

SERVO FEEDS



P/A INDUSTRIES – A BRIEF HISTORY

For well over a half of a century, P/A has been providing equipment and application solutions to the Metal Stamping, Wire Forming and Fabrication Industries. A proven leader in innovation and quality, our commitment is to our customers. P/A's Sales and Design Engineers have years of hands-on experience with Servo technology and work closely with our Service team to continuously improve our products.

P/A is unique within our Industry. No other manufacturer offers such a complete product line. We are able to provide Feeds – both Pneumatic, and Servo Driven, Payoff Reels, Straighteners, Cutters/Shears, Rewinders, as well as complete Cut-To-Length machines for both coiled strip and wire. Whether used individually in your process, or combined into a custom manufacturing line, P/A has the components, capability and support to meet your production needs.

Management & Sales Team

Executive



Jerome E. Finn
Chairman
Since 1975



Edward Morris
President
Since 1999

Regional Sales



Don Frank
Regional Sales Manager
Since 1996



Tim Oualls
Regional Sales Manager
Since 2002



Mark Beiner
Regional Sales Manager
Since 2006

P/A International

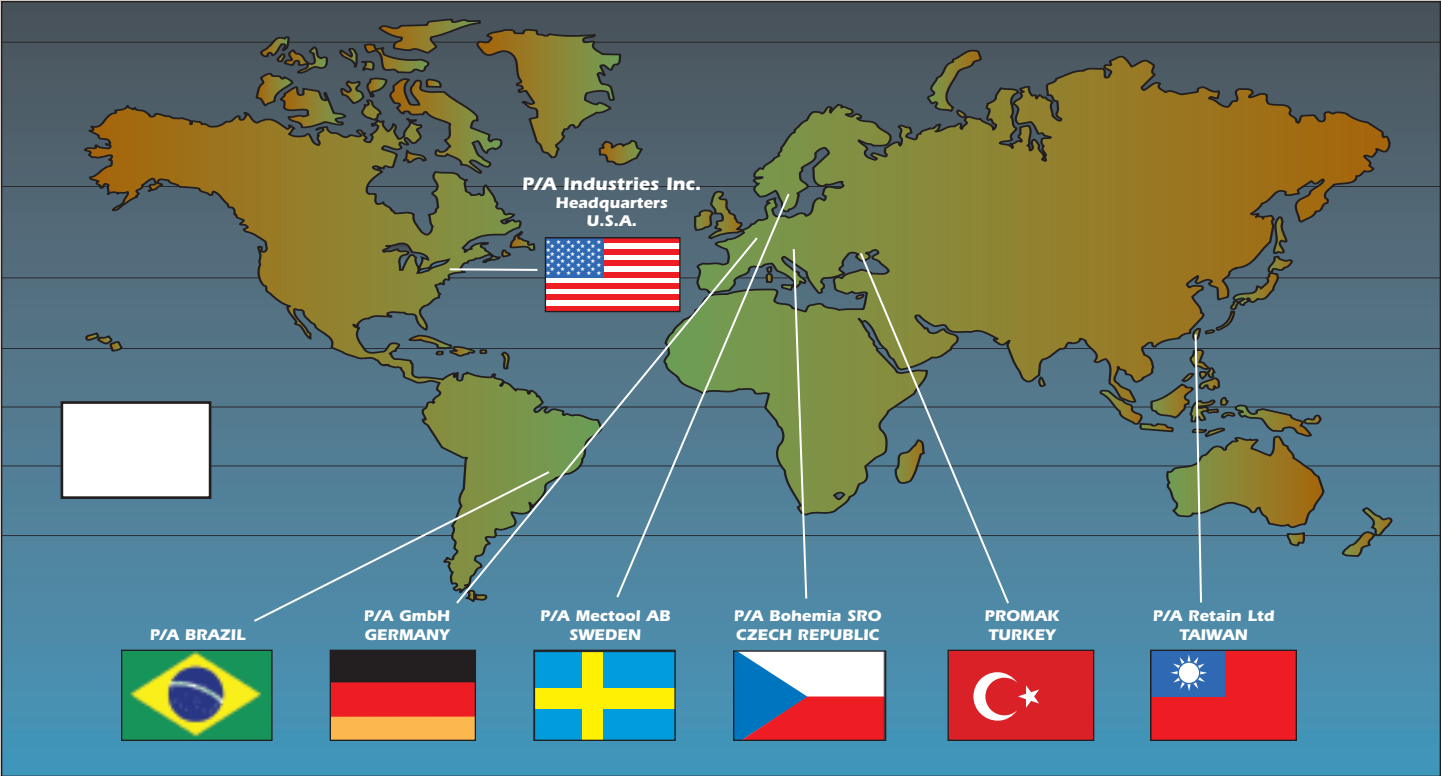
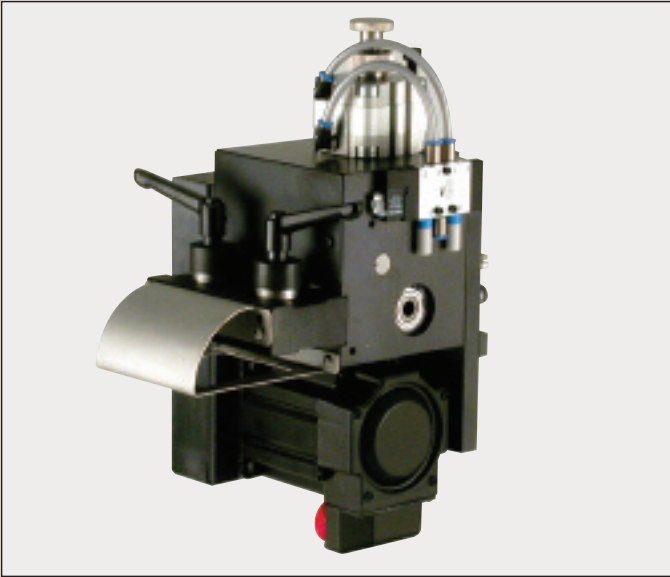


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	Servo Feed Model	Page Number	Roll Diameter	Max. Stock Thickness	Stock Width
	Micro	4	1.38 inch 35 mm	.040 inch 1,01 mm	2.0-6.0 inch 50-150 mm
	Mini	6	1.77 inch 45 mm	.078 inch 2,00 mm	4.0-12.6 inch 105-320 mm
	P/A K350 Edge	8	3.54 inch 90 mm	.100 inch 2,54 mm	3.9-23.6 inch 100-600 mm
	P/A K350 Advantage	10	3.54 inch 90 mm	.188 inch 4,78 mm	5.1-36.1 inch 130-915 mm
	P/A K350 Dynamax	12	3.35 inch 85 mm	.040 inch 1,00 mm	51.2-74.8 inch 1300-1900 mm
	P/A K350 Magnum	14	4.72 inch 120 mm	.400 inch 10,16 mm	12.0-48.0 inch 305-1219 mm
	P/A K550 Maximus	16	6.0 inch 152 mm	.500 inch 12,70 mm	12.0-72.0 inch 305-1829 mm
	Servo Feed with Pull-Thru Straightener	18	Model Dependent	.375 inch 9,35 mm	5.0-72.0 inch 130-1829 mm
	Stagger Feed	20	Model Dependent	.188 inch 4,78 mm	4.0-11.8 inch 105-300 mm
	Profiled Parts Feed	21	Model Dependent	.040 inch 1,01 mm	4.0-6.0 inch 105-152 mm
	Push-Pull	22	Model Dependent	Model Dependent	Model Dependent
	Bullet Series	23	Hi-Speed Feed Series		
	Sequential Controls	24	Provides the ability for step feeding, tool signaling, Gagging and multiple programs off of one press		
	Options	25	Guides, Strip Encoders, Limit Switch, Pilot Releases, Cut-to-Length Systems		
	Reference	26	Production, Consumption, Speeds, Weights, Loop Area		

MICRO FEED



MECHANICAL FEATURES

- Machined Plate Construction
- Hard Chrome Feed Rolls with Matte Finish to Provide Increased Grip
- Adjustable Roll Lift
- Quick Change Rolls Can be Machined to Accept Wire or Profiled Material
- Feed Rolls are Mounted in Permanently Sealed Anti-Friction Ball Bearings
- Cascade Entry Support with Two Quick Release Adjustable Edge Stock Guides
- Entrance Material Support
- Pneumatic Pilot Release

MECHANICAL OPTIONS

- Exit Support Bridge to Prevent Stock Buckling
- Feed Mounting Bracket for up to 2.3" (59 mm) of Die Height Adjustment
- Floor Stand to mount Control
- Polyurethane Coated Upper Roll for delicate material
- Factory Profiled Rolls
- Hand Held Remote Jog Pendant
- Anti-Buckling Bridge



ELECTRONIC FEATURES

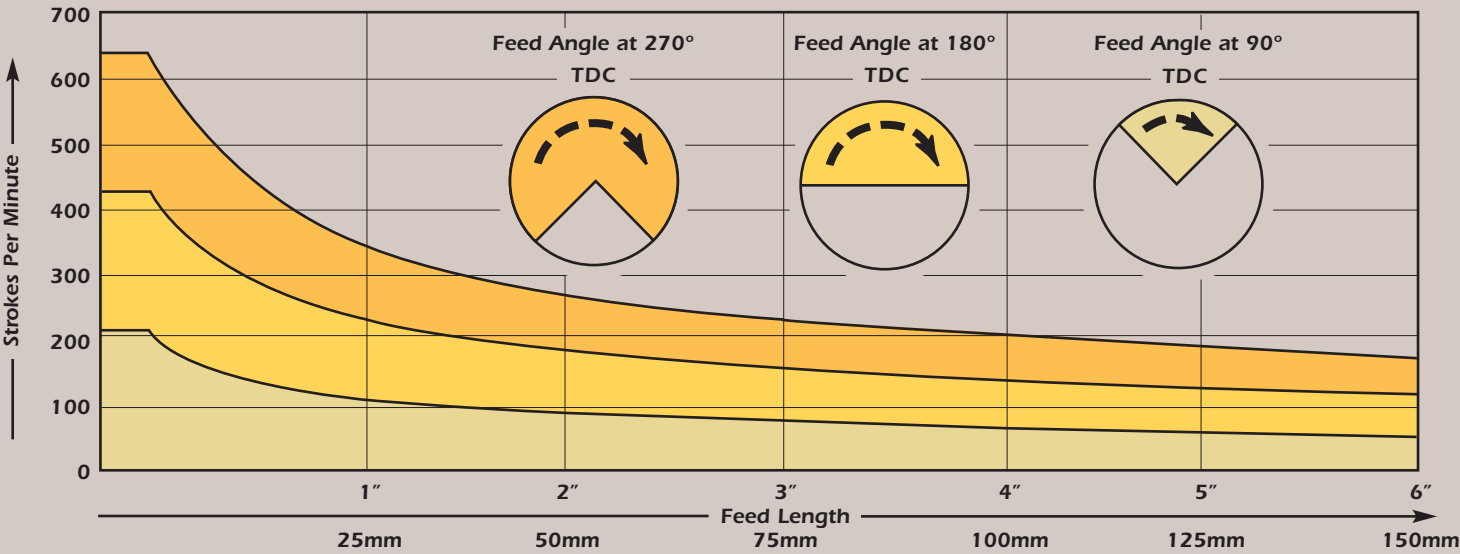
- ISO Certified Electrical Components wired to JIC, NEC and CE Standards
- Backlit, LCD Touchscreen Interface
- Inch/Metric, Multi-Language Selectability
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- NEMA 4/12/13 Enclosure
- Feed Complete Programmable Output Relay
- Batch Counter
- Jog-To-Length from Touch-Screen
- Built-In I/O Diagnostics
- Check Feed Synchronization Confirmation
- High Performance Digital Servo Drive, PLC and Motor

ELECTRONIC OPTIONS

- Proximity Sensors to initiate Feed and Pilot Release
- 200V/220V CE Compliant
- Kinetix Drive Package includes:
 - Storage for up to 200 jobs
 - Micro Adjust
 - Sync Fault Feed Window Protection
 - Single Stroke Automatic Mode
- P/A K350 Micro Feed Options:
 - Integral Programmable Rotary Limit Switch
 - Sequential Control
 - SFI-Servo Feed Interface

