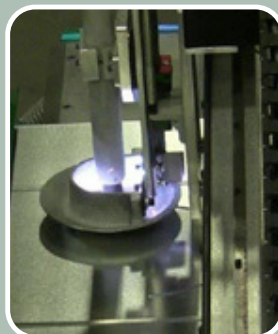


The Vicon Coil Line is designed to deliver maximum profitability and efficiency, featuring the industry's fastest patented coil loading system and a unique rollformer design engineered for maximum uptime. Engineered for reliable performance, high productivity, and precise part transfer, it takes duct work production to the next level.

The state of the art PC Controller powered by ViSoft Software for Windows®, features an intuitive, menu-driven interface that can be tailored to meet SMACNA standards or customized to align with your shop's specific requirements. Backed by Vicon's team of programming engineers, ViSoft enhances productivity and precision, ensuring your operation runs seamlessly.



**Coil Spool Assembly**  
US Patent #7,673,915



**Optional  
Coil Line Plasma Cutting**  
US Patent #9,393,638  
& #9,731,376



**Heavy-Duty Liner  
Shearing**  
US Patent #9,981,399 B2



**Optional  
Four Position Insulation Holder**  
US Patent #7,926,757

# COIL HANDLING SYSTEM



The VICON Coil Cradle System offers an efficient, user-friendly process for loading coils. Coils are spooled onto patented Coil Drum Assemblies (US Patent #7,673,915) and can be inserted into the coil material using a forklift in minutes. Coils are then loaded into cradles with a forklift or crane, allowing one person to manage the entire operation.

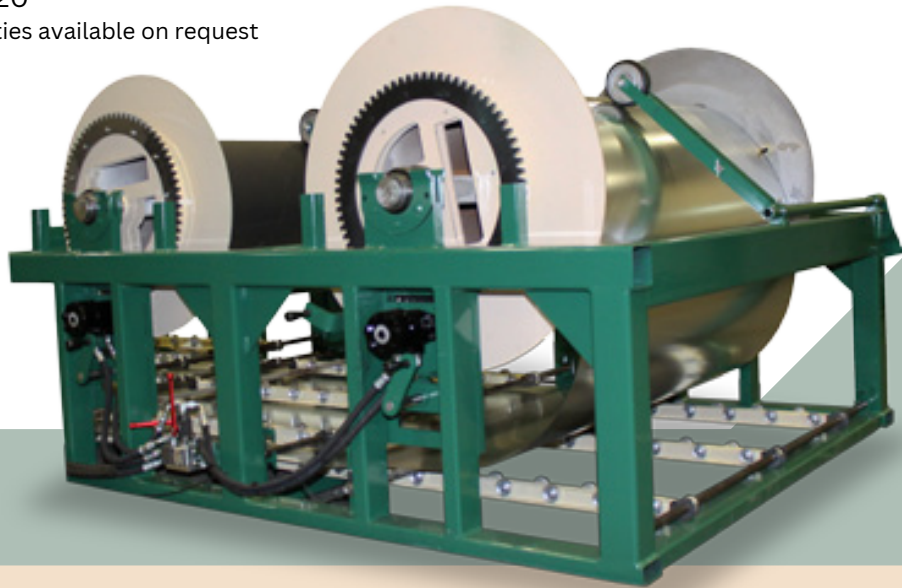
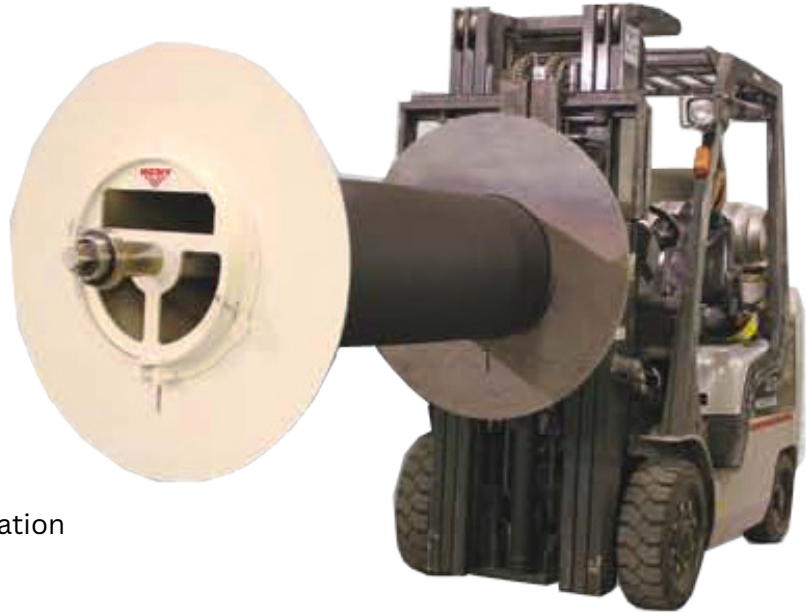
The Coil Cradles feature individual hydraulic coil drive motors and pneumatic "backup" wheels at each coil station to ensure positive feed and secure band removal on the new coils.

