

YESTERDAY'S INTEGRITY. TOMORROW'S TECHNOLOGY.

SERVO ROLL FEED STRAIGHTENERS

MXS-300PL Series



CHS 
AUTOMATION

 MADE IN THE U.S.A.

Standard Features

Standard Specifications:

Feed roll diameter	3.0 inches
Maximum material width.....	6 - 42 inches
Material thickness range.....	0.020 - 0.186 inches
Maximum feed length	999.999 inches
Material feed accuracy within	0.0003 inches
Required air pressure supply.....	60 - 80 PSI

Standard Features:

- One sets of 3" diameter - solid shaft feed rolls
- Coating of upper and lower feed rolls – Max Grip Matte Chrome Blast #3
- Heavy duty blanchard ground side plates
- High speed air operated pilot pin release
- Upper and lower driven feed rolls
- Precision anti-back lash cluster gear train
- AC servo drive package
- PanelView 600 Touch Screen HMI – 6" Screen
- Right angle precision servo gear head
- Centralized operator control station for all servo feed functions
- Remote pendant control with curly cord for jog forward and reverse
- Fused disconnect
- Centralized lubrication system (manual lube)
- Three roll loop support section
- Slide and clamp edge guides with scale
- Press attachment slots for 3/4 bolts & +/- 6" adjustment from pass line

Optional Features:

- Fixed cabinet base
- Cabinet base with adjustable pass line via hand crank (+/- 6" from median pass line)
- Motorized pass line adjustment with travel limits
- EZ Clamp (Constant tension press attachment system)
- Single roll self-centering edge guides via hand crank
- Single roll edge guides with individual or simultaneous adjustments
- Overhead cable run with fixed and flexible conduit
- Trapping roll on catenary section for threading assistance
- End of stock detector for automatic shut-off
- Counter balance roll lift system
- Automatic lubrication unit
- SFI hardware and programming



Additional features and accessories available

Standard Features

MXS-300PL Series

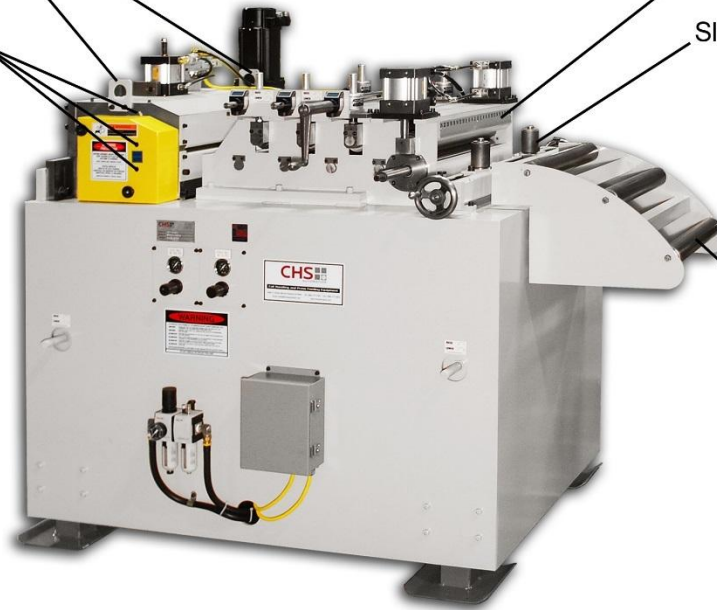
Lifting Provisions for Safe and Easy Mounting of Machine

Centralized Lube Points (3 Total)