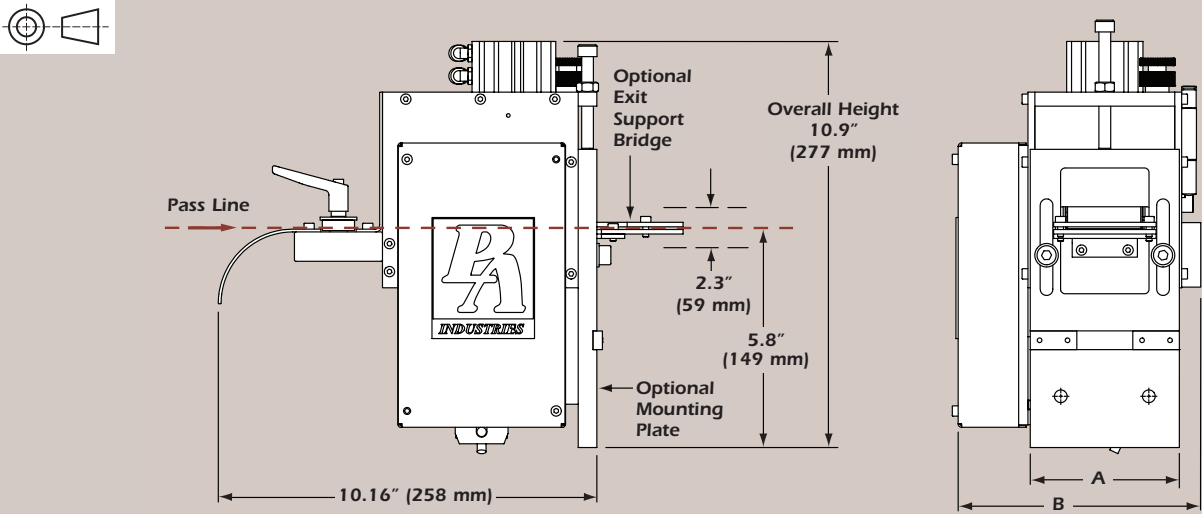
MICRO FEED SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

DIMENSIONS



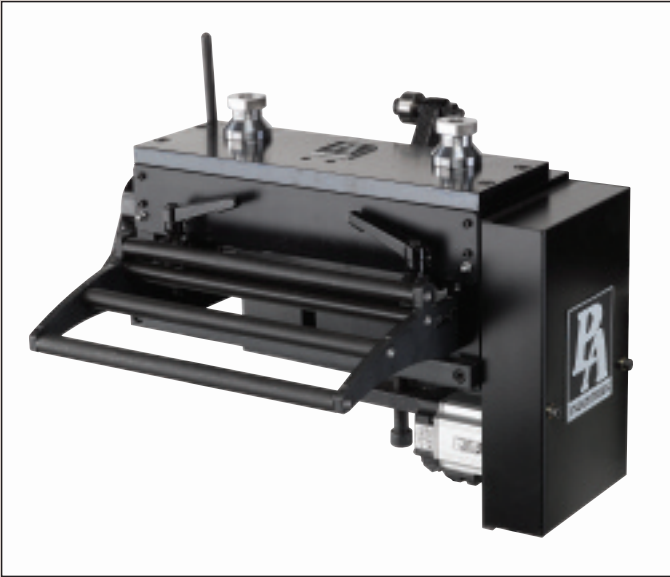
DIMENSIONS – inches			
Model	A	B	
MF-2	4	6.5	
MF-4	6	8.5	
MF-6	8	10.5	

DIMENSIONS – mm			
Model	A	B	
MF-2	102	165	
MF-4	152	216	
MF-6	203	268	

SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input	
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz	kW
MF-2P	1.38	.060	.040	2	72	24	115/1/60	0.2
MF-4P	1.38	.060	.030	4	72	24	115/1/60	0.2
MF-6P	1.38	.060	.025	6	72	24	115/1/60	0.2

SPECIFICATIONS – METRIC								
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input	
			Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz	kW
MF-2P	35	1,52	1,01	50	321	108	230/1/50	0,2
MF-4P	35	1,52	0,76	100	321	108	230/1/50	0,2
MF-6P	35	1,52	0,64	150	321	108	230/1/50	0,2

MINI SERVO ROLL FEED



MECHANICAL FEATURES

- Rugged Steel Frame
- Unique Design Maintains Roll Parallelism with Off Center Loading
- Pilot Release Roller Cam
- Hand Knobs With Vernier Scale Adjust Roll Pressure on Material
- Hard Chrome Feed Rolls with Textured Finish To Provide Increased Grip
- Feed Mounting Bracket for up to 2.4" (61 mm) of Pass Line Height Adjustment
- Precision Gear Driven Upper Roll with Anti-Backlash
- Exit Support Bridge to Prevent Stock Buckling
- Stock Thickness Adjustment Lever
- Two Quick Release Adjustable Edge Stock Guides
- Roll Release Lever for Strip Insertion with Safety Lock
- Feed Rolls Mounted in Permanently Sealed Anti-Friction Ball Bearings

MECHANICAL OPTIONS

- Pneumatic Release of Upper Roll for Strip Insertion and Piloting
- Mechanical Release By Adjustable Ram Mounted, Bullet Nose Cam Bar
- Extra Roll Opening



ELECTRONIC FEATURES

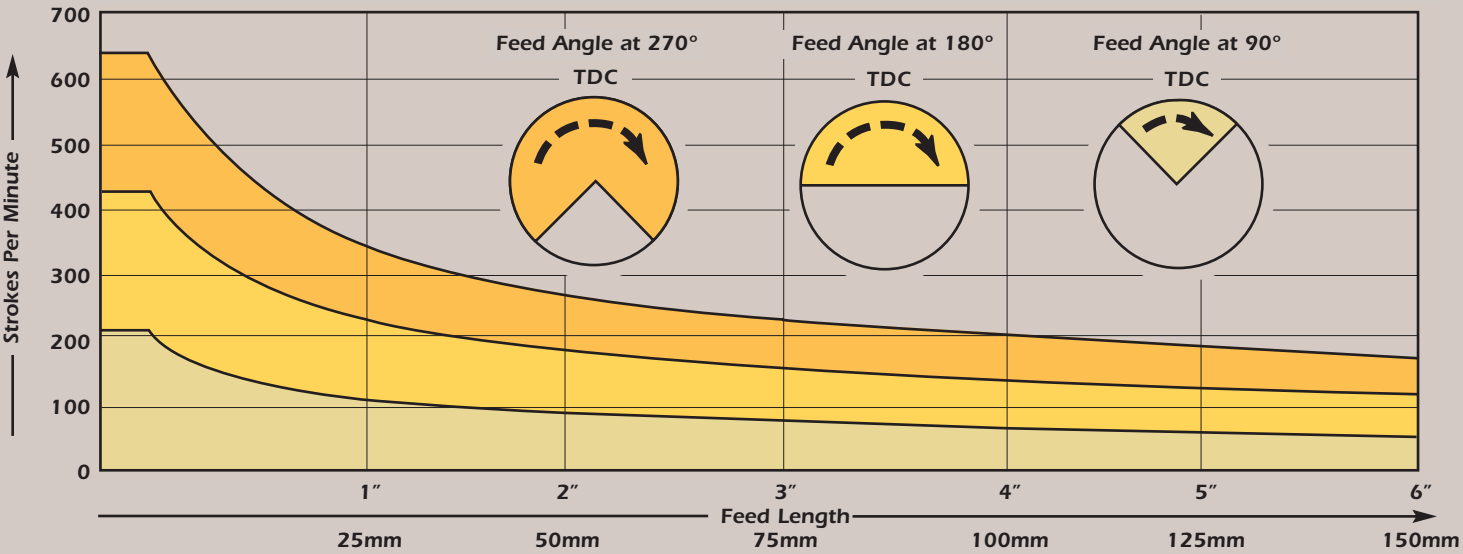
- ISO Certified Electrical Components wired to JIC, NEC and CE Standards
- Backlit, LCD Touchscreen Display
- Inch/Metric, Multi-Language Selectability
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Feed Complete Programmable Output Relay (Can Be Used for Cut-To-Length Applications)
- Batch Counter
- Jog-To-Length
- Built-In I/O Diagnostics
- Feed Synchronization Confirmation
- High Performance Digital Servo Drive, PLC and Motor
- Hand Held Remote Jog Pendant

ELECTRONIC OPTIONS

- Kinetix Control and Drive Package
 - Storage for 200 jobs
 - Micro Adjust
 - Sync Fault Feed Window
 - Single Stroke/Automatic Mode
- Sequential Feed Control
- Programmable Rotary Limit Switch
- 200V/220V CE Compliant

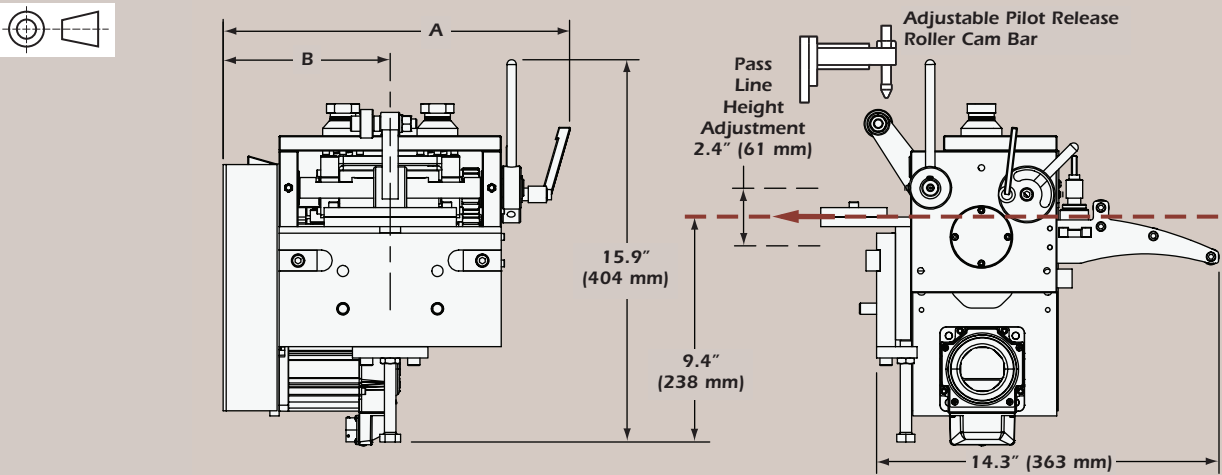
MINI SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

DIMENSIONS



DIMENSIONS – inches		
Model	A	B
SRF-105P	14.4	7.0
SRF-220P	18.9	9.1
SRF-320P	22.9	11.1

DIMENSIONS – mm		
Model	A	B
SRF-105P	366	178
SRF-220P	481	231
SRF-320P	581	282

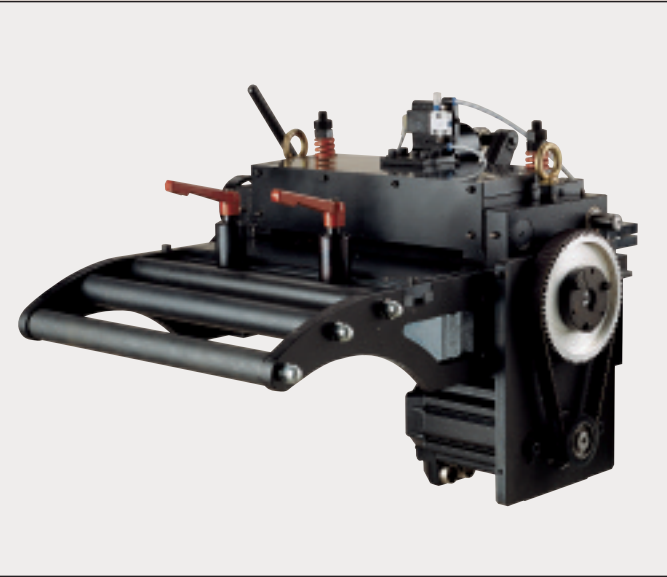
SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max Roll Opening in.*	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz	kW
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.		
SRF-105P	1.77	.078	.060	4	113	39	115/1/60	0.4
SRFX-105P	1.77	.078	.078	4	212	71	230/1/60	0.8
SRF-220P	1.77	.078	.038	8.5	113	39	115/1/60	0.4
SRFX-220P	1.77	.078	.060	8.5	212	71	230/1/60	0.8
SRF-320P	1.77	.078	.060	12.5	212	71	230/1/60	0.8

* Optional Max. Roll Opening .098 inch

SPECIFICATIONS – METRIC								
Model	Feed Roll Dia. mm	Max Roll Opening mm*	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz	kW
			Thickness mm	at Width mm	Peak N	Cont. N		
SRF-105P	45	2,00	1,52	105	504	172	230/1/50	0,4
SRFX-105P	45	2,00	2,00	105	943	318	230/1/50	0,8
SRF-220P	45	2,00	0,97	220	504	172	230/1/50	0,4
SRFX-220P	45	2,00	1,52	220	943	318	230/1/50	0,8
SRF-320P	45	2,00	1,52	320	943	318	230/1/50	0,8

* Optional Max. Roll Opening 2,5 mm

P/A K350 EDGE SERVO ROLL FEED



MECHANICAL FEATURES

- Rugged Steel Frame
- Unique Design Maintains Roll Parallelism with Off Center Loading
- Precision Gear Driven Upper Roll with Anti-Backlash
- Roll Release Lever for Strip Insertion with Safety Lock
- Stock Thickness Adjustment Lever
- Large Diameter, Hard Chrome Feed Rolls are Texturized for Increased Grip
- Feed Mounting Bracket For 2.4" (61 mm) of Die Height Adjustment
- Pilot Release Roller Cam
- Exit Support Bridge to Prevent Stock Buckling
- Feed Rolls Mounted in Permanently Sealed, Anti-Friction Ball Bearings