An underfed roller track guiding system is incorporated to direct the end of each coil up to the infeed guide ramp of the duct blanking system.

## STANDARD SPECIFICATIONS

- \*Number of Stations: 1-6
- \*Max Coil Weight: 12,000lbs per station
- \*Max Coil Width: 60"
- \*Max Coil O.D. : 42"
- \*Coil I.D. : 20"

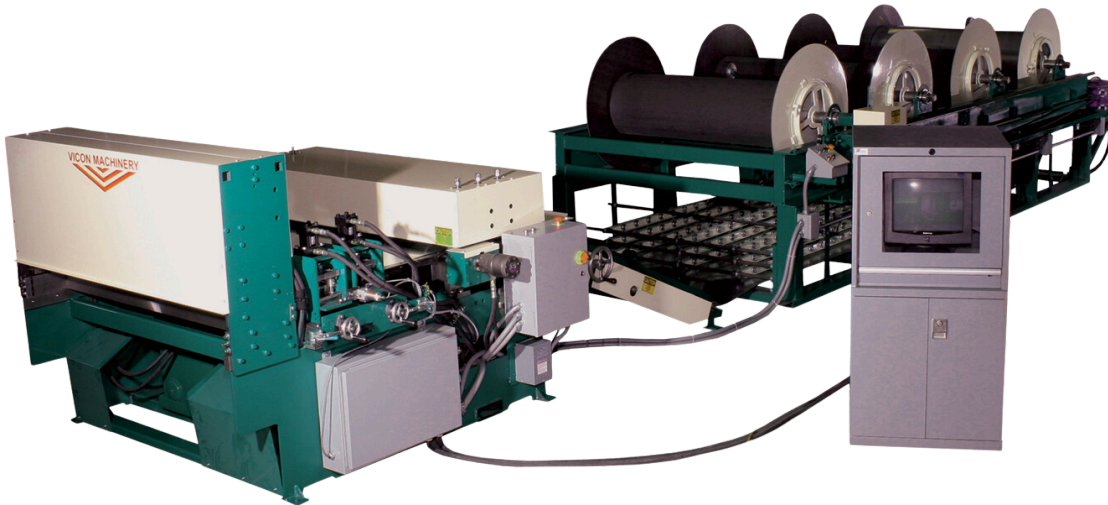
\*Optional capacities available on request



## FEATURES & BENEFITS

- Individual hydraulic coil drive motors at each station for extremely smooth and quiet material feed
- Each drive motor is retractable for safe material loading
- Automatic forward and reverse drive capability with slack loop sensing system
- Forklift and Crane loading capability





The VICON duct fabrication system centers around the essential Duct-Line Express front-end. Transform it into a complete Full Coil Line effortlessly by integrating modular VICON Coil Line components, delivering exceptional versatility and productivity.