Stock Width Scale for Stock Guide Alignment

Slide and Clamp Edge Guides with Tools Free Adjustment

3-Roll Catenary Section for Proper Loop Support

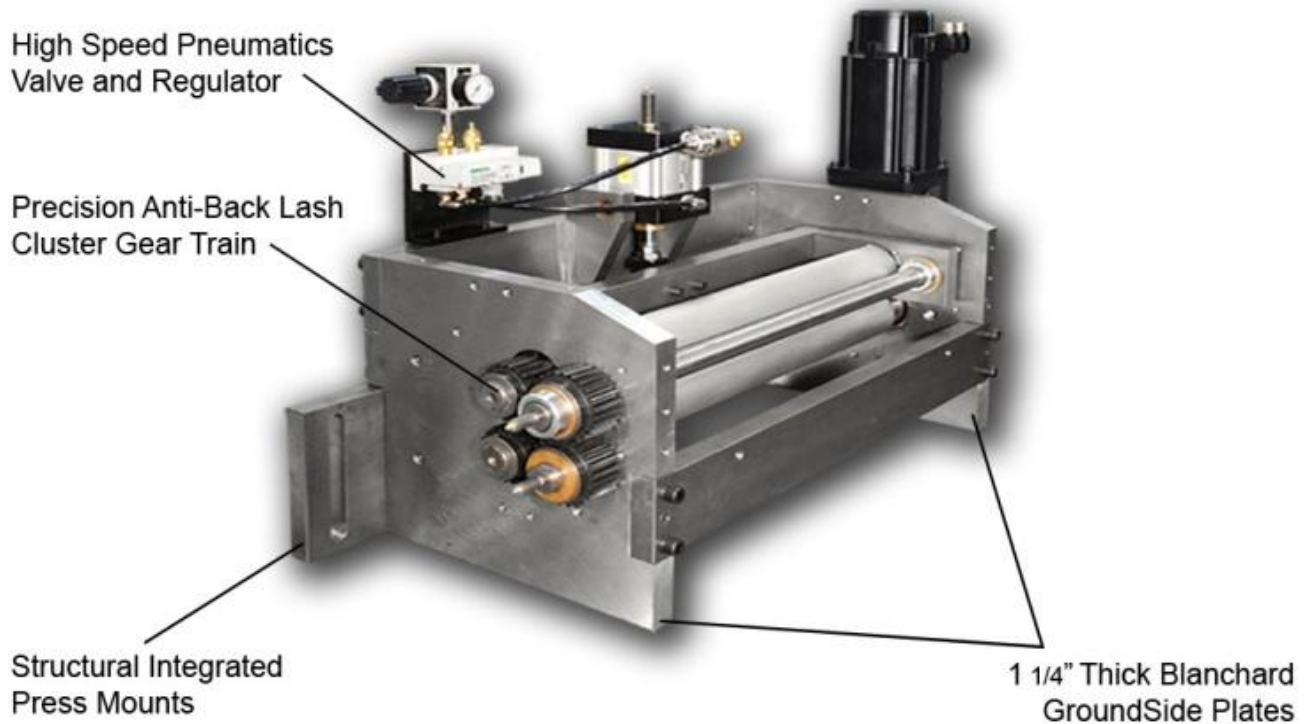
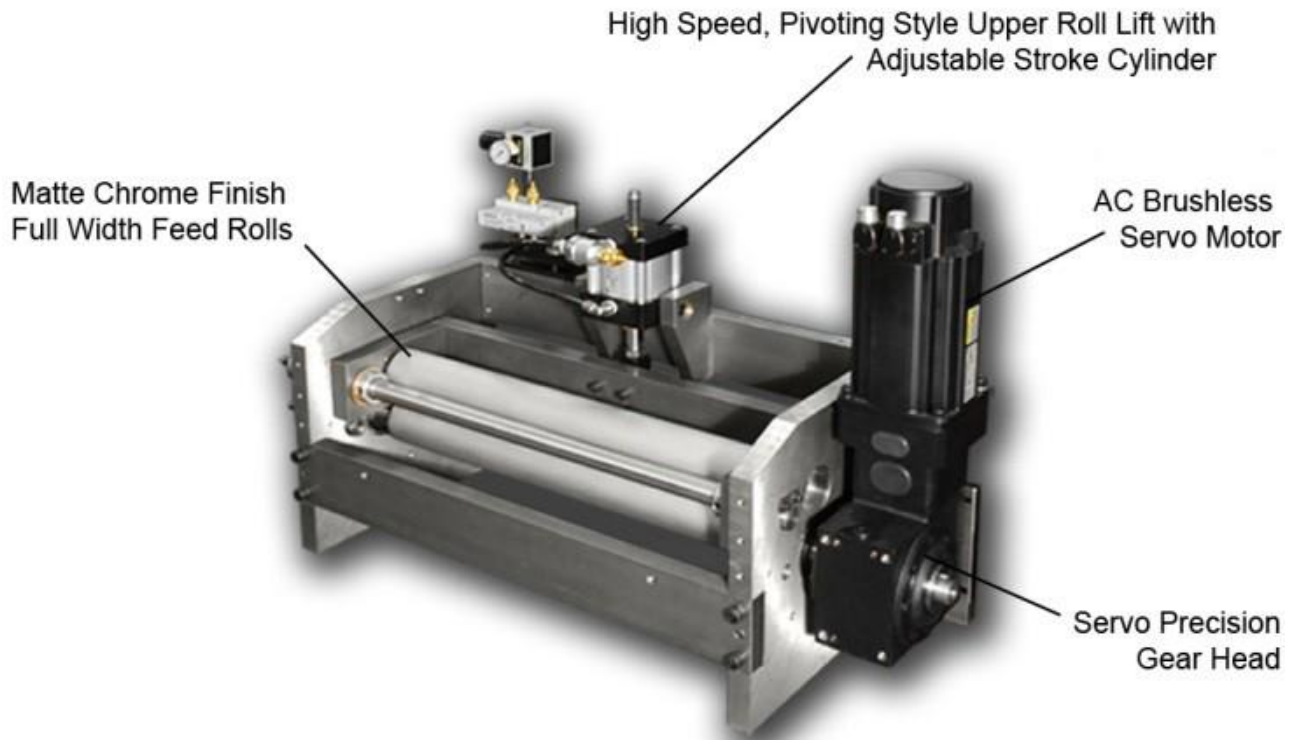