MECHANICAL OPTIONS

- Pneumatic Release of Upper Roll for Strip Insertion and Piloting
- Edge Squaring Guides
- Mechanical Release by Mounted, Adjustable Bullet Nose Cam Bar
- Feed Mounting Cabinet with 12" (305 mm) of Height Adjustment
- Urethane Covered Catenary Rolls for Additional Material Protection
- Self-Centering Edge Guides for Strip Insertion



ELECTRONIC FEATURES

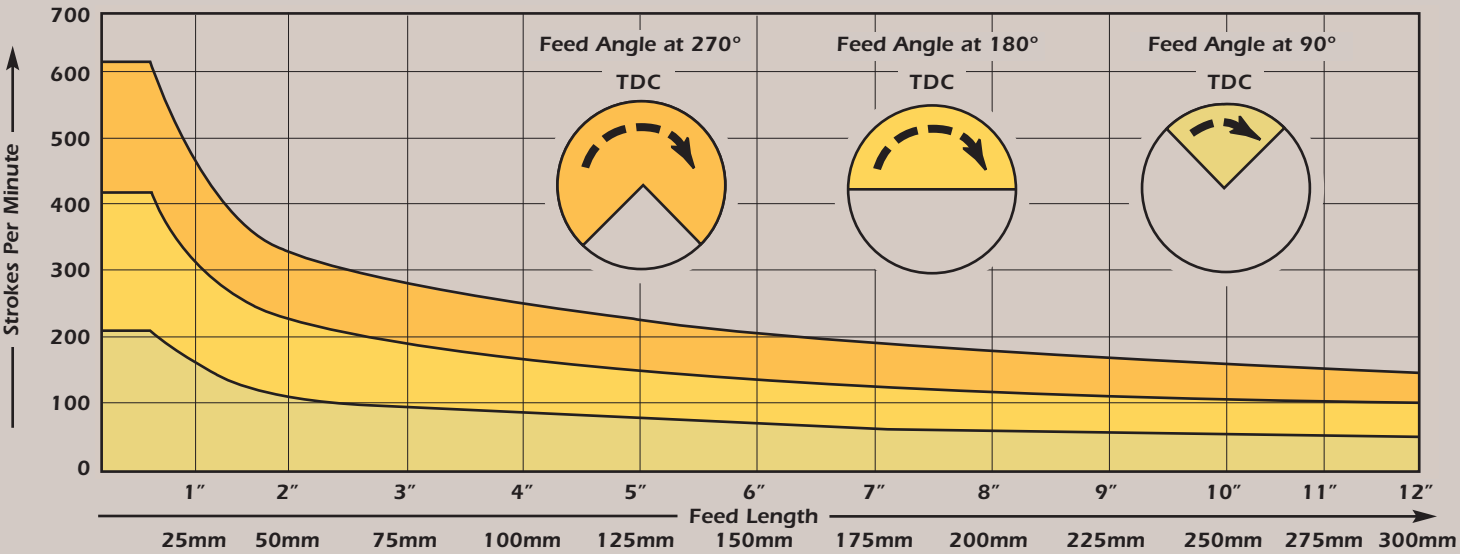
- ISO Certified Electrical Components Wired to JIC, NEC, & CE Standards
- Backlit, LCD Touchscreen Display
- Built-In I/O Diagnostics Assists in Troubleshooting
- Batch Counter
- Password Protected Job Storage
- On-The-Fly, Micro Adjust Feed Length
- Inch/Metric, Multi-Language Selectability
- Single Stroke or Continuous Press Mode Capability
- Jog Pendant
- Jog-To-Length Capability
- High Performance Digital Servo Drive, PLC and Motor
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- Lockable Power Disconnect Switch
- On Screen Motion Trends
- On Screen Fault History

ELECTRONIC OPTIONS

- Integral Programmable Limit Switch for Setting Feed Angle, Cycle Reset, and Pilot Release with Digital Press Crankshaft Position Indicator
- SFI (Servo Feed Interface) Provides Communication with External Devices
- Cut-To-Length Systems Available
- Sequential Feed Control
- Feed To Registration
- End of Stock Sensor Mounted to Entry Plate
- Auxiliary Strip Encoder
- Excel Communication for easy Programming
- Available Cellular Support
- Options can be Toggled On and Off

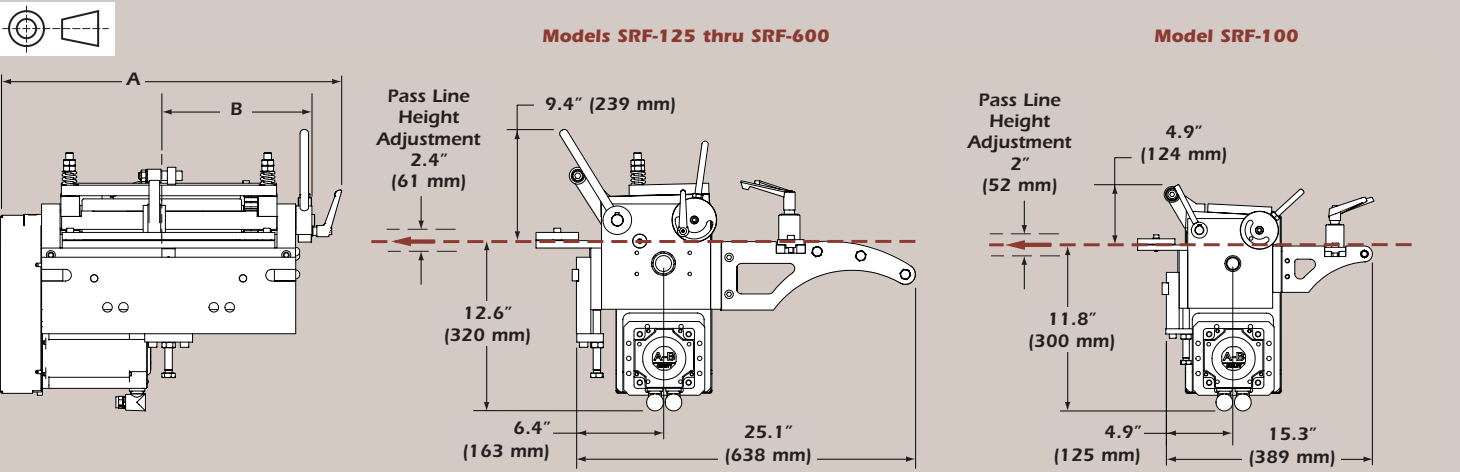
P/A K350 EDGE SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

DIMENSIONS



DIMENSIONS – inches			
Model	A	B	
SRF-100	13.6	6.1	
SRF-125	20	8.0	
SRF-200	23	9.5	
SRF-300	27	11.5	
SRF-400	31	13.5	
SRF-500	35	15.5	
SRF-600	39	17.5	

DIMENSIONS – mm			
Model	A	B	
SRF-100	345	155	
SRF-125	508	203	
SRF-200	584	241	
SRF-300	686	292	
SRF-400	787	343	
SRF-500	889	394	
SRF-600	991	445	

SPECIFICATIONS – USA							
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	
SRF-100	2.90	.098	.080	3.94	310	110	115/1/60 2
SRF-125	3.55	.138	.100	5.11	254	90	115/1/60 2
SRF-200	3.55	.138	.080	7.87	254	90	115/1/60 2
SRF-300	3.55	.138	.080	11.81	394	147	115/1/60 2
SRF-400	3.55	.138	.060	15.74	394	147	115/1/60 2
SRF-500	3.55	.138	.050	19.68	394	147	115/1/60 2
SRF-600	3.55	.138	.040	23.62	394	147	115/1/60 2

SPECIFICATIONS – METRIC							
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness mm	at Width mm	Peak N	Cont. N	
SRF-100	73	2,50	2,03	100	1380	490	230/1/50 2
SRF-125	90	3,50	2,54	130	1130	401	230/1/50 2
SRF-200	90	3,50	2,03	200	1130	401	230/1/50 2
SRF-300	90	3,50	2,03	300	1755	654	230/1/50 2
SRF-400	90	3,50	1,52	400	1755	654	230/1/50 2
SRF-500	90	3,50	1,27	500	1755	654	230/1/50 2
SRF-600	90	3,50	1,02	600	1755	654	230/1/50 2

P/A K350 ADVANTAGE SERVO ROLL FEED



MECHANICAL FEATURES

- Rugged Steel Frame
- Unique Design Maintains Roll Parallelism with Off Center Loading
- Precision Gear Driven Upper Roll with Anti-Backlash
- Roll Release Lever for Strip Insertion with Safety Lock
- Stock Thickness Adjustment Lever
- Large Diameter, Hard Chrome Feed Rolls are Texturized for Increased Grip
- Feed Mounting Bracket For 2.4" (61 mm) of Die Height Adjustment
- Pilot Release Roller Cam
- Exit Support Bridge to Prevent Stock Buckling
- Feed Rolls Mounted in Permanently Sealed, Anti-Friction Ball Bearings
- Precision Planetary Gearbox 5:1 Ratio
- Precision Planetary Gearbox 8:1 Ratio for Models SRF28 – 36
- "X" Model offers a standard 8:1 Gearbox and extra thickness capacity

MECHANICAL OPTIONS

- Pneumatic Release of Upper Roll for Strip Insertion and Piloting
- Material Squaring Guides
- Mechanical Release by Mounted, Adjustable Bullet Nose Cam Bar
- Pull Through Straightener (See pages 18 & 19)
- Feed Mounting Cabinet with 12" (305 mm) of Height Adjustment
- Urethane Covered Catenary Rolls for Additional Material Protection
- Self-Centering Edge Guides for Strip Insertion



ELECTRONIC FEATURES

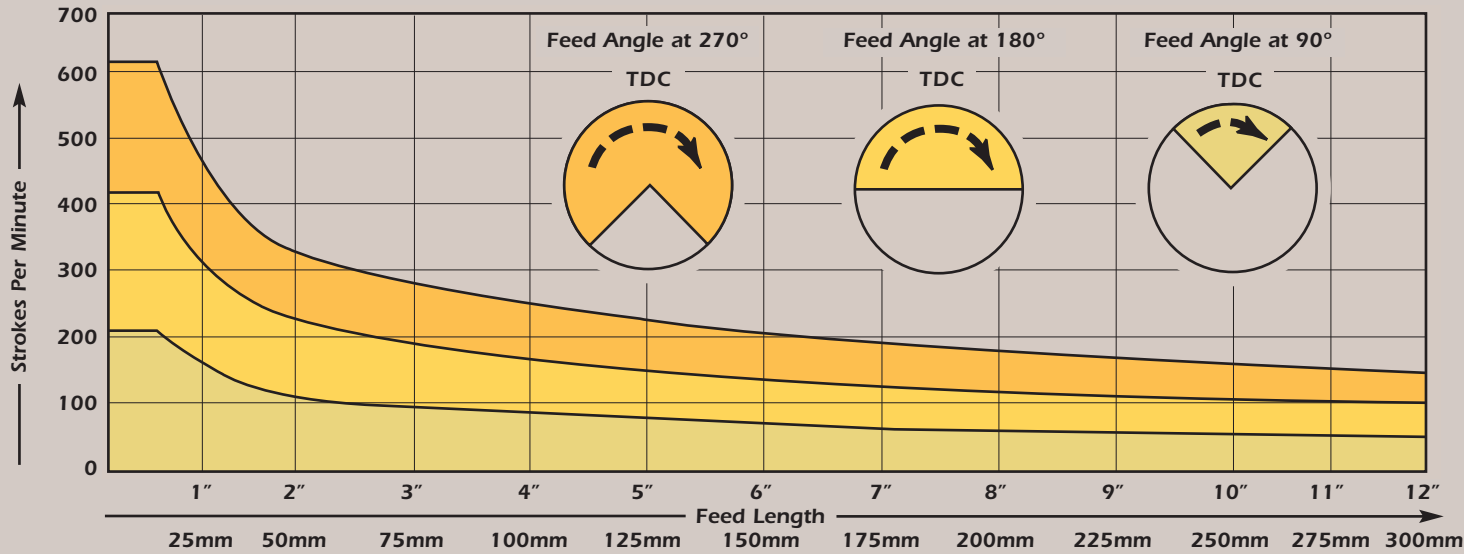
- ISO Certified Electrical Components Wired to JIC, NEC, & CE Standards
- Backlit, LCD Touchscreen Display
- Built-In I/O Diagnostics Assists in Troubleshooting
- Batch Counter
- Password Protected Job Storage
- On-The-Fly, Micro Adjust Feed Length
- Inch/Metric, Multi-Language Selectability
- Single Stroke or Continuous Press Mode Capability
- Jog Pendant
- Jog-To-Length Capability
- High Performance Digital Servo Drive, PLC and Motor
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- Lockable Power Disconnect Switch
- On Screen Motion Trends
- On Screen Fault History

ELECTRONIC OPTIONS

- Integral Programmable Limit Switch for Setting Feed Angle, Cycle Reset, and Pilot Release with Digital Press Crankshaft Position Indicator
- SFI (Servo Feed Interface) Provides Communication with External Devices
- Cut-To-Length Systems Available
- Sequential Feed Control
- Feed To Registration
- End of Stock Sensor Mounted to Entry Plate
- Auxiliary Strip Encoder
- Excel Communication for easy Programming
- Available Cellular Support
- Options can be Toggled On and Off

