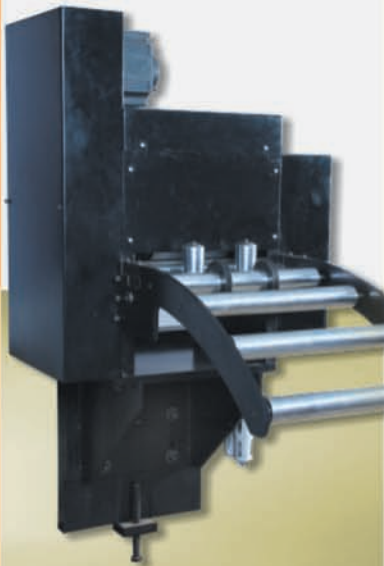


# Servo Roll Feeders

High Quality Product for  
Coil-Feeding in Press-Room





Press Room in their endeavor 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 1250 mm & thickness from 0.1 mm to 12.00 mm fully programmable units have been interlinked with small / medium / large presses.

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

## FEATURES

### MECHANICAL

- 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 and Jack Screw for press line adjustment  $\pm 50\text{mm}$ ;
- Exit anti-buckle Stock Bridge.

### SERVO SYSTEM FEATURES.

- High Performance brushless Servo Drive (From International Source) ;
- Low inertia, brush less AC Servo Motor with high energy ;
- Precision incremental Optical Encoder (In built) to provide velocity and 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 of 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 and 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 and 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  $\pm 0.025\text{mm}$  roll position is achieved through, closed-loop servo control and precision gearing.
- When connected to the press control, advanced diagnostic protect machinery and 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 and 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.
- Programmable Rotary Limit Switch for Setting of the Safe Feed and Pilot Release Windows, with digital crank rotation position and Press Speed Indicator consult Factory.
- Adjustable Pilot Release Cam Pin for mounting to press ram
- Pneumatic 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.

#### Multi Press With Multi - Feed Machine (Space/ Time/ Money Saver)

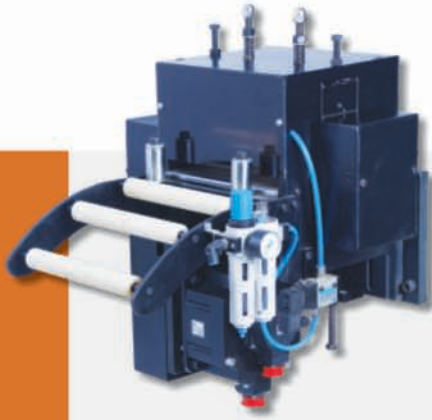
This is special application where two and more press/ marking/ stamping/ tapping units are synchronised with NC roll feed having multi feed facility with PLC logic. It has selection of manual mode and automatic mode. This configuration can produce flexible sheet metal components without need of long progressive tool or separate individual operations. Any kind of small/ big batch can easily be produced as once programmed you only have to load correct material and recall correct part number and feed desired batch size.

This system can have further integration with roll forming for producing finished products.

#### CONTROL PANEL

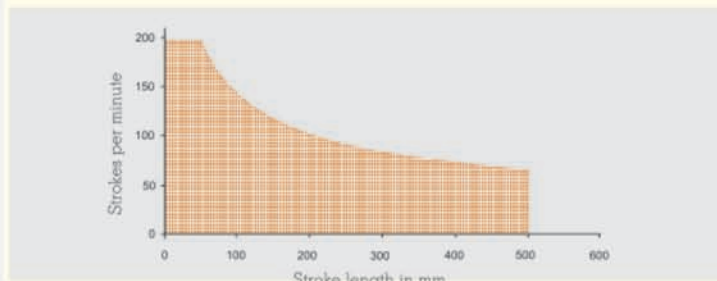
- In MANUAL MODE Each Press & Servo Feeder can be operated using individual push button on the control panel. Indicating lamp would be provided for displaying state of Feeder & Presses.
- In AUTO MODE, any one of the program can be selected & on pressing START button, the whole program is executed with 50 steps. The program can be edited. The display would show the machine status & feed parameters.
- Any Station can be operated in any sequence with reference to Roll Feed position.
- Also Roll Feed can have any indexing length in reference to operation of each Station Single/Jointly.
- The system can store 100 programs each with 50 steps. The programming would have
- Max. Speed of Material.
- Max. Acceleration of Roll Feed.
- UP & DOWN timing of Punching Presses.
- Length setting of Each indexing.
- Decoiler-Straightener-Drive & Loop Programming.
- Job No./ Edit/ Set-up/ Run Mode.