CHS 
AUTOMATION

 MADE IN THE U.S.A.



Servo Roll Feed Head Assembly



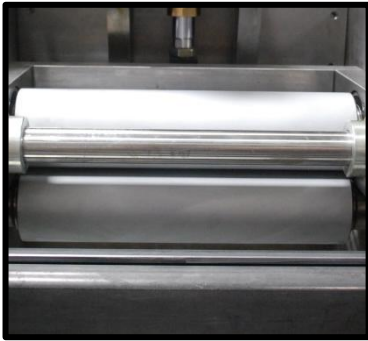
CHS 
AUTOMATION

 **MADE IN THE U.S.A.**



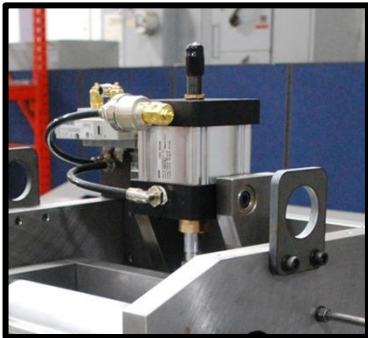
Standard Feature Descriptions

MXS-300PL Series



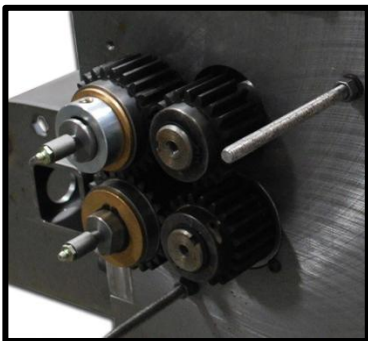
Feed rolls

The rolls are of solid full width hardened and ground construction with matte chrome finish #3 for positive material grip. The rolls are mounted in anti-friction bearings.



High speed upper feed roll for pilot pin release

The high-speed pivoting style upper feed roll assembly uses an adjustable stroke, trunnion mounted cylinder and lift arm combination to raise and lower the upper roll. The pneumatic cylinder's stroke adjustment allows users to optimize the roll lift speed and distance by reducing the travel of the piston, or increase for thicker materials when needed. The lift arm design provides leverage in the downward pinch pressure on the material, optimizes air consumption and maintains a parallel situation with the lower feed roll through its rigid design. The true pivoting rotation maintains full gear engagement throughout material variations while providing a precise feed length.