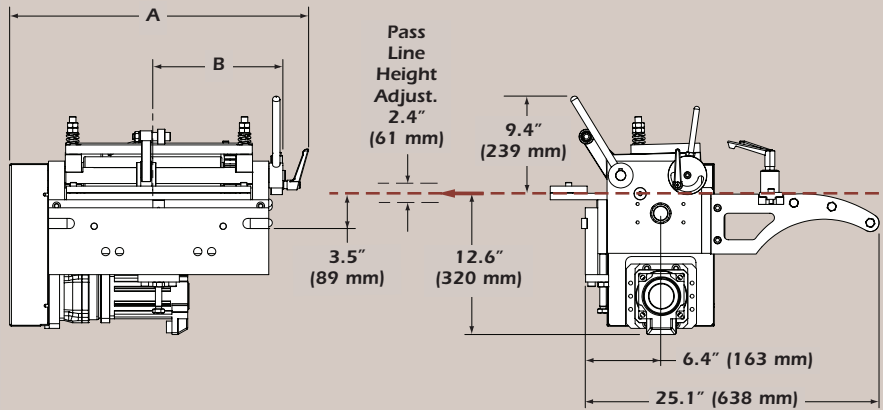
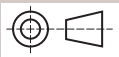
P/A K350 ADVANTAGE SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



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DIMENSIONS



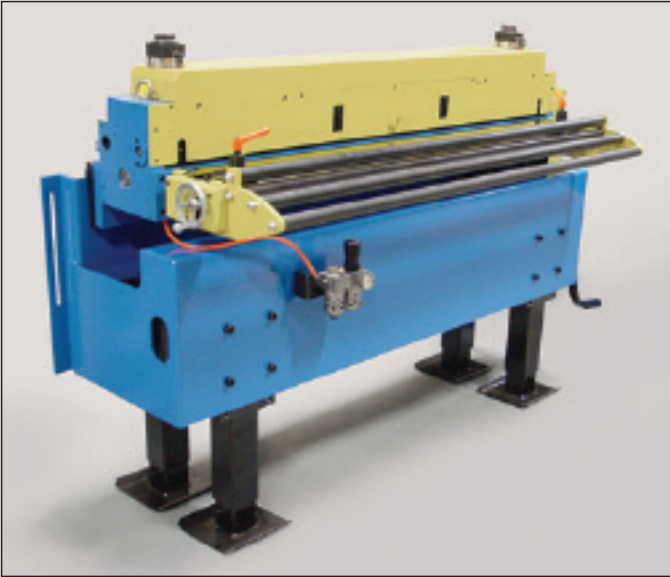
DIMENSIONS – in.			DIMENSIONS – mm		
Model	A	B	Model	A	B
SRF-5	20	8.0	SRF-5	508	203
SRF-8	23	9.5	SRF-8	584	241
SRF-12	27	11.5	SRF-12	686	292
SRF-16	31	13.5	SRF-16	787	343
SRF-20	35	15.5	SRF-20	889	394
SRF-24	39	17.5	SRF-24	991	445
SRF-28	43	19.5	SRF-28	1092	495
SRF-32	47	21.5	SRF-32	1194	546
SRF-36	51	23.5	SRF-36	1295	597

Note: SRFX Models have same mechanical dimensions as SRF.

SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input	
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz	kW
SRF-5	3.55	.138	.138	5.11	584	201	230/1/60	2
SRF-8	3.55	.138	.138	7.87	584	201	230/1/60	2
SRF-12	3.55	.138	.138	11.81	584	201	230/1/60	2
SRF-16	3.55	.138	.120	15.74	584	201	230/1/60	2
SRF-20	3.55	.138	.105	19.68	584	201	230/1/60	2
SRF-24	3.55	.138	.090	23.62	584	201	230/1/60	2
SRF-28	3.55	.138	.105	27.55	934	322	230/1/60	2
SRF-32	3.55	.138	.090	31.49	934	322	230/1/60	2
SRF-36	3.55	.138	.075	36.10	934	322	230/1/60	2
SRFX-5	3.55	.188	.188	5.11	934	322	230/1/60	2
SRFX-8	3.55	.188	.180	7.87	934	322	230/1/60	2
SRFX-12	3.55	.188	.165	11.81	934	322	230/1/60	2
SRFX-16	3.55	.188	.150	15.74	934	322	230/1/60	2
SRFX-20	3.55	.188	.135	19.68	934	322	230/1/60	2
SRFX-24	3.55	.188	.120	23.62	934	322	230/1/60	2

SPECIFICATIONS – METRIC								
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input	
			Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz	kW
SRF-5	90	3,50	3,50	130	2600	894	230/1/50	2
SRF-8	90	3,50	3,50	200	2600	894	230/1/50	2
SRF-12	90	3,50	3,50	300	2600	894	230/1/50	2
SRF-16	90	3,50	3,05	400	2600	894	230/1/50	2
SRF-20	90	3,50	2,67	500	2600	894	230/1/50	2
SRF-24	90	3,50	2,29	600	2600	894	230/1/50	2
SRF-28	90	3,50	2,67	700	4155	1435	230/1/50	2
SRF-32	90	3,50	2,29	800	4155	1435	230/1/50	2
SRF-36	90	3,50	1,91	915	4155	1435	230/1/50	2
SRFX-5	90	4,77	4,78	130	4155	1435	230/1/50	2
SRFX-8	90	4,77	4,57	200	4155	1435	230/1/50	2
SRFX-12	90	4,77	4,19	300	4155	1435	230/1/50	2
SRFX-16	90	4,77	3,81	400	4155	1435	230/1/50	2
SRFX-20	90	4,77	3,43	500	4155	1435	230/1/50	2
SRFX-24	90	4,77	3,05	600	4155	1435	230/1/50	2

P/A K350 DYNAMAX SERVO ROLL FEED



MECHANICAL FEATURES

- Rugged Steel Frame
- Unique Design Maintains Roll Parallelism with Off Center Loading
- Precision Gear Driven Upper Roll with Anti-Backlash
- Pneumatic Cylinders to provide Roll Pressure
- Pneumatic Pilot Release of Upper Roll for Strip Insertion and Piloting
- Smooth Finish Hard Chrome Feed Rolls
- Feed Mounting Bracket For 4.0" (102 mm) of Die Height Adjustment
- Exit Support Bridge to Prevent Stock Buckling
- Feed Rolls Mounted in Permanently Sealed, Anti-Friction Ball Bearings
- Precision Planetary Gearbox 7:1 Ratio

MECHANICAL OPTIONS

- Material Squaring Guides
- Feed Mounting Cabinet with 12" (305 mm) of Height Adjustment
- Urethane Covered Catenary Rolls for Additional Material Protection
- Self-Centering Edge Guides for Strip Insertion



ELECTRONIC FEATURES

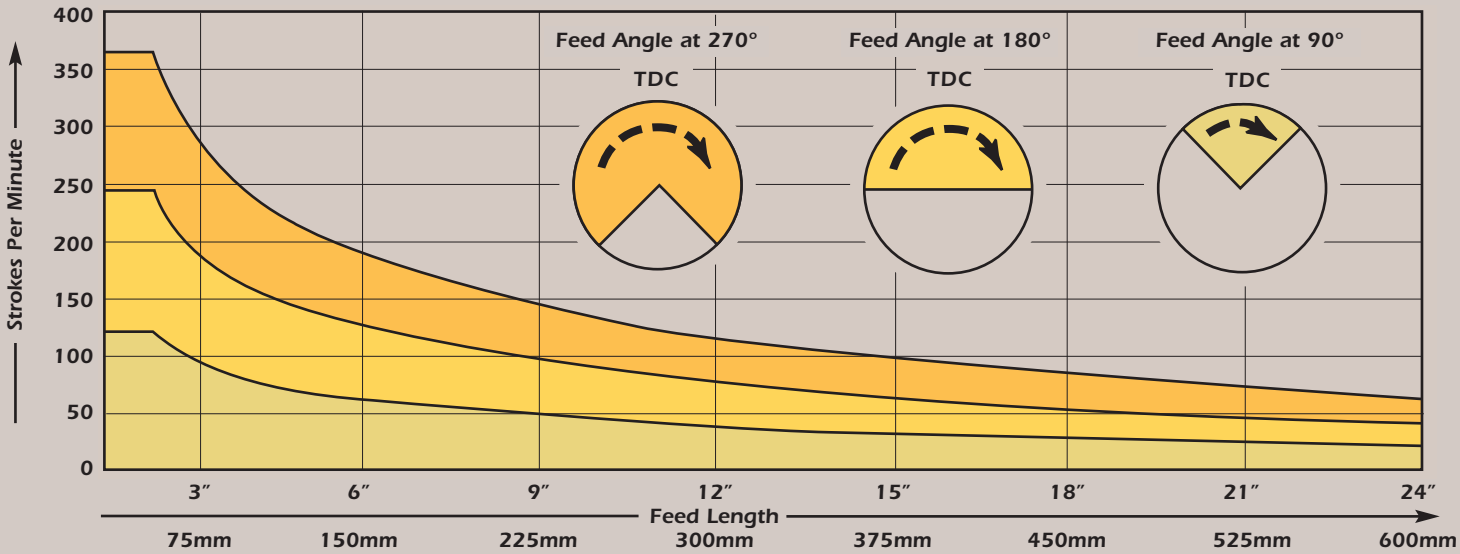
- ISO Certified Electrical Components Wired to JIC, NEC, & CE Standards
- Backlit, LCD Touchscreen Display
- Built-In I/O Diagnostics Assists in Troubleshooting
- Batch Counter
- Password Protected Job Storage
- On-The-Fly, Micro Adjust Feed Length
- Inch/Metric, Multi-Language Selectability
- Single Stroke or Continuous Press Mode Capability
- Jog Pendant
- Jog-To-Length Capability
- High Performance Digital Servo Drive, PLC and Motor
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- Lockable Power Disconnect Switch
- On Screen Motion Trends
- On Screen Fault History

ELECTRONIC OPTIONS

- Integral Programmable Limit Switch for Setting Feed Angle, Cycle Reset, and Pilot Release with Digital Press Crankshaft Position Indicator
- SFI (Servo Feed Interface) Provides Communication with External Devices
- Cut-To-Length Systems Available
- Sequential Feed Control
- Feed To Registration
- End of Stock Sensor Mounted to Entry Plate
- Auxiliary Strip Encoder
- Excel Communication for easy Programming
- Available Cellular Support
- Options can be Toggled On and Off

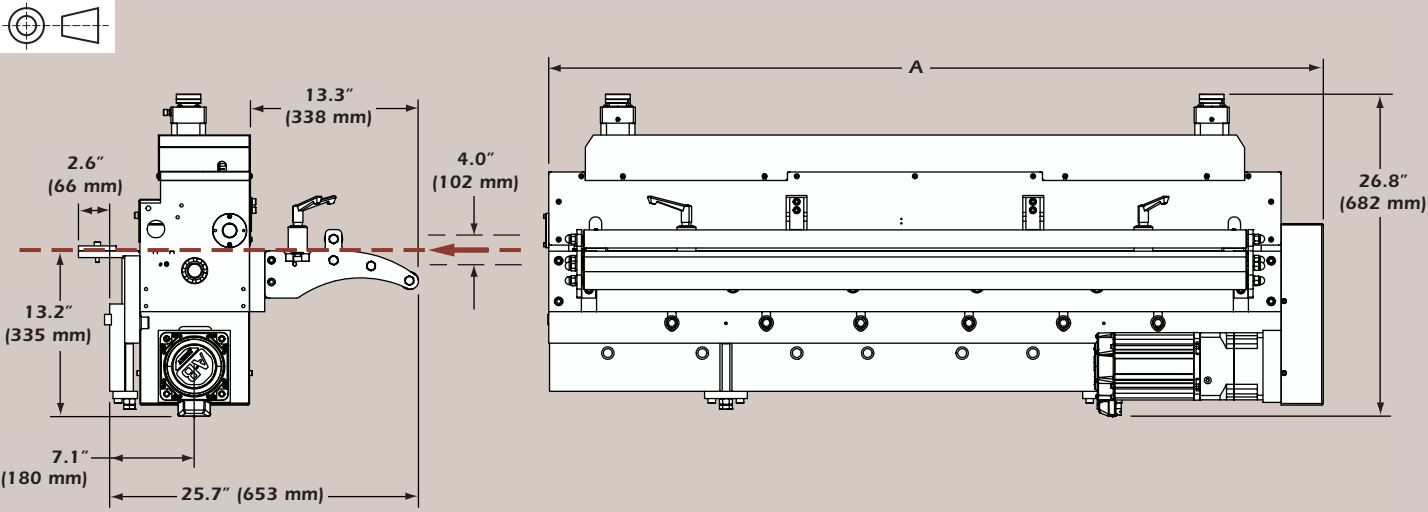
P/A K350 DYNAMAX SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

