NC Servo Feeder

High Quality Products for Coil Feeding in Press Room

NC Servo Feeder
(Normal Speed)

Control Panel

NC Servo Zig Zag Feeder
Zig Zag Feed Saves Material Cost For Round Components Upto 8%

HIGHER END
NC Servo Feeder
in Technical Tieup with
ITALY
LC CATTANEO
Coil handling and feed equipment

Imported Gear Box (< 5' Backlash)

Measuring Wheel

EUROPE'S MOST TRUSTED & TECHNOLOGY DRIVEN EQUIPMENTS

- Minimum Backlash Gearbox is used for better accuracy & higher torque.
- The accuracy is made by a double measuring system servo motor resolver + measuring wheel on sheet.
- Special TDC arrangement for transmission of power from lower shaft to upper shaft which results in min backlash during too / fro motions.

Press Room
An ISO 9001:2015 Company

Press Room in their endure to bring latest technology for feeder, have brought NC Roll Feeder technology for presses in year 2001. Today with installation in various parts of country to handle strip width from 100 mm to 1300 mm & thickness from 0.05 mm to 10.00 mm fully programmable units have been interlinked with small / medium / large presses.

Various models have been manufactured & following standards models are available in short deliveries.

FEATURES

MECHANICAL FEATURES.

- Stabilized Steel frame construction
- Gear driven upper Roll with anti-backlash features to ensure non-slip, positive feeding
- Quick adjustment for stock thickness
- Finished Rolls
- Permanently sealed precision Roll Bearings, no lubrication required
- Low Inertia Timing Sheaves with reinforced Gear Belt
- Roll Release Actuation Lever that adapts to either Mechanical or Pneumatic Pilot Release
- Entry Support Rolls / Cascade Rolls
- Individually adjustable Roller Stock Guides
- Roll Release Lever for Strip insertion;
- Adjustable Mounting Bracket with Transition Plate & Jack Screw for press line adjustment ± 50mm;
- Exit anti-buckle Stock Bridge.

SERVO SYSTEM FEATURES.

- Servo Motor, Drive, PLC, HMI Make All from Mitsubishi, Japan. Others on request.
- High performance Servo Drive and Low inertia, brushless AC Servo Motor with high energy.
- Precision incremental Optical Encoder (In built) to provide velocity & position loop feed back.
- Industrial Hardened Terminal : Easy-to-read solid state Interface Terminal display area with a backlit 4 line display, sealed membrane keypad with tactile feedback.
- User Friendly Interface : The Interface Terminal directs the operator with clear, descriptive message in plain English. Pressing the Help Key while in different screens directs the operator with instructions on how to change parameters or look at information. Different modes off operation can be selected as well as jogging forward or reverse in manual mode.
- Batch counting : The operator chooses the number of parts to make & the Interface Terminal will display a message when the count is reached. Up to 999,999.
- Advanced Feed-Angle Monitoring : Continually monitors the feed-angle & the material position.
- Compact electronic Control Enclosure with built-in Operation Panel that can be easily adapted for press mounting or used as a freestanding console.

ADDITIONAL FEATURES.

- Accuracy to ± 0.025mm roll position is achieved through, closed-loop servo control & precision gearing.
- When connected to the press control, advanced diagnostic protect machinery & dies by automatically stopping the press if a fault is detected.
- On-Screen message displayed in English.
- Smoother feeder operations with controlled acceleration profiles.
- Up to 99 parts can be pre-programmed by part number, each having unique length, feed rate, acceleration & jerk configuration.
- Multiple cycle choices-feed before press, press before feed, or intermittent operations - allow the user to set up the roll feed specific to his needs.
- Input Power : 230 / 415V, 3 Phase. No Transformer Required.

ACCESSORIES & OPTIONS

- Stock Oiler.
- Electronic Cam Kit :
  Programmable Rotary Limit Switch for Setting of the Safe Feed and Pilot Release Windows, with digital crank rotation position and Press Speed Indicator.
- Adjustable Pilot Release Cam Pin for mounting to press ram.
- Pneumatic/mechanical/servo roll release for pilot release.
- Proximity sensor to initiate feed cycle instead of limit switch.
- Screw Adjustable Press Mounting Bracket.
- Hydraulic Jack Press Mounting Bracket.
- Special Roll Finish.
- Pull-Through Straightener.
- Remote Pendant with Forward and Reverse Jog Push Buttons.
- Additional measuring wheel on strip for measurement.
- Sequential Press feeding to enter no of pitches in a single setting.