Precision anti-back lash cluster gear train

A heavy duty set of cluster gears ensure that the feed has no play or back lash during the feeding of material.





Drive train (gear head)

The lower roll is driven via a direct shaft mounted right angle high performance gearhead. This heavy duty system has a 300% shock load capacity. Utilizing a precision gearhead eliminates the need for problematic couplings, belts, and pulleys.



Remote pendant control

This remote pendant control is utilized for incremental jogging of the material as well as jog to length. It is equipped with retracting coil cord and holder.



Fused disconnect

The console cabinet is a NEMA 12 enclosure with fusible disconnect. The feed will require a one pole 24VDC signal for feed for automatic feed initiate and 24VDC signal for pilot pin release from the press rotary cam switch.



Loop support section

A three-roll stock support is located on the entrance side to support the material in a controlled arc on entry side of the feed unit.

Slide and clamp edge guides with scale

Two tools free vertical roll (one per side) slide and clamp edge guides are provided to guide material into the feed head. A three roll stock support is



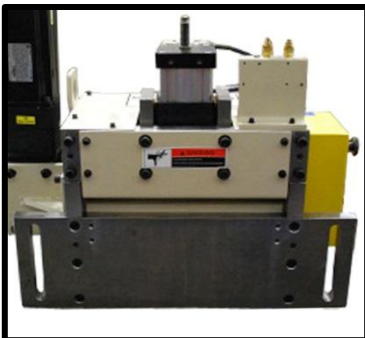
located on the entrance side to support the material in a controlled arc on entry side of the feed unit.

Press attachment slots

Press attachment slots are provided as a standard on the base machine. Optional is an adjustable press mounting assembly or a free-standing base.