DIMENSIONS



DIMENSIONS – in.	
Model	A
SRF-48	64.5
SRF-60	76.3
SRF-72	88.1

DIMENSIONS – mm	
Model	A
SRF-48	1640
SRF-60	1940
SRF-72	2240

SPECIFICATIONS – USA							
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	
SRF-48	3.35	.158	.040	51.18	1060	531	230/1/60 3
SRF-60	3.35	.158	.030	62.99	1060	531	230/1/60 3
SRF-72	3.35	.158	.020	74.80	1060	531	230/1/60 3

SPECIFICATIONS – METRIC							
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness mm	at Width mm	Peak N	Cont. N	
SRF-48	85	4,01	1,02	1300	4760	2365	230/1/50 3
SRF-60	85	4,01	0,76	1600	4760	2365	230/1/50 3
SRF-72	85	4,01	0,51	1900	4760	2365	230/1/50 3

P/A K350 MAGNUM SERVO ROLL FEED



MECHANICAL FEATURES

- 1-1/2" (38 mm) Thick, Rugged Cast Iron Frame
- Unique Design Maintains Roll Parallelism with Off Center Loading
- Fail Safe Stock Clamping Assures Material Position in Die When Power is Off
- Two 3.15" (80 mm) Dia. Pneumatic Cylinders to Provide Roll Pressure; 3.94" (100 mm) on "X" Models
- Urethane Covered Catenary Rolls for Additional Material Protection
- Large Diameter, Hard Chrome Feed Rolls are Texturized for Positive Grip
- Pneumatic Pilot Release
- Precision, Low Backlash Worm Gearbox
- Digital Readout and Hand Wheel for Accurate Material Thickness Setting
- Precision Cluster Gearing of Upper Roll
- Exit Support Bridge to Prevent Stock Buckling
- Feed Mounting Bracket for 3.9" (100 mm) of Die Height Adjustment
- "X" Model offers a standard 30:1 Gearbox and larger cylinders for extra gripping force and extra thickness capacity

MECHANICAL OPTIONS

- Edge Squaring Guides
- Pull Through Straightener (See pages 18 & 19)
- Feed Mounting Cabinet with 12" (305 mm) of Height Adjustment
- Heavy Duty Catenary Rolls
- Self-Centering Edge Guides for Strip Insertion



ELECTRONIC FEATURES

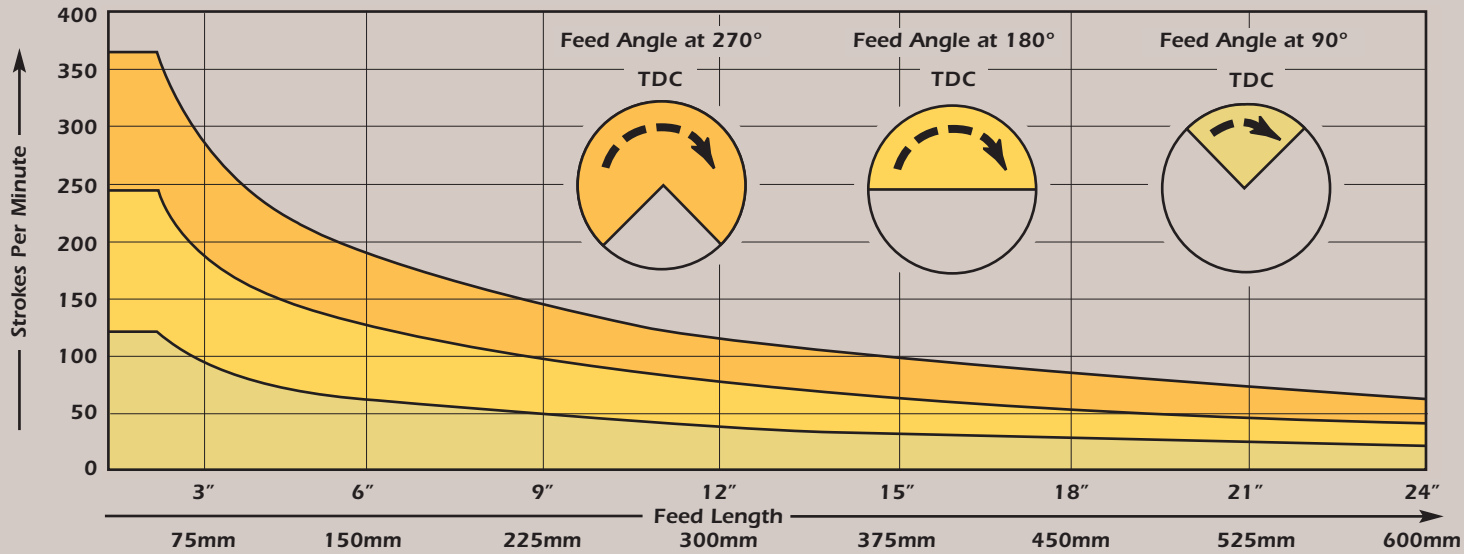
- ISO Certified Electrical Components Wired to JIC, NEC, & CE Standards
- Backlit, LCD Touchscreen Display
- Built-In I/O Diagnostics Assists in Troubleshooting
- Batch Counter
- Password Protected Job Storage
- On-The-Fly, Micro Adjust Feed Length
- Inch/Metric, Multi-Language Selectability
- Single Stroke or Continuous Press Mode Capability
- Jog Pendant
- Jog-To-Length Capability
- High Performance Digital Servo Drive, PLC and Motor
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- Lockable Power Disconnect Switch
- On Screen Motion Trends
- On Screen Fault History

ELECTRONIC OPTIONS

- Integral Programmable Limit Switch for Setting Feed Angle, Cycle Reset, and Pilot Release with Digital Press Crankshaft Position Indicator
- SFI (Servo Feed Interface) Provides Communication with External Devices
- Cut-To-Length Systems Available
- Sequential Feed Control
- Feed To Registration
- End of Stock Sensor Mounted to Entry Plate
- Auxiliary Strip Encoder
- Excel Communication for easy Programming
- Available Cellular Support
- Options can be Toggled On and Off

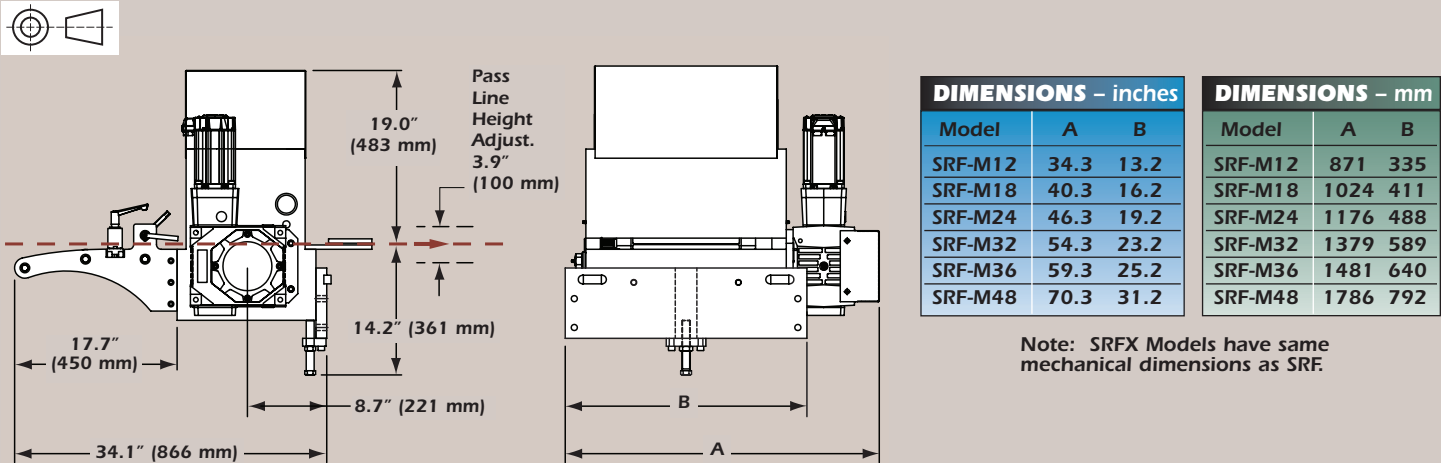
P/A K350 MAGNUM SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

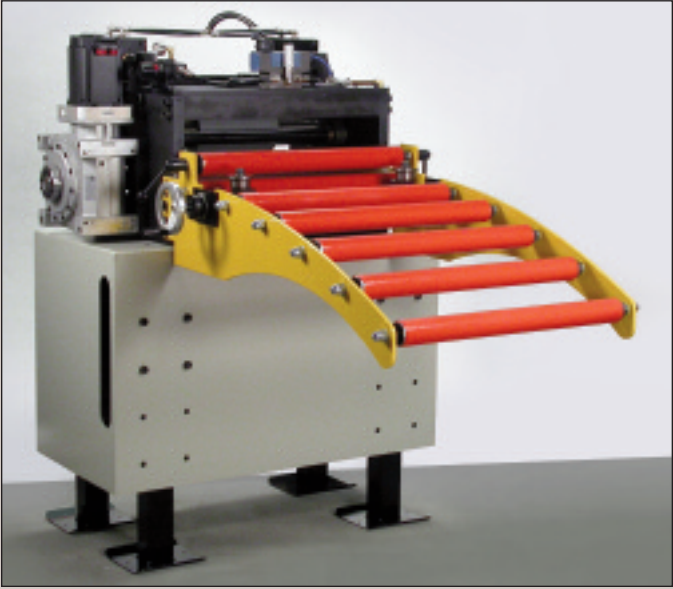
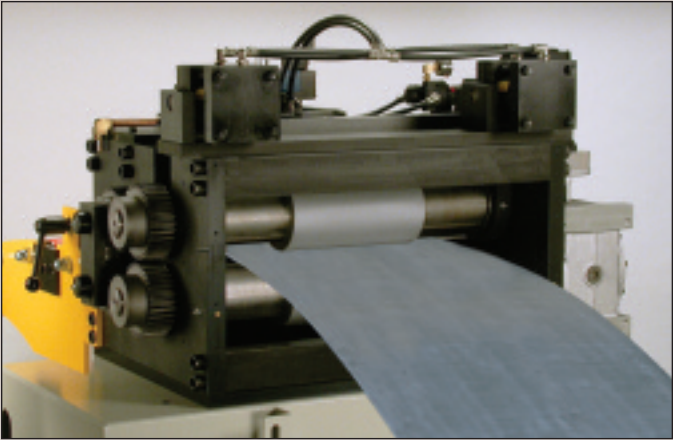
DIMENSIONS



SPECIFICATIONS – USA							
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	
SRF-M12	4.72	.315	.200	12	1080	562	230/1/60 3
SRF-M18	4.72	.315	.190	18	1080	562	230/1/60 3
SRF-M24	4.72	.315	.165	24	1080	562	230/1/60 3
SRF-M32	4.72	.315	.136	32	1080	562	230/1/60 3
SRF-M36	4.72	.315	.125	36	1080	562	230/1/60 3
SRF-M48	4.72	.315	.095	48	1080	562	230/1/60 3
SRFX-M12	4.72	.400	.315	12	1665	866	230/1/60 3
SRFX-M18	4.72	.400	.290	18	1665	866	230/1/60 3
SRFX-M24	4.72	.400	.255	24	1665	866	230/1/60 3
SRFX-M32	4.72	.400	.215	32	1665	866	230/1/60 3
SRFX-M36	4.72	.400	.195	36	1665	866	230/1/60 3
SRFX-M48	4.72	.400	.155	48	1665	866	230/1/60 3

SPECIFICATIONS – METRIC							
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz kW
			Thickness mm	at Width mm	Peak N	Cont. N	
SRF-M12	120	8,00	5,08	305	4800	2500	230/1/50 3
SRF-M18	120	8,00	4,83	457	4800	2500	230/1/50 3
SRF-M24	120	8,00	4,19	609	4800	2500	230/1/50 3
SRF-M32	120	8,00	3,45	812	4800	2500	230/1/50 3
SRF-M36	120	8,00	3,18	914	4800	2500	230/1/50 3
SRF-M48	120	8,00	2,41	1219	4800	2500	230/1/50 3
SRFX-M12	120	10,16	8,00	305	7415	3855	230/1/50 3
SRFX-M18	120	10,16	7,37	457	7415	3855	230/1/50 3
SRFX-M24	120	10,16	6,48	609	7415	3855	230/1/50 3
SRFX-M32	120	10,16	5,46	812	7415	3855	230/1/50 3
SRFX-M36	120	10,16	4,95	914	7415	3855	230/1/50 3
SRFX-M48	120	10,16	3,94	1219	7415	3855	230/1/50 3

P/A K550 MAXIMUS SERVO ROLL FEED



MECHANICAL FEATURES

- 1.5" (38 mm) Thick, Machined Frame
- Two 5" (127 mm) Diameter Pneumatic Cylinders Provide Roll Pressure
- Self-Centering Edge Guides for Strip Insertion
- Urethane Covered Catenary Rolls for Additional Material Protection
- 6 Inch (152 mm) Diameter, Hard Chrome Feed Rolls are Texturized for Positive Grip
- Precision, Low Backlash Worm Gearbox
- Pneumatic Pilot Release
- Feed Mounting Cabinet with 12" (305 mm) of Height Adjustment