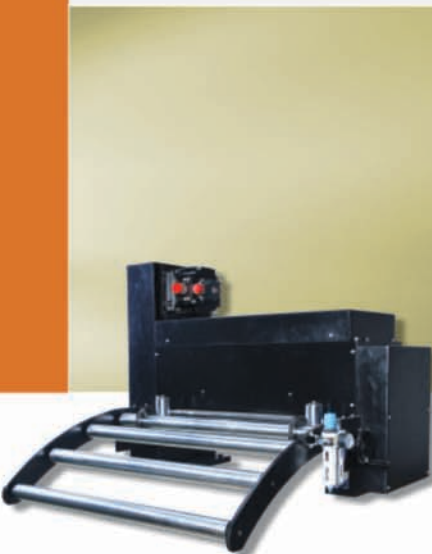
## Servo Roll Feeders Range LIGHT SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Light Series	PRSF-A-200-LS	200	0.1 - 2.0	90
	PRSF-A-300-LS	300	0.1 - 2.0	90
	PRSF-A-400-LS	400	0.1 - 1.2	90



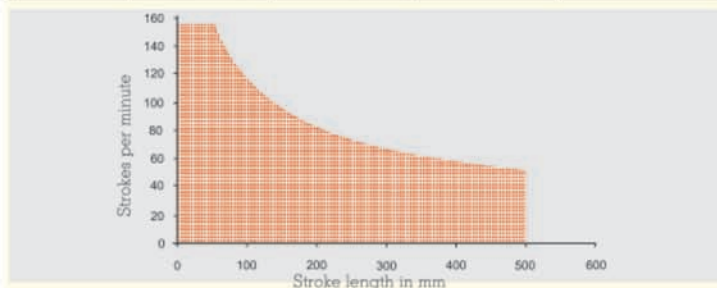
working speeds at varying stroke lengths for light series & mid series (models up to 500mm)

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only



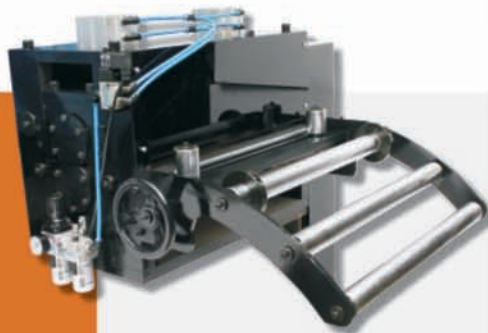
## MID SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Mid Series	PRSF-B-200-MS	200	0.3 - 3.0	90
	PRSF-B-300-MS	300	0.3 - 3.0	90
	PRSF-B-400-MS	400	0.3 - 2.0	90
	PRSF-B-500-MS	500	0.3 - 2.5	90
	PRSF-B-600-MS	600	0.3 - 2.5	90
	PRSF-B-800-MS	800	0.3 - 1.6	90
	PRSF-B-1000-MS	1000	0.3 - 1.5	90