Optional Features

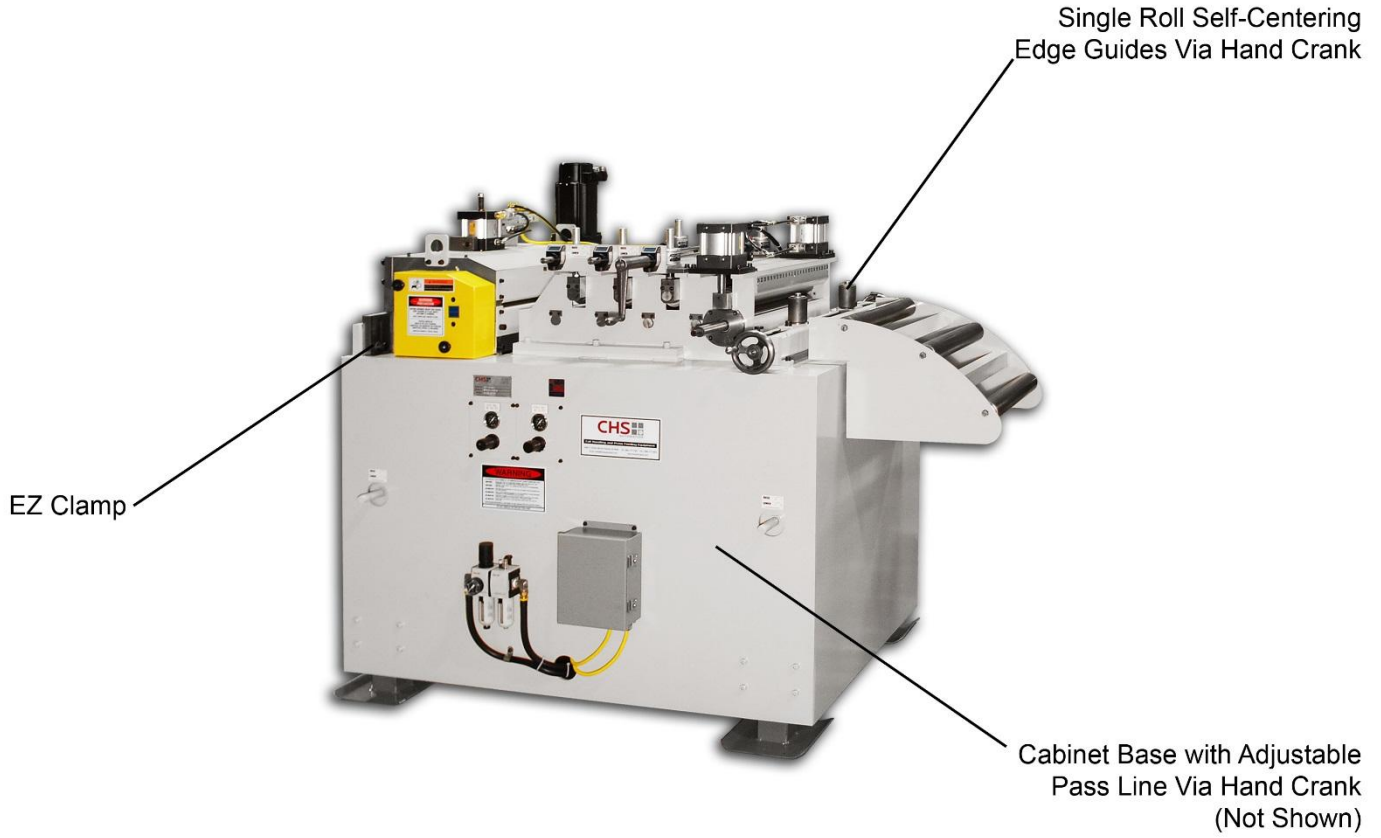
MXS-300PL Series



CHS 
AUTOMATION

 **MADE IN THE U.S.A.**





Optional Feature Descriptions

MXS-300PL Series

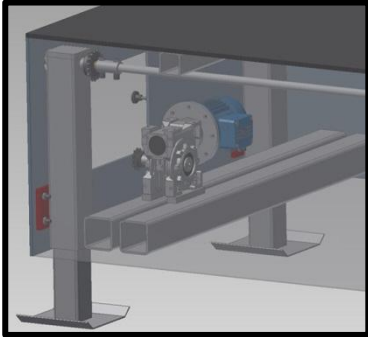
CHS 
AUTOMATION

 MADE IN THE U.S.A.

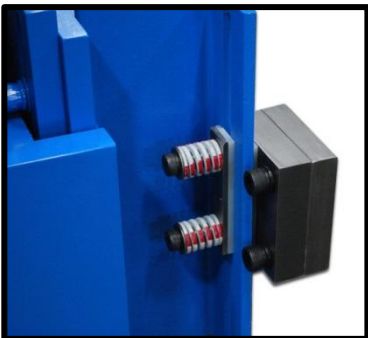




Cabinet base with adjustable pass line



Motorized pass line adjustment



EZ Clamp (Constant tension press attachment system)

With this system, no press attachment bolts have to be loosened from the press when changing the height of the cabinet.



Single roll self-centering edge guides via hand crank

Both edge guide rolls move in unison and hold a true center on the material. This edge guide is recommended if the material needs to always be centered in the press or using equipment.

CHS 
AUTOMATION

 MADE IN THE U.S.A.





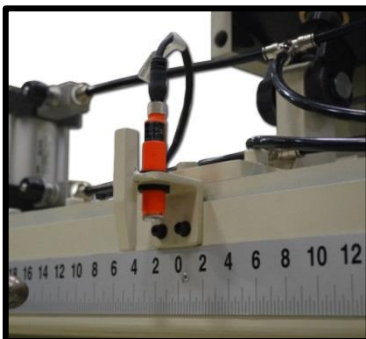
Single roll edge guides with individual or simultaneous roll adjustments



Overhead cable run

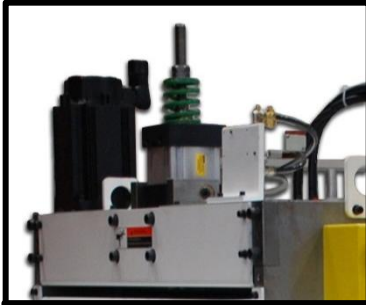


Trapping roll



End of stock detector





Counter balance system on upper feed roll



Allen Bradley AC servo control system



Automatic lubrication unit





(Standard) Servo Control Package

Rexroth/Indramotion Package with VCP-08 Operator Interface

- REXROTH – INDRAMAT – Indramotion Package with VCP-08 HMI
- REXROTH – INDRAMAT – Indradrive
- REXROTH – INDRAMAT - Servo motor
- Servo motor power cable & servo motor feedback cable – 10-meter length
- All related relays, starters, push-buttons, pilot lights, etc
- Emergency stop
- Free standing NEMA-12 sloped front electrical enclosure
- Fused disconnect
- Full operator's manuals and electrical schematics