MECHANICAL OPTIONS

- Pull Through Straightener (See pages 18 & 19)
- Auxiliary Strip Encoder
- Anti-Backup Rolls
- Motorized Cabinet/Pass Line Height Adjustment



ELECTRONIC FEATURES

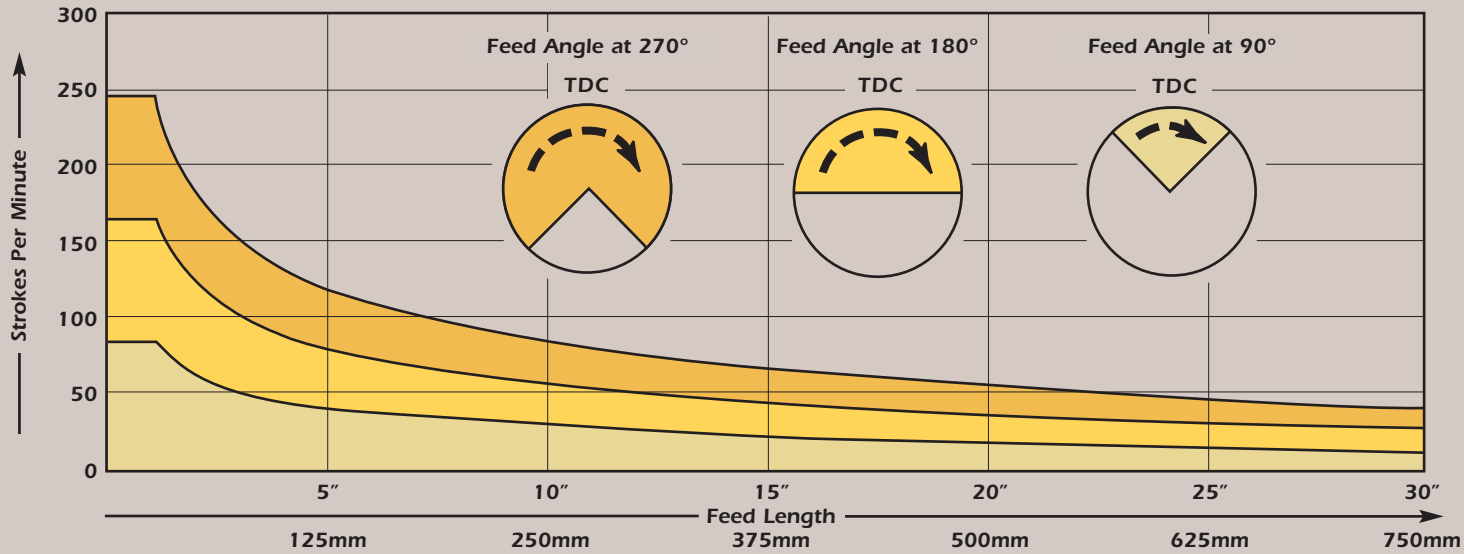
- ISO Certified Electrical Components Wired to JIC, NEC, & CE Standards
- Backlit, LCD Touchscreen Display
- Built-In I/O Diagnostics Assists in Troubleshooting
- Batch Counter
- Password Protected Job Storage
- On-The-Fly, Micro Adjust Feed Length
- Inch/Metric, Multi-Language Selectability
- Single Stroke or Continuous Press Mode Capability
- Jog Pendant
- Jog-To-Length Capability
- High Performance Digital Servo Drive, PLC and Motor
- NEMA 4/12/13 Enclosure
- Free Standing and Portable Console Stand
- Mushroom Emergency Stop with Auxiliary Contacts for Multi-Unit Stop
- Lockable Power Disconnect Switch
- On Screen Motion Trends
- On Screen Fault History

ELECTRONIC OPTIONS

- Integral Programmable Limit Switch for Setting Feed Angle, Cycle Reset, and Pilot Release with Digital Press Crankshaft Position Indicator
- SFI (Servo Feed Interface) Provides Communication with External Devices
- Cut-To-Length Systems Available
- Sequential Feed Control
- Feed To Registration
- End of Stock Sensor Mounted to Entry Plate
- Auxiliary Strip Encoder
- Excel Communication for easy Programming
- Available Cellular Support
- Options can be Toggled On and Off

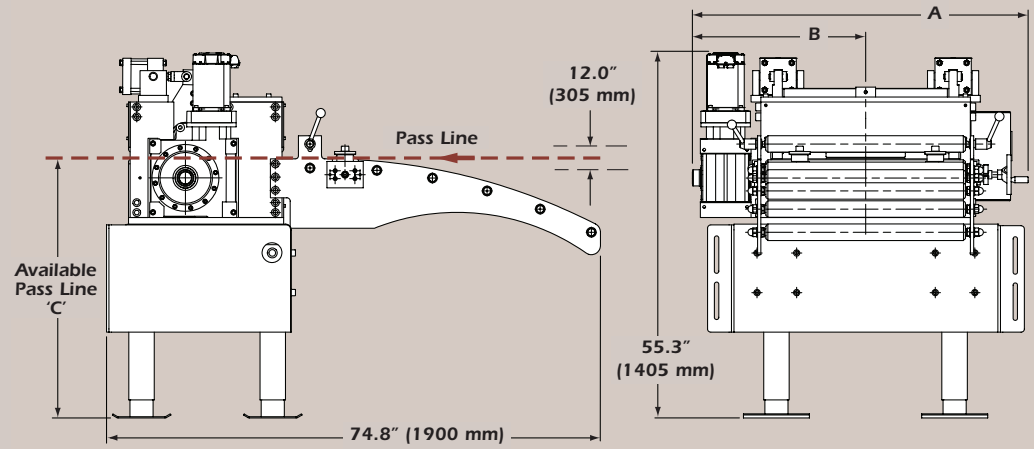
P/A K550 MAXIMUS SPECIFICATIONS

SAFE WORKING SPEEDS AT VARYING LENGTHS



Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

DIMENSIONS



C – inches
37 - 50
45 - 58
52 - 65

C – meters
0,94 - 1,27
1,14 - 1,47
1,32 - 1,65

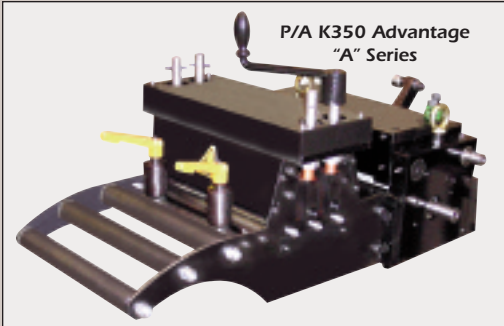
DIMENSIONS – inches		
Model	A	B
SRFHD-612	38.9	20.3
SRFHD-618	44.9	23.3
SRFHD-624	50.9	26.3
SRFHD-636	62.9	32.2
SRFHD-648	74.9	38.3
SRFHD-660	86.9	44.3
SRFHD-672	98.9	50.2

DIMENSIONS – mm		
Model	A	B
SRFHD-612	987	515
SRFHD-618	1140	591
SRFHD-624	1292	667
SRFHD-636	1597	819
SRFHD-648	1902	972
SRFHD-660	2206	1124
SRFHD-672	2511	1276

SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz	kW
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.		
SRFHD-612	6.0	.500	.500	12	3360	1445	480/3/60	10
SRFHD-618	6.0	.500	.430	18	3360	1445	480/3/60	10
SRFHD-624	6.0	.500	.375	24	3360	1445	480/3/60	10
SRFHD-636	6.0	.500	.312	36	3360	1445	480/3/60	10
SRFHD-648	6.0	.500	.250	48	3360	1445	480/3/60	10
SRFHD-660	6.0	.500	.190	60	3360	1445	480/3/60	10
SRFHD-672	6.0	.500	.150	72	3360	1445	480/3/60	10

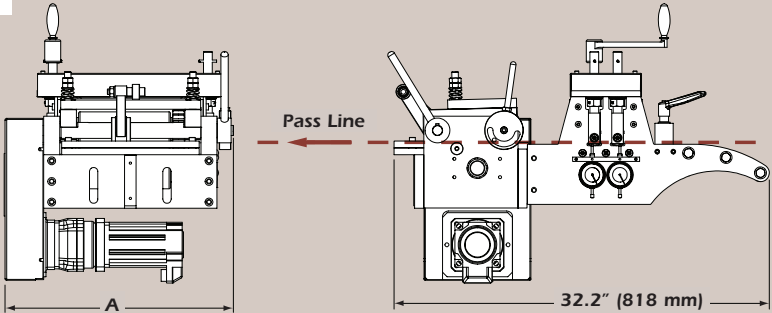
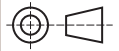
SPECIFICATIONS – METRIC								
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input V/Ph/Hz	kW
			Thickness mm	at Width mm	Peak N	Cont. N		
SRFHD-612	152	12,7	12,70	305	14950	6425	400/3/50	10
SRFHD-618	152	12,7	10,92	457	14950	6425	400/3/50	10
SRFHD-624	152	12,7	9,53	610	14950	6425	400/3/50	10
SRFHD-636	152	12,7	7,92	914	14950	6425	400/3/50	10
SRFHD-648	152	12,7	6,35	1219	14950	6425	400/3/50	10
SRFHD-660	152	12,7	4,83	1524	14950	6425	400/3/50	10
SRFHD-672	152	12,7	3,81	1829	14950	6425	400/3/50	10

SERVO FEED w/PULL-THRU STRAIGHTENER



This space and cost saving design utilizes a Standard P/A Feed Model integrated with a non-motorized "Pull-Thru" Straightener that is mounted on an adjustable height cabinet. (B,C, and D Models)

P/A K350 ADVANTAGE w/PULL-THRU 'A' Series

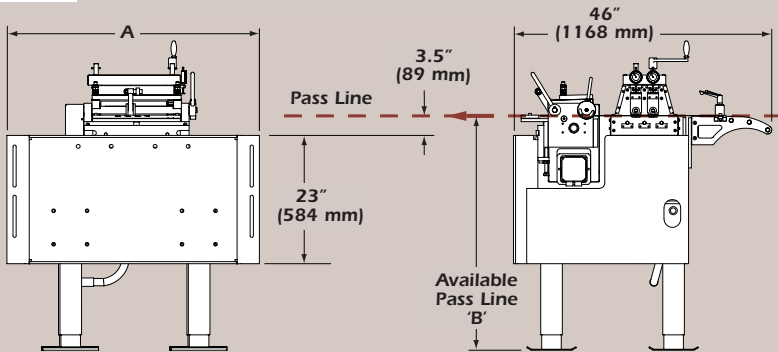
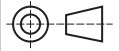


DIMENSIONS – inches			DIMENSIONS – mm		
Model	A		Model	A	
SRF-5S5A	16.6		SRF-5S5A	303	
SRF-8S5A	19.6		SRF-8S5A	378	
SRF-12S5A	23.6		SRF-12S5A	479	
SRF-20S5A	27.6		SRF-20S5A	578	
SRF-24S5A	31.6		SRF-24S5A	678	

SPECIFICATIONS – USA										
Model	Feed Roll Dia. in.	Straightener Roll Qty.	Roll Dia. in.	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz		
SRF-5S5A	3.50	5	1.50	.100	5.11	934	322	230/1/60	2	
SRF-8S5A	3.50	5	1.50	.080	7.87	934	322	230/1/60	2	
SRF-12S5A	3.50	5	1.50	.075	11.81	934	322	230/1/60	2	
SRF-20S5A	3.50	5	1.50	.045	19.68	934	322	230/1/60	2	
SRF-24S5A	3.50	5	1.50	.035	23.62	934	322	230/1/60	2	

SPECIFICATIONS – Metric										
Model	Feed Roll Dia. mm	Straightener Roll Qty.	Roll Dia. mm	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz		
SRF-5S5A	90	5	38,1	2,54	130	4155	1435	230/1/50	2	
SRF-8S5A	90	5	38,1	2,03	200	4155	1435	230/1/50	2	
SRF-12S5A	90	5	38,1	1,91	300	4155	1435	230/1/50	2	
SRF-20S5A	90	5	38,1	1,14	500	4155	1435	230/1/50	2	
SRF-24S5A	90	5	38,1	0,89	600	4155	1435	230/1/50	2	

P/A K350 ADVANTAGE w/PULL-THRU 'B' Series



DIMENSIONS – inches			DIMENSIONS – m		
Model	A		Model	A	
SRF-12S5B	39		SRF-12S5B	0,99	
SRF-20S5B	45		SRF-20S5B	1,14	
SRF-24S5B	45		SRF-24S5B	1,14	
SRF-36S5B	52		SRF-36S5B	1,32	

B – inches		B – m	
42	54	1,10	1,40
49	61	1,20	1,50
56	68	1,40	1,70

SPECIFICATIONS – USA										
Model	Feed Roll Dia. in.	Straightener Roll Qty.	Roll Dia. in.	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz		
SRF-12S5B	3.50	5	2.25	.100	11.81	934	322	230/1/60	2	
SRF-20S5B	3.50	5	2.25	.080	19.69	934	322	230/1/60	2	
SRF-24S5B	3.50	5	2.25	.075	23.62	934	322	230/1/60	2	
SRF-36S5B	3.50	5	2.25	.045	36.00	934	322	230/1/60	2	