Normal Speed Series

Extra Light Series (ELS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-AA-200-ELS	200	0.1	2.0	1.5	300	90
PRSF-AA-300-ELS	300		1.5	1.0	300	90

Light Series (LS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-A-200-LS	200	0.1	3.0	2.0	400	90
PRSF-A-300-LS	300			1.6	480	90
PRSF-A-400-LS	400			1.2	480	90

Mid Series (MS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-B-200-MS	200	0.3	3.5	3.0	600	90
PRSF-B-300-MS	300			2.5	750	90
PRSF-B-400-MS	400			2.0	800	90
PRSF-B-600-MS	600	0.3	2.5	2.5	1500	90
PRSF-B-800-MS	800			1.6	1280	90
PRSF-B-1000-MS	1000			1.4	1400	90

Extra Mid Series (EMS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-BH-300-EMS	300	0.3	4.0	4.0	1200	90
PRSF-BH-400-EMS	400			3.0	1200	90

Heavy Series (HS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-CH-300-HS	300	0.5	6.0	6.0	1800	90
PRSF-CH-400-HS	400			5.0	2000	90
PRSF-CH-500-HS	500			4.8	2400	90
PRSF-CH-600-HS	600			4.0	2400	90
PRSF-CH-800-HS	800			3.0	2400	90
PRSF-CH-1000-HS	1000			2.0	2000	90

Extra Heavy Series (EHS)

Model	Max Width in mm	Thickness Range in mm		Max Thickness with Max Width in mm	Max Section in mm²	Max Velocity in MPM
		Min	Max			
PRSF-D-200-EHS	200	1.0	10.0	10.0	2000	20
PRSF-DH-400-EHS	400			8.0	3200	20
PRSF-DH-600-EHS	600			6.3	3780	40

Normal Speed Series Feeding Rates

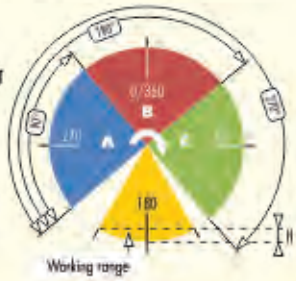
The max Mechanical Press Speed (in SPM) derives from coil feeding pitch and available feeding angle. The table gives the press rate depending on these parameters.

For the 3 most popular feeding angle values

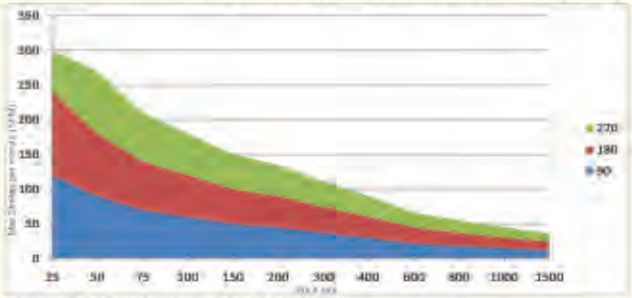
90° : This value allows short pitches but with high tooling & press safety. Used for complex bending & drawing operations

180° : This is the popular average value.

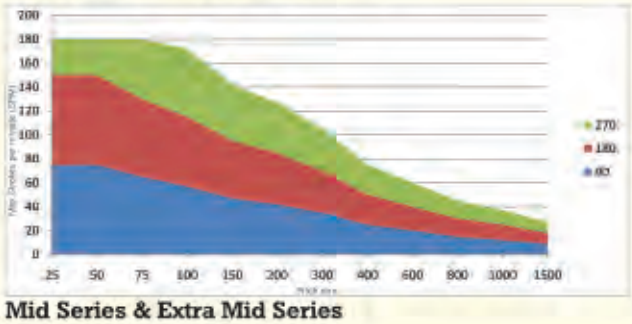
270° : This value gives maximum feeding time in case of simple and safe tool operation. Example : cutting.



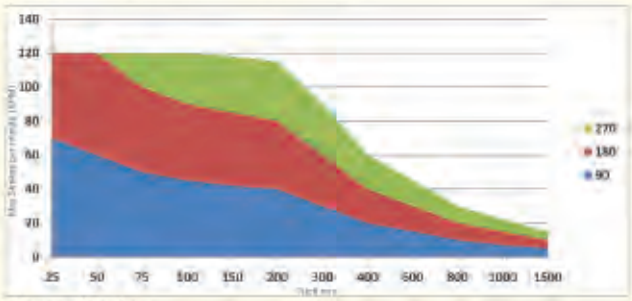
Max Stokes per minute in continuous running mode for a feeding angle of 90° - 180° - 270°



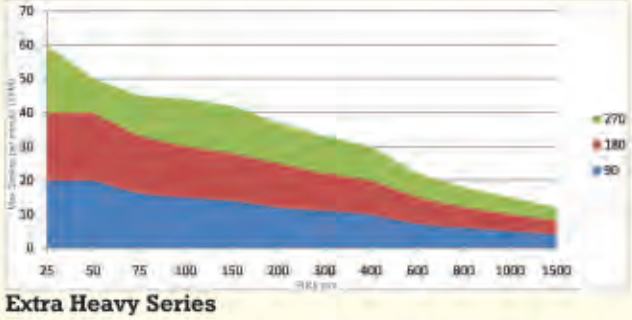
Extra Light Series & Light Series



Mid Series & Extra Mid Series



Heavy Series



Extra Heavy Series

- **All NC Servo Feeder (in above range) can achieve pilot roll release uptill 180 SPM only.**
- **The SPM in feeding rates chart may vary by the load to feeding machine by material, stress, etc.**

The above parameters are for the material having tensile strength 40kgf/mm² max.