- Hard button/switch functions provided:
 - Power On
 - Drive On/Drive Off
 - E-Stop
 - Feed Roll: Raise/Lower/Pilot
 - Remote jog pendant with 10' curly cord and mounting holster
 - Jog Forward / Jog Reverse
 - All other hard button/switch functions are optional at an additional cost
- HMI Keypad Dedicated Button Functions
 - Auto/Manual/Setup Mode
 - Jog Forward / Jog Reverse

Standard Features:

- Operating modes (Parameter, Manual, Automatic, Setup)
- Feed before press (single stroke, continuous stroke)
- Press before feed (single stroke, continuous stroke)
- Product counter
- Clear text diagnosis
- Multilingual operator terminal – English, Spanish, German & French
- I/O status
- **Production Data:**
 - Feed angle utilization as %
 - Strokes per minute
 - Average web speed
 - Analog speed override
 - Micro-adjust on the fly
 - Roller venting (Manual/Auto)
- **Data management for 99 products:**
 - Feed length
 - Speed
 - Acceleration
 - Back
 - Piece counter
 - MMC for Central data storage
 - Preconfigured HMI Screens
 - PC-less commissioning
 - Start/Stop/Cycle Stop
 - Reset product counter, piece counter
 - Clear faults
- **Communication (with preparation)**
 - Serial punch through mode (2 x com port)
 - Device Net/SERCOS III

Optional Features:

- 1) Additional hard button / switch functions
 - a. Ex: Items unforeseen for feeder functions



- b. Contact sales with your detailed list of existing machine functions and updated quote
- 2) Functions for Pilot Head On/Off, Power Passline Up/Down
- 3) Calibrated at CHS prior to shipment
 - a. Fully bench tested and ran at CHS, pre-programmed
 - b. Customer to supply additional info such as feed roll diameter, gear ratio, etc.
- 4) Motor Blower (If needed based on heavy duty or higher speed applications)
- 5) On-site start-up and training
- 6) Overhead cable run

****Note control functions and features may vary from above descriptions depending on the servo drive and controls specific to your needs. Please consult with your sales representative for more information.**

(Optional) Servo Control Package



CHS Automation / Rockwell / Allen Bradley - Servo Drive & Control Package:

- CHS
- Allen



Servo Feed
Programming
Bradley Servo
Motor



- PanelView 600 Operator Interface
- Kinetix 5500 Drive
- Panel View Plus application
- Motor Power/Encoder Cable
- Remote jog pendant with 10' curly cord and mounting holster
- All related relays, starters, pilot lights, etc.
- Emergency stop
- Free standing sloped front electrical enclosure
- Fused disconnect
- Full operator's manuals & electrical schematics (Electronic)

Features:

The controls have the following functions as standard:



- Automatic, Manual and Setup Modes
- 100 Part recipe storage capacity (expandable)
- Feed To Length – programmable per part recipe
- Feed Velocity (speed) – programmable per part recipe
- Feed Acceleration – programmable per part recipe
- Batch Count - programmable per part recipe
- Feed Length Micro Adjustment
- Manual Mode:
 - Jog Feed Mode
 - Feed Roll Open/Close
- Setup mode:
 - Jog to part length & stop – stroke press – Jog to part length & stop
- Pilot Pin Control
- Inch or Metric length input
- Feed complete signal
- Fault History
- (2) - 24Volt DC capable dry contacts from the press rotary cam switch will be required. One for automatic feed initiate, and for pilot pin release.
- SFI (Servo Feed Interface) compatible with select Wintriss & Link press controls with preparation & additional SFI purchase from the press control manufacturer.
- Optional features and upgrades are available. Please contact your CHS sales rep for more information.