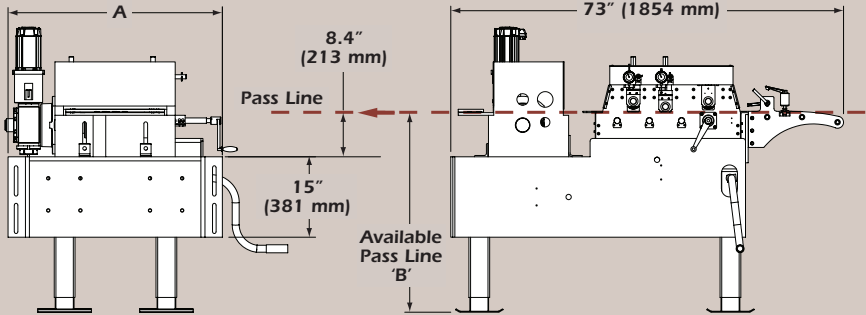
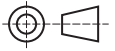
SPECIFICATIONS – Metric										
Model	Feed Roll Dia. mm	Straightener Roll Qty.	Roll Dia. mm	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz		
SRF-12S5B	90	5	57,2	2,54	300	4155	1435	230/1/50	2	
SRF-20S5B	90	5	57,2	2,03	500	4155	1435	230/1/50	2	
SRF-24S5B	90	5	57,2	1,91	600	4155	1435	230/1/50	2	
SRF-36S5B	90	5	57,2	1,14	915	4155	1435	230/1/50	2	

SERVO FEED w/PULL-THRU STRAIGHTENER

PULL-THRU OPTIONS

Option	Series			
	A	B	C	D
7 Roll Option	N/A	Optional	Optional	Optional
Pinch Rolls for Threading Manually	N/A	Optional	Standard	Standard
Motorized Pinch Rolls for Threading	N/A	Optional	Optional	Standard
Pnuematic Release of Pinch Rolls	N/A	Optional	Standard	Standard
Manual Height Adjustment Cabinet	N/A	Standard	Standard	Standard
Motorized Height Adjustment Cabinet	N/A	Optional	Optional	Optional

P/A K350 MAGNUM w/PULL-THRU 'C' Series



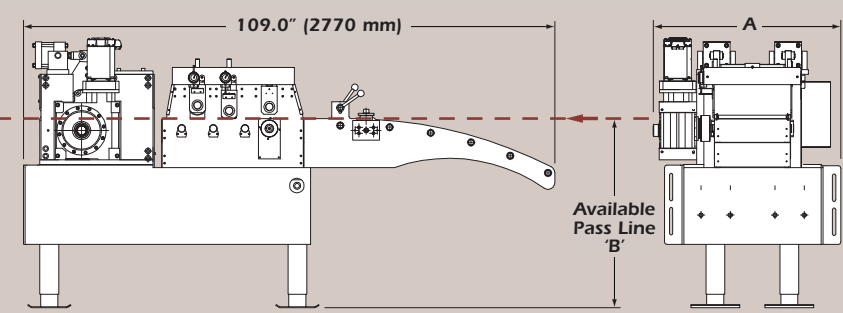
DIMENSIONS – inches			DIMENSIONS – m		
Model	A		Model	A	
SRFM-12S5C	40		SRFM-12S5C	1,02	
SRFM-24S5C	46		SRFM-24S5C	1,17	
SRFM-36S5C	56		SRFM-36S5C	1,42	
SRFM-48S5C	69		SRFM-48S5C	1,75	

B – inches		B – m	
37	50	0,94	1,27
45	58	1,14	1,47
52	65	1,32	1,65

SPECIFICATIONS – USA										
Model	Feed Roll Dia. in.	Straightener Roll Qty.	Roll Dia. in.	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz		
SRFM-12S5C	4.72	5	3.00	.170	12	1665	866	230/1/60	3	
SRFM-24S5C	4.72	5	3.00	.120	24	1665	866	230/1/60	3	
SRFM-36S5C	4.72	5	3.00	.095	36	1665	866	230/1/60	3	
SRFM-48S5C	4.72	5	3.00	.060	48	1665	866	230/1/60	3	

SPECIFICATIONS – Metric										
Model	Feed Roll Dia. mm	Straightener Roll Qty.	Roll Dia. mm	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz		
SRFM-12S5C	120	5	76,2	4,32	305	7415	3855	230/1/50	3	
SRFM-24S5C	120	5	76,2	3,05	609	7415	3855	230/1/50	3	
SRFM-36S5C	120	5	76,2	2,41	914	7415	3855	230/1/50	3	
SRFM-48S5C	120	5	76,2	1,52	1219	7415	3855	230/1/50	3	

P/A K550 MAXIMUS w/PULL-THRU 'D' Series



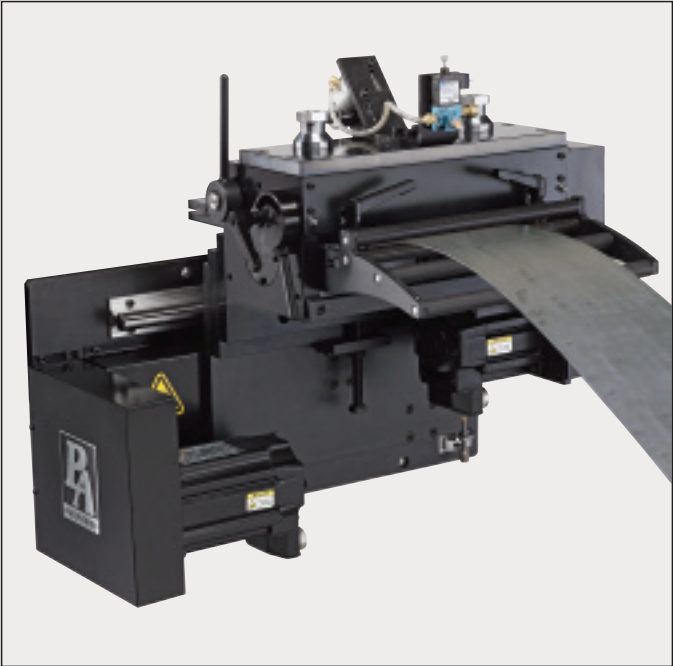
DIMENSIONS – inches			DIMENSIONS – m		
Model	A		Model	A	
SRFHD-612S5D	38.5		SRFHD-612S5D	0,98	
SRFHD-624S5D	50.5		SRFHD-624S5D	1,28	
SRFHD-636S5D	62.5		SRFHD-636S5D	1,59	
SRFHD-648S5D	78.5		SRFHD-648S5D	1,99	

B – inches		B – m	
37	50	0,94	1,27
45	58	1,14	1,47
52	65	1,32	1,65

SPECIFICATIONS – USA										
Model	Feed Roll Dia. in.	Straightener Roll Qty.	Roll Dia. in.	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz		
SRFHD-612S5D	6.00	5	4.00	.100-.360	12	5000	2150	480/3/60	15	
SRFHD-624S5D	6.00	5	4.00	.100-.250	24	5000	2150	480/3/60	15	
SRFHD-636S5D	6.00	5	4.00	.100-.200	36	5000	2150	480/3/60	15	
SRFHD-648S5D	6.00	5	4.00	.100-.180	48	5000	2150	480/3/60	15	

SPECIFICATIONS – Metric										
Model	Feed Roll Dia. mm	Straightener Roll Qty.	Roll Dia. mm	Full Capacity		Pulling Power		AC Power Input		kW
				Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz		
SRFHD-612S5D	152,4	5	101,6	2,54-9,14	305	22250	9570	400/3/50	15	
SRFHD-624S5D	152,4	5	101,6	2,54-6,35	609	22250	9570	400/3/50	15	
SRFHD-636S5D	152,4	5	101,6	2,54-5,08	914	22250	9570	400/3/50	15	
SRFHD-648S5D	152,4	5	101,6	2,54-4,57	1219	22250	9570	400/3/50	15	

STAGGER FEED

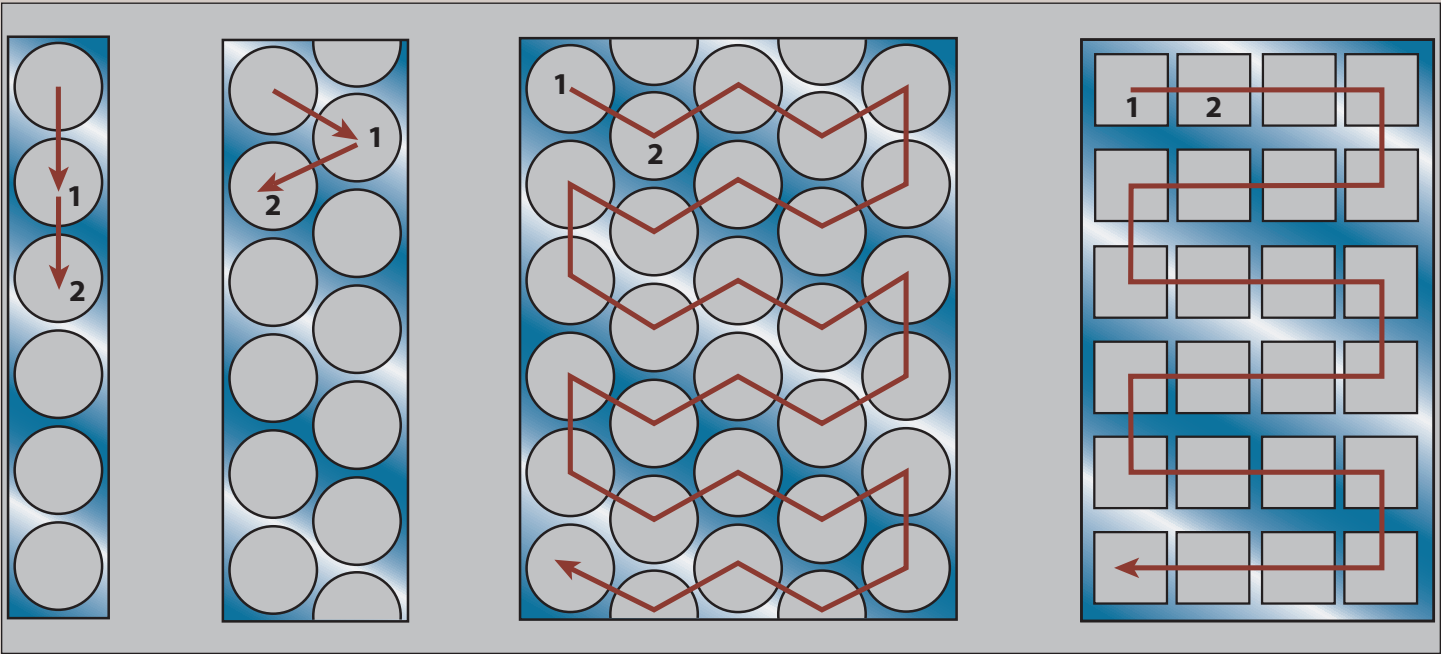


MECHANICAL FEATURES

- Utilizes the same rugged feed bodies as the Mini and Advantage Feeds
- Mechanical Ball Screw for Side to Side Motion
- Pneumatic release of Upper Roll for piloting and strip insertion
- Standard Adjustable Entry and exit guides

ELECTRONIC FEATURES

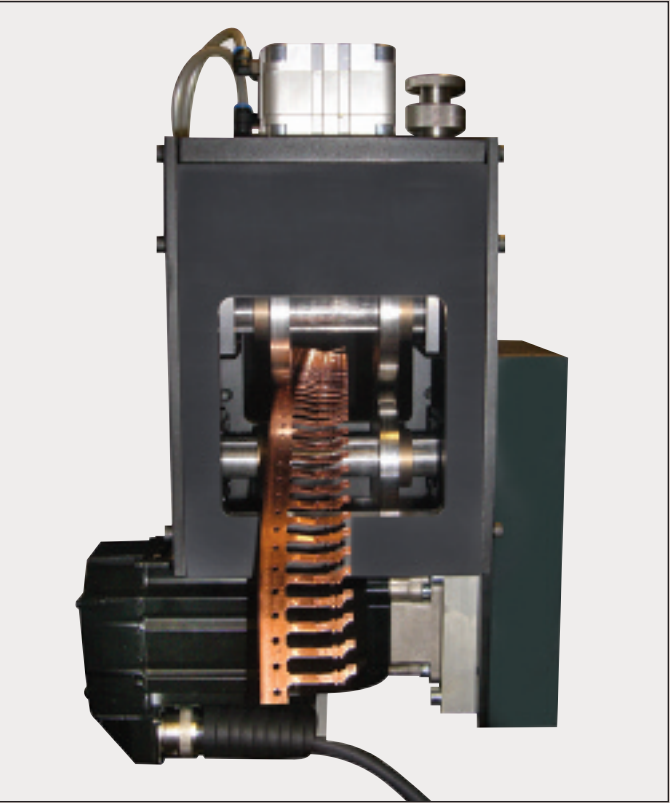
- Utilizes the same user-friendly touch-screen interface as the P/A K350 Edge thru 350 Magnum and P/A K550 Maximus
- A second servo motor and drive with absolute encoder to monitor side to side motion
- Basic operation to include touch-screen inputs for blank size, feed length, material width and number of parts per width.
- Ability to process patterns up suit material strip
- Forward/Backward movement to enable faster speeds for side motion