## FEATURES & BENEFITS

- Precision, high speed servo feed system for the fastest production rate in the industry
- Gear-driven four roll straightener with 4" diameter rolls
- Individual coil drive motors on each coil station
- Pneumatic back-up wheels at each coil station for safe band removal and positive coil feed
- Heavy-duty notching unit with combination dies to provide Slip & Drive, TDX, Snaplock and Pittsburgh notch patterns
- Dual hydraulic cylinder shear with high carbon, high chrome D-2 shear blades. Fully adjustable heavy-duty gibs allow for independent blade gap adjustment. Heavy-duty torsion synchronization shaft ensures proper shear angle throughout the stroke
- VICON PC based control system capable of controlling the complete system
- Ring type beading with SMACNA spacing
- Hands-free coil feed

## STANDARD SPECIFICATIONS

- 16-30-gauge mild steel capacity
- \*12,000 lbs. max coil capacity (with coil drive)
- \*Coil widths from 48"- 60" standard
- \*Number of Stations: 1-6
- Quick-change coil spools (US Patent #7,673,915)
- Individual Hydraulic coil drive motors
- Powered in-feed guide ramp with hand wheel for change in coil widths

\* Optional capacities available upon request

## OPTIONS

- Heavy-duty coil processing, 4.5" diameter six (6) roll straightener, 14-gauge mild steel notching and shearing
- Tie rod hole punch unit Model HP-5 provides tie rod and damper holes per SMACNA standards (or set your own standards)
- Plasma Cutting Unit designed to cut round, oval and rectangular holes for tap-ins and access doors without limitations on the entire duct blank (US Patent #9,393,638 & #9,731,376)
- Economical overfed coil cradle systems for smaller overall footprint
- Heavy-duty "Patented" shearing process (US Patent #9,981,399 B2)
- 30" wide coil processing capability for transverse duct flange (T25a & T25b) on standard 60" coil width system
- Heavy-duty in-line slitting with multiple slits available

# SHEAR & BEND



The VICON Shear & Bend offers a practical solution for shop needs, featuring a patented coil cradle system, ramp, straightener unit, beader, notching unit, and heavy-duty shear and bending unit. The Full Coil line can be easily completed with additional modular VICON coil line components.

## FEATURES & BENEFITS

- ▶ Pneumatic back-up wheels at each coil station for safe band removal and positive coil feed
- ▶ High-speed servo feed system gear-driven four roll straightener with 4" diameter rolls
- ▶ Individual coil drive motors on each coil station
- ▶ Robust, gear-driven four roll straightener with 4" diameter rolls
- ▶ Ring type beading with SMACNA spacing
- ▶ Heavy-duty notching unit with combination dies to provide Slip & Drive, TDX, Snaplock and Pittsburgh notch patterns
- ▶ Dual hydraulic cylinder shear with high carbon, high chrome D-2 shear blades. Fully adjustable heavy-duty gibs allow for independent blade gap adjustment. Heavy-duty torsion synchronization shaft ensures proper shear angle throughout the stroke
- ▶ Rugged bending unit to form the male Pittsburgh edge as well as an L-section, U-section, or full wrap
- ▶ VICON PC based control system capable of controlling the complete system
- ▶ Hands-free coil feed

## STANDARD SPECIFICATIONS

- 16-30-gauge mild steel capacity
  - \*12,000 lbs. max coil capacity (with coil drive)
  - \*Coil widths from 48"- 60" standard
  - \*Number of Stations: 1-6
  - Quick-change coil spools (US Patent #7,673,915)
  - Individual Hydraulic coil drive motors
  - Powered in-feed guide ramp with hand wheel for change in coil widths
- \* Optional capacities available upon request

## OPTIONS

- Tie rod hole punch unit Model HP-5 provides tie rod damper holes per SMACNA standards or customizable to your shop standards
- Male button punch system for Snaplock male edge
- Dual Head Cleat Edge rollformer to form the female cleat edges on L-Section or full wrap section
- Economical overfed coil cradle systems for smaller overall footprint

# LOCKSEAM SYSTEM and TRANSFER/FEED CONVEYOR SYSTEM



The VICON Lockseam System excels in design, providing a user-friendly and reliable method for automatically creating Pittsburgh and Snaplock seams. Its "Accessible Concept" eliminates overhead devices to minimize miss-feeds or jams, while the "open top" feature allows for larger blanks to be fed into the TDX, liner, and brake systems.