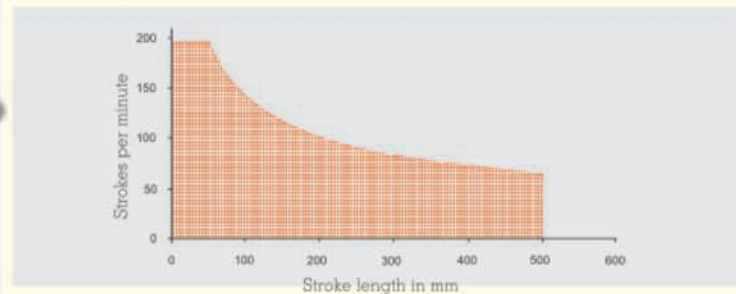
working speeds at varying stroke lengths for mid series (models from to 600 to 1000 mm)

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only



## EXTRA MID SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Extra Mid Series	PRSF-BH-300-EMS	300	0.3 - 4.0	90
	PRSF-BH-400-EMS	400	0.3 - 3.0	90



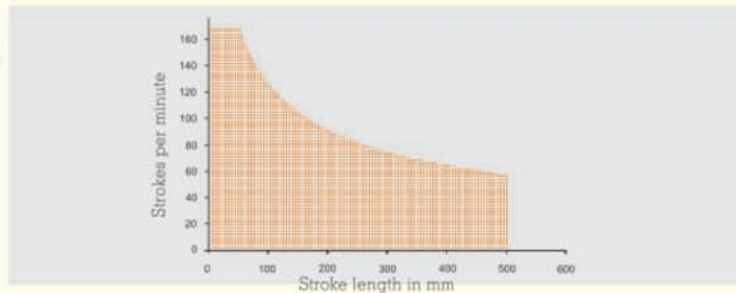
working speeds at varying stroke lengths for extra mid series

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only



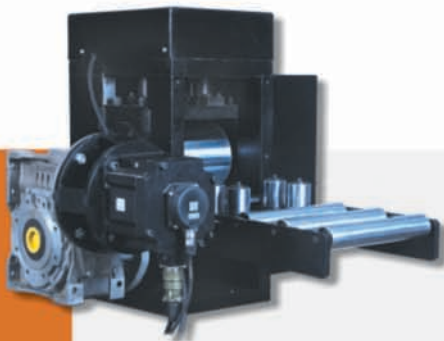
## HEAVY SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Heavy Series	PRSF-CH-200-HS	200	0.5 - 6.0	90
	PRSF-CH-300-HS	300	0.5 - 6.0	90
	PRSF-CH-400-HS	400	0.5 - 5.0	90
	PRSF-CH-500-HS	500	0.5 - 5.0	90
	PRSF-CH-600-HS	600	0.5 - 4.0	90
	PRSF-CH-800-HS	800	0.5 - 3.0	90
	PRSF-CH-1000-HS	1000	0.5 - 2.0	90



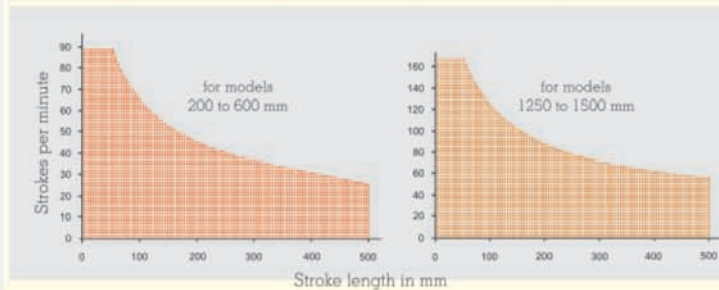
working speeds at varying stroke lengths for heavy series

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only



## EXTRA HEAVY SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Extra Heavy Series	PRSF-D-200-EHS	200	1.0 - 10.0	20
	PRSF-DH-400-EHS	400	1.0 - 9.0	20
	PRSF-DH-600-EHS	600	1.0 - 6.3	40
	PRSF-DH-800-EHS	800	0.5 - 5.0	60
	PRSF-DH-1000-EHS	1000	0.9 - 4.0	80
	PRSF-DH-1250-EHS	1250	0.5 - 2.5	150
	PRSF-DH-1500-EHS	1500	0.5 - 2.0	150