High Speed Series

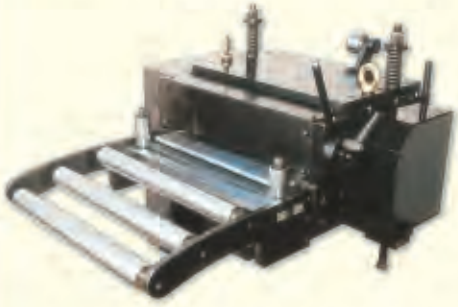
High Speed Series with Pneumatic Pilot Release

High Speed Series with Pneumatic Pilot release mechanism is suitable for electrical motor stamping & electrical lamination mfg. industries. Special High Frequency & High Flow Solonoid Valves are using to achive pilot release at high speed of 24 to 30 mpm.

High Speed Series			
Model	Max Width in mm	Max Thickness Range in mm	Max Velocity in mm
PRSF-A-200-HSS	200	0.1 - 1.0	120
PRSF-A-300-HSS	300	0.1 - 1.0	120
PRSF-A-400-HSS	400	0.1 - 0.8	120

High Speed Series with Mechanical Pilot Release

High Speed Series with Mechanical Pilot release is suitable for electrical motor stamping & electrical lamination mfg. industries where line speed is uptill 40 mpm.



High Speed Series with Mechanical Pilot Release			
Model	Max Width in mm	Max Thickness Range in mm	Max Velocity in mm
PRSF-B-200-HSS	200	0.1 - 1.0	120
PRSF-B-300-HSS	300	0.1 - 1.0	120
PRSF-B-400-HSS	400	0.1 - 0.8	120

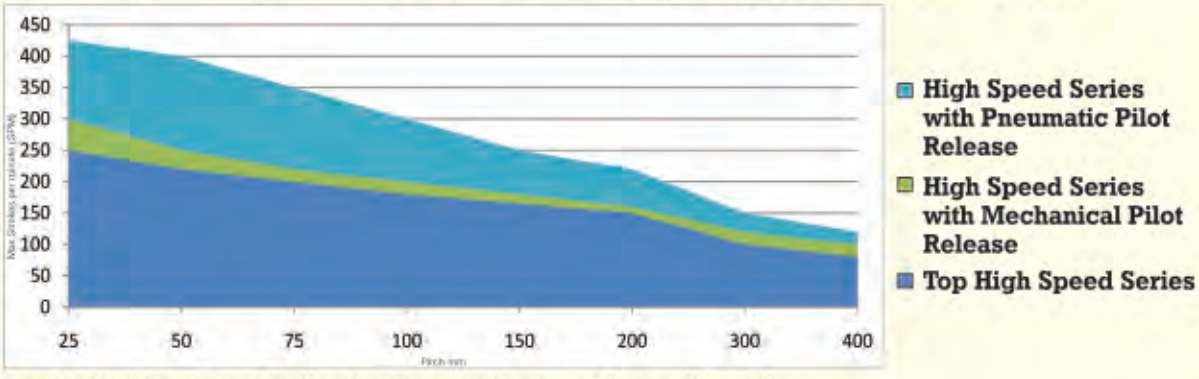
Top High Speed Series

In Top High Speed Series, Feed and Pilot release are done by two separate servo motors. This enables to achieve desired line speed uptill 60 mpm with high accuracy.

Top High Speed Series			
Model	Max Width in mm	Max Thickness Range in mm	Max Velocity in mm
PRSF-A-200-THSS	200	0.1 - 1.0	200
PRSF-A-300-THSS	300	0.1 - 1.0	200
PRSF-A-400-THSS	400	0.1 - 0.8	200

High Speed Series Feeding Rates

Max Stokes per minute in continuous running mode for a feeding angle of 180°



- **All NC Servo Feeder (in above range) can achieve pilot roll release for SPM as mentioned above.**

High Speed Press Feeding Line for Electrical Lamination
200mm(w) x .5mm(thk) x 1000kg - 40mtr./min
Decoiler, Precision Straightener, NC Servo Feeder

High Strength Steel Press Feeding Line
Motorised Decoiler, Leveller, NC Servo Feeder
800mm (w) X 6mm (thk) X 10 Tons

Press Feeding Line with Servo Press
Twin Decoiler, Straightener, NC Servo Feeder
200mm (w) x 2mm (thk) x 1000 Kg

Transformer Lamination
Punching, Notching & Variable
Cut to Length Line

The above parameters are for the material having tensile strength 40kgf/mm² max.
Technical specifications are indicative and subject to change to suit end application.

Press Room Automation And Feed Fixtures (India) Pvt. Ltd

Plot No. W-78/A, Anand Nagar, M.I.D.C, Addl. Ambernath Indl. Area,
Ambernath (East), Dist. Thane 421 506, Maharashtra, India.
Telefax Works: 9324044004 / 9819812717 / 9322951554. **E-mail : info@pressroomautomation.net**
Website : www.pressroomautomation.in / www.powerpressline.net / www.pressroomautomation.net

TUV NORD India ISO 9001:2015
An ISO 9001:2015 Company

AATMA-NIRBHAR BHARAT

30+ Years
Of Coil Feeding Solutions