## FEATURES & BENEFITS

- ▶ Forms Pittsburgh and Snaplock seams automatically
- ▶ Female and male seams formed independently eliminating tapered edges and duct "twist" allowing the fastest production rate in the industry
- ▶ Large heavy-duty bearings with inner races and grease fittings protect rollformers and extend the life of the machines
- ▶ Chain driven, heavy-duty roller transfer conveyors
- ▶ Positive roll form feed system to ensure square formation
- ▶ Quick changeover on female lock using a rotating rollformer frame
- ▶ Automatic quick set for button punch on male edge
- ▶ Material removal bypass feature allows for blank removal of sheets to be plasma cut or used for other operations

## STANDARD SPECIFICATIONS

- Heavy-duty roll form heads
- 120" maximum and 14" minimum duct stretch-out
- 138" maximum material stretch-out on 4-piece duct
- 18-26-gauge mild steel capacity for Pittsburgh
- 20-28-gauge mild steel capacity for Snaplock

\* Lighter and heavier capacities available upon request

## OPTIONS

- Dual head system designed to minimize footprint and maximize productivity when ship floor space is limited
- Automatic duct seam sealant system
- Industrial hard chrome plated rollform tooling
- Extended length transfer system for additional duct stretch-out



# DUAL HEAD CLEAT EDGE FORMER



The VICON Dual Head Cleat Edge Former rollforms a 7/16" cleat edge on both ends of the duct after the Male and Female lockseam has been rollformed.

## FEATURES & BENEFITS

- ▶ Cleats can be formed on either the short or long leg of L-section or full wrap duct
- ▶ Reliable, quiet performance
- ▶ Accurate positioning with precision ball screws
- ▶ Large heavy-duty bearings with inner races and grease fittings protect rollformer and extend the life of the machine
- ▶ Pneumatically operated bypass guides with wedge-grip conveyors allow blanks to be fed through for other types of duct connectors