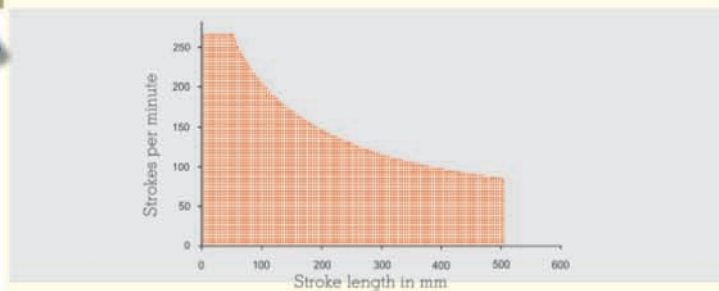


working speeds at varying stroke lengths for extra heavy series

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only

## HIGH SPEED LIGHT SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
High Speed Light Series	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



working speeds at varying stroke lengths for high speed light series

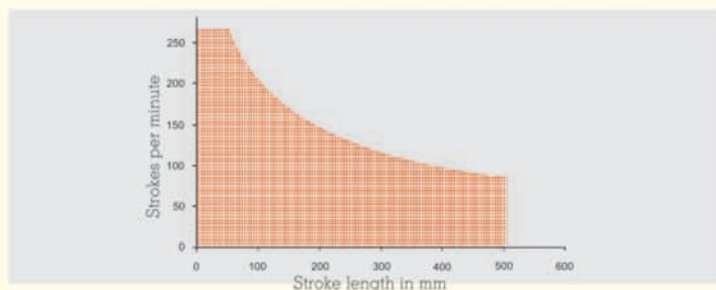
**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only





## HIGH SPEED MID SERIES

Series	Models	Width (mm)	Thickness Range (mm)	Velocity (mpm)
High Speed Mid Series	PRSF-B-200-HSS	200	0.3 - 2.0	120
	PRSF-B-300-HSS	300	0.3 - 1.5	120
	PRSF-B-400-HSS	400	0.3 - 1.2	120

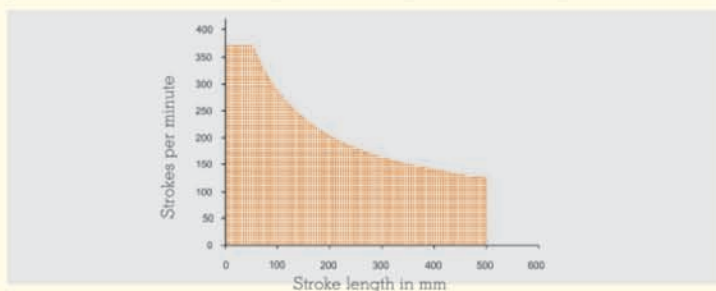


working speeds at varying stroke lengths for high speed mid series

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only

## TOP HIGH SPEED SERIES

Series	Models (mm)	Width (mm)	Thickness Range (mm)	Velocity (mpm)
Top High Speed Series	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 - 1.0	200



working speeds at varying stroke lengths for top high speed series

**Note :** 1. This Graph is for feeding angle at 180°. The more / less speed will come Depending on angle of feed.  
2. All feeders can operate pilot roll release uptill 180 SPM only

**The speeds in feeding graph may vary by the load to feeding machine by material, stress etc.**

The above parameters are for the material having tensile strength 40kgf/mm<sup>2</sup> max.  
Models of higher capacity or higher or lower line speeds are available on request.



**Transformer Lamination  
Punching, Notching &  
Variable cut to Length Line**

**NC ZIG ZAG FEEDER**  
Zig Zag Feed Saves  
upto 6 to 14% material  
cost for round components



*Technical specifications are indicative and subject to change to suit end application.*

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