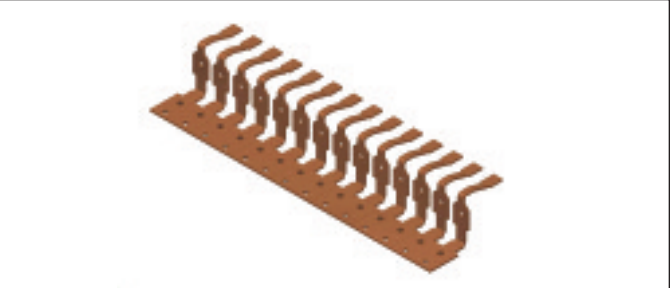
SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max Roll Opening in.	Full Capacity		Pulling Power		AC Power Input	
			Thickness in.	at Width in.	Peak lbs.	Cont. lbs.	V/Ph/Hz	kW
SRF-105MZZ	1.8	.078	.060	4.00	236	91	230/1/60	2
SRF-220MZZ	1.8	.078	.060	8.50	236	91	230/1/60	2
SRF-5ZZ	3.5	.138	.138	5.11	584	201	230/1/60	2
SRF-8ZZ	3.5	.138	.138	7.87	584	201	230/1/60	2
SRF-12ZZ	3.5	.138	.138	11.81	584	201	230/1/60	2

SPECIFICATIONS – METRIC								
Model	Feed Roll Dia. mm	Max Roll Opening mm	Full Capacity		Pulling Power		AC Power Input	
			Thickness mm	at Width mm	Peak N	Cont. N	V/Ph/Hz	kW
SRF-105MZZ	45	2,00	1,50	105	1050	405	230/1/50	2
SRF-220MZZ	45	2,00	1,50	220	1050	405	230/1/50	2
SRF-5ZZ	90	3,50	3,50	130	2600	894	230/1/50	2
SRF-8ZZ	90	3,50	3,50	200	2600	894	230/1/50	2
SRF-12ZZ	90	3,50	3,50	300	2600	894	230/1/50	2

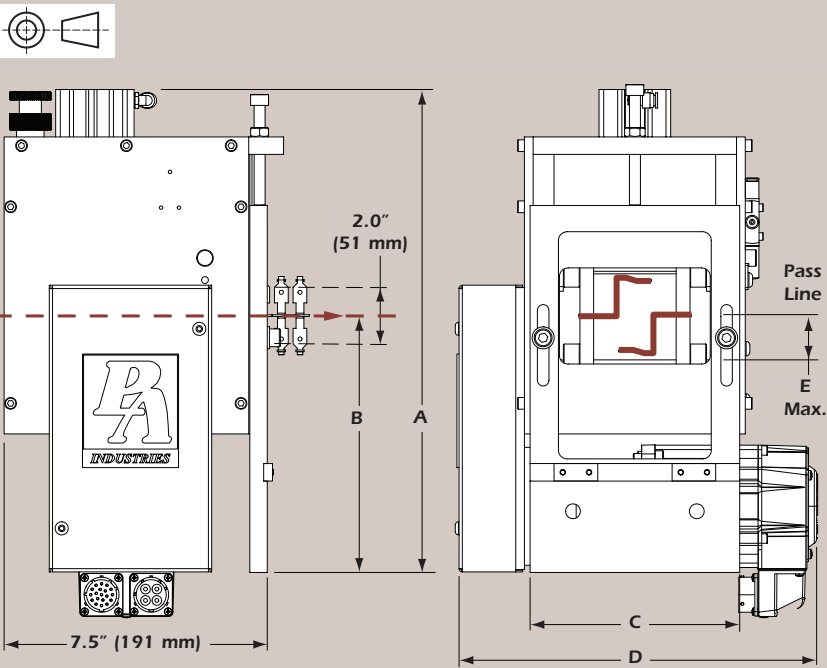
PROFIED PARTS FEED



The profiled parts feed has special collared rolls to feed parts that have a shape or profile that would not fit in a traditional roll feed. These collars are adjustable to suit different shapes.



DIMENSIONS



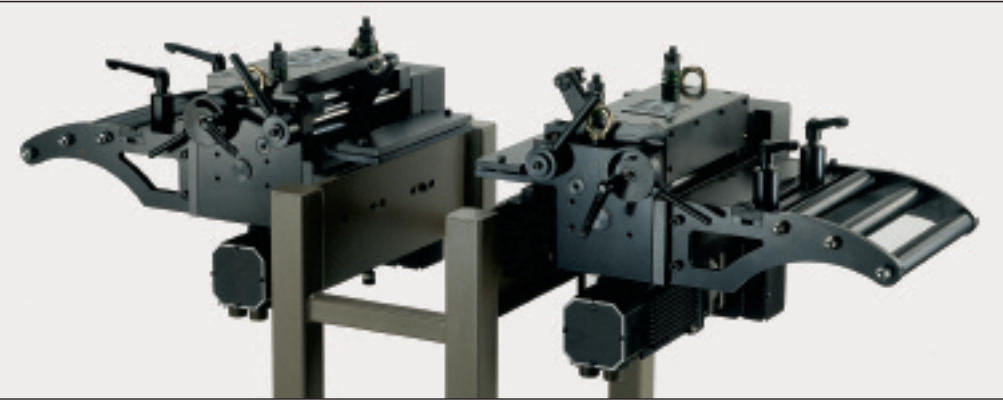
DIMENSIONS – inches					
Model	A	B	C	D	E
PPF-4	6.4-8.4	12.6-14.6	6.0	10.2	1.24
PPFX-4	8.0-10.0	14.2-16.2	6.0	10.2	2.03
PPF-6	6.4-8.4	12.6-14.6	8.0	12.2	1.24

DIMENSIONS – mm					
Model	A	B	C	D	E
PPF-4	163-213	320-371	152	259	31,5
PPFX-4	203-254	361-411	152	259	51,5
PPF-6	163-213	320-371	203	311	31,5

SPECIFICATIONS – USA								
Model	Feed Roll Dia. in.	Max. Roll Opening between collars in.	Full Capacity			Pulling Power		AC Power Input V/Ph/Hz kW
			Web Thickness in.	Part clearance between pass line & shaft in. (E)	At Width in.	Peak lbs.	Cont. lbs.	
PPF-4	3.35	.060	.040	1.24	4.00	154	63	115/1/60 0.8
PPFX-4	4.92	.060	.040	2.03	4.00	154	63	115/1/60 0.8
PPF-6	3.35	.060	.040	1.24	6.00	154	63	115/1/60 0.8

SPECIFICATIONS – Metric								
Model	Feed Roll Dia. mm	Max. Roll Opening between collars mm	Full Capacity			Pulling Power		AC Power Input V/Ph/Hz kW
			Web Thickness mm	Part clearance between pass line & shaft mm (E)	At Width mm	Peak N	Cont. N	
PPF-4	85	1,52	1,52	31,5	105	685	280	230/1/50 0,8
PPFX-4	125	1,52	1,52	51,5	105	685	280	230/1/50 0,8
PPF-6	85	1,52	1,52	31,5	152	685	280	230/1/50 0,8

PUSH-PULL SERVO ROLL FEED

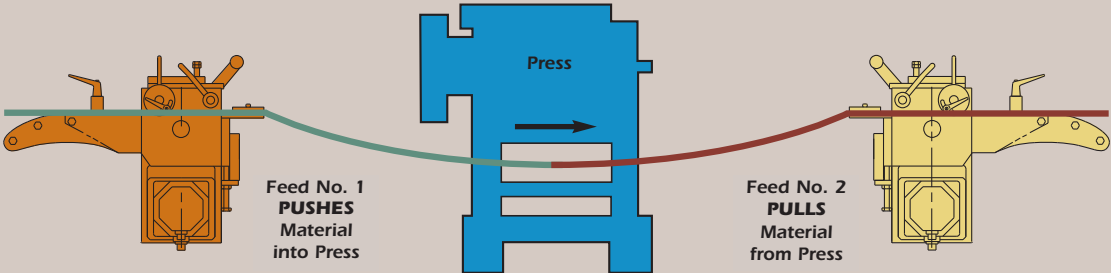


P/As Push/Pull Feeds can be configured in any of P/As Servo Feed Models. The control consists of tandem Allen Bradley Kinetix 350 or 550/650 Servo Drives.

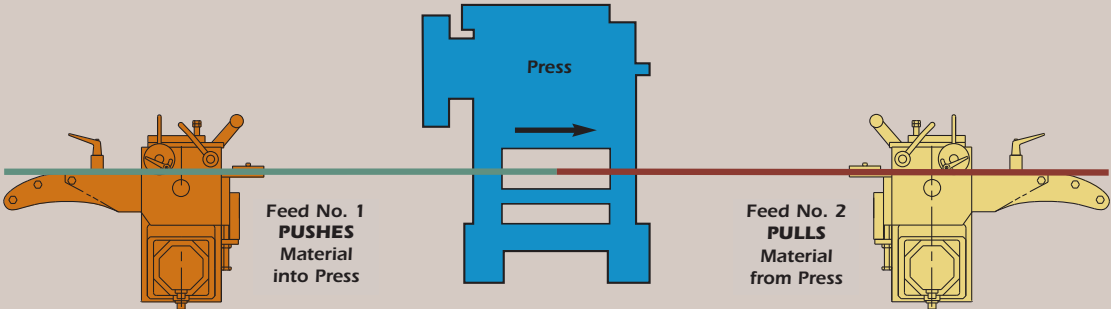
The second drive follows the master drive at a programmable ratio. This ratio can be tweaked by the operator to set the amount of tension in the strip.

Why a Push/Pull Feed?

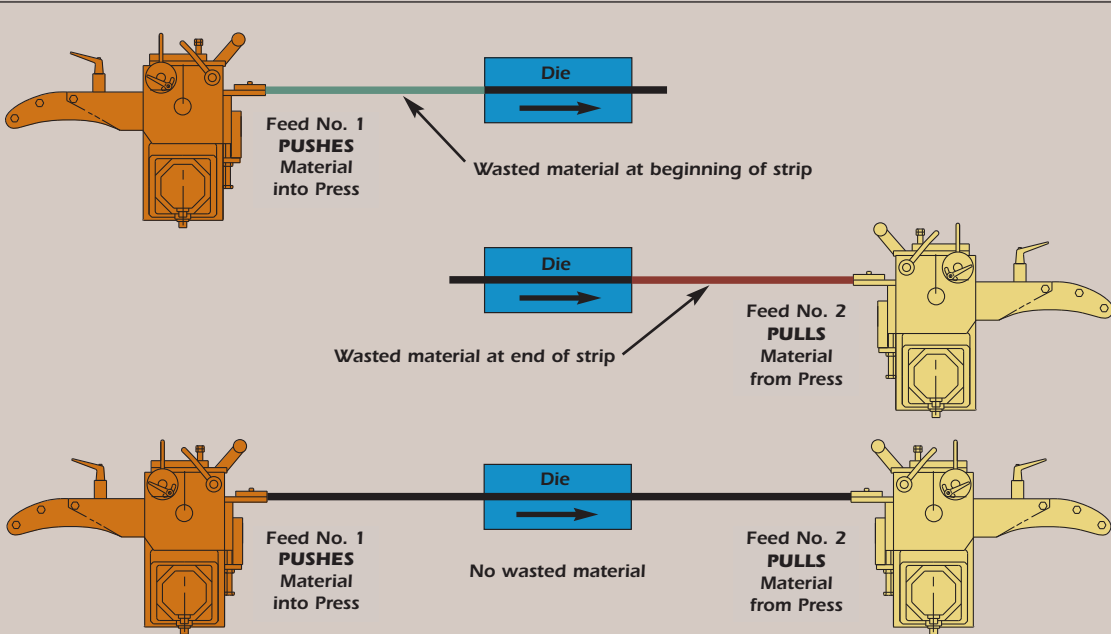
For Delicate Applications to **AVOID** tension



For Delicate Applications to **INDUCE** tension



For **MATERIAL SAVINGS** on strip



BULLET Series



Every manufacturer wants to produce their product as quickly and efficiently as possible. The P/A Bullet series allows you to do just that. Using Advanced Design software, we are able to address each customer's individual needs for additional speed by using Mechanical and Electronic enhancements to our standard Servo Roll Feeds.

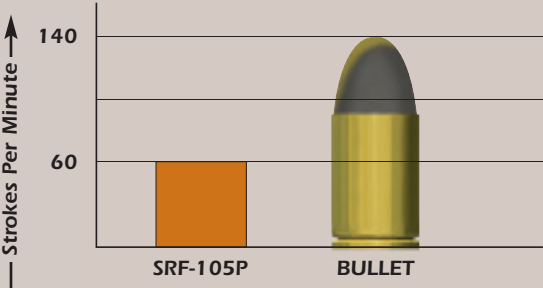
Our Engineering