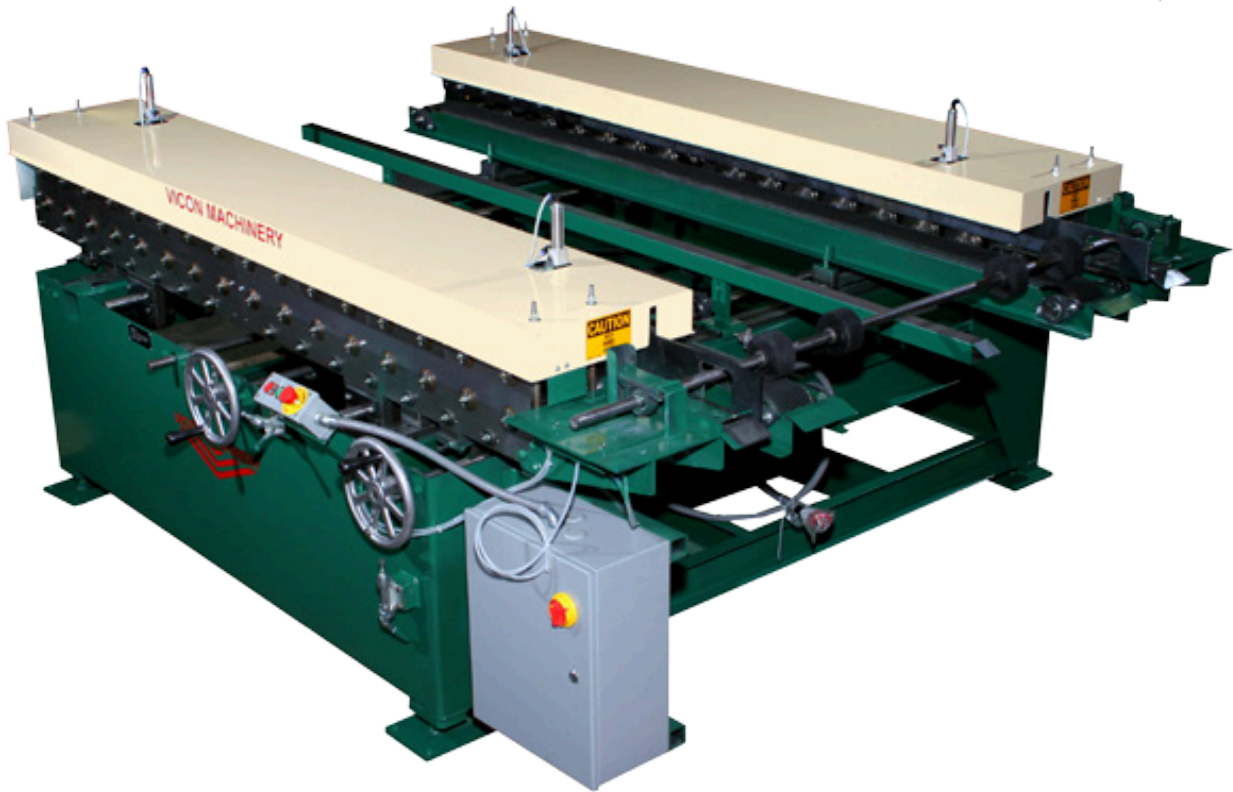
## OPTIONS

- 72" coil capacity

## STANDARD SPECIFICATIONS

- 18-26-gauge mild steel capacity with no adjustments
- 7/16" cleat edge with minimum cleat length of 4"
- 3HP motor coupled to a heavy-duty oil bath gear reducer
- 8 station heavy-duty conventional roll form heads
- Heavy-duty roller chain drive (no belts)
- Robust 1" diameter stress proof roller spindles

# DUAL HEAD TDX ROLLFORMER



The VICON TDX Dual Head Rollformer is designed to produce your preference of either T-25a or T-25b SMACNA approved transverse flange connector.

## FEATURES & BENEFITS

- ▶ Reliable, quiet, long life performance
- ▶ Superior quality with 16 forming station on each rollform head
- ▶ Precision ball screws for parallelism and quick change over
- ▶ Large heavy-duty bearings with inner races and grease fittings protect rollformer and extend the life of the machine
- ▶ Pneumatically operated bypass guides with wedge-grip conveyors allow blanks to be fed through for other types of duct connectors

## STANDARD SPECIFICATIONS

- 18-26-gauge mild steel capacity with no adjustments required when changing metal thickness
- 10HP motor coupled to a heavy-duty oil bath gear reducer
- Heavy-duty roller chain drive (no belts)
- Rugged 1-1/4" diameter stress proof roller spindles

\*16-gauge mild steel capacity available on request

## OPTIONS

- "Grease duct, Welded duct" option available to produce right angle flange
- Industrial hard chrome plated rollform tooling

# AUTOMATIC DUCT LINER SYSTEM



The VICON Automatic Duct Liner Application System automates the processes of unwinding, cutting, applying adhesive to sheet metal, and securing duct liners without needing tooling or blade changes. It accommodates various liners like Armaflex® and K-Flex®. An optional four-position insulation coil holder further reduces downtime during insulation changeovers for long or short runs.

## FEATURES & BENEFITS

- ▶ Heavy-duty patented liner shearing, capable of processing all types of liner material designed for use in coil line duct fabrication. No tooling or blade changes required. (US Patent #9,981,399 B2)
- ▶ Safe push button control allows fast, safe and easy threading and crop cutting of new insulation rolls
- ▶ Rows of pins spaced to SMACNA standard for low and high velocity air flows. Pin placement can be customized via the control system
- ▶ Unit automatically controlled by the VICON Control System
- ▶ Easy, open access to glue heads for cleaning
- ▶ Industry leading guiding system, no adjustments required

## STANDARD SPECIFICATIONS

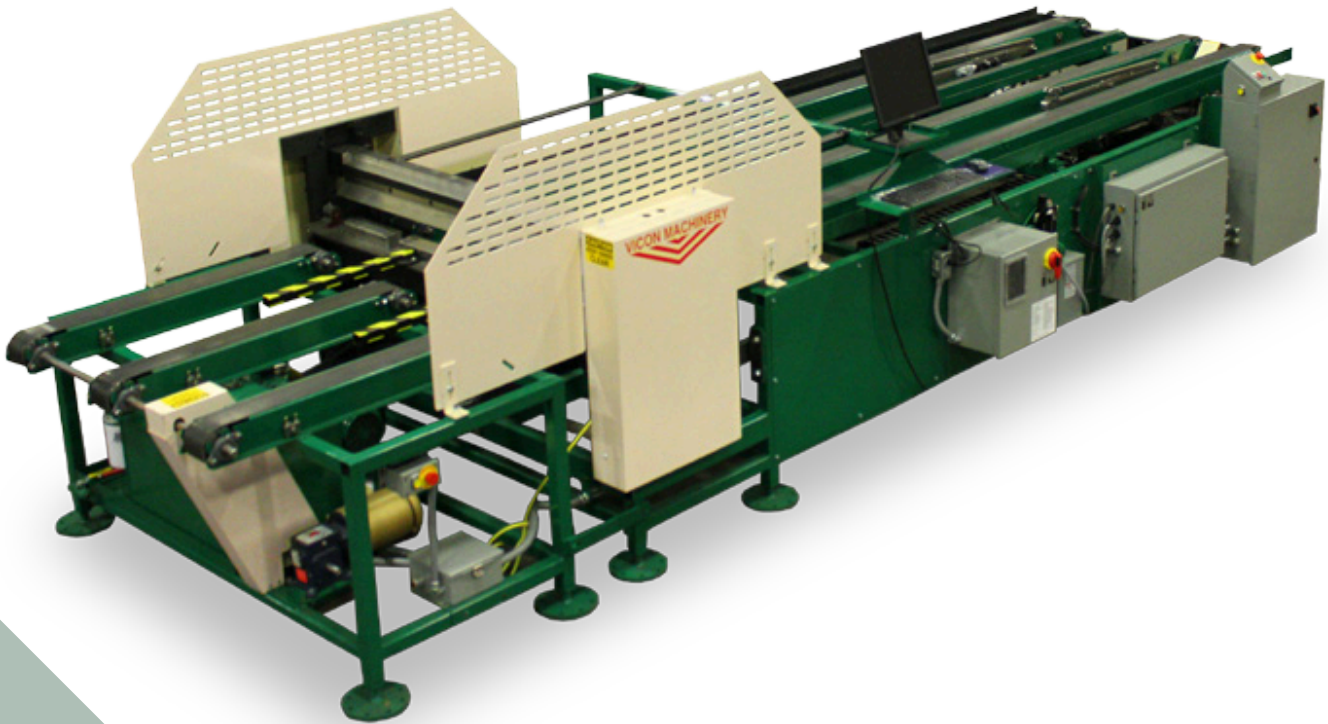
- Automatic adhesive extrusion application system
- Multi-speed drive for optimum pinning speed or bypass of unlined duct
- Designed to apply 44", 47", 48", 56", 59", and 60" wide liner
- Low profile liner cradle/uncoiler
- Multi-head pin spotter: choice of Duro Dyne® or Gripnail®

## OPTIONS

- Patented Four (4) position insulation coil holder to allow for rapid change of insulation sizes US Patent #7,926,757)
- High-Speed multi-head pin spotter



# FULL WRAP BRAKE SYSTEM



The VICON Full Wrap Automatic Brake System is a heavy-duty high-speed servo feed bending system.

## FEATURES & BENEFITS

- ▶ High production front gauge gripper/ejector system with dual rack and pinion servo-drive ensuring squareness and accuracy
- ▶ Reliable "Time Based Logic" eliminates need of adjustments to external sensors
- ▶ Remote Coil Line Operator Control station
- ▶ Industry leading guiding system, no adjustments required

## OPTIONS

- L-Brake system also available
- 14-gauge mild steel capacity

## STANDARD SPECIFICATIONS

- Heavy-duty 5' hydraulic bending unit with 16-26-gauge mild steel capacity
- System capable of L-section, U-section or full wrap duct (min. size for full wrap is 6" x 6" unlined), maximum capacity 120" wrap perimeter
- 48" and 60" duct lengths for slip & drive/ raw duct and 44" and 56" duct lengths for TDX duct
- Unit automatically controlled by VICON Control System



WHERE SUPERIOR DUCT WORK BEGINS™

**PROUDLY DESIGNED, ENGINEERED, &  
MANUFACTURED IN THE USA**

**MANUFACTURING, SALES, SERVICE**

*Coil Line, Rollform, etc.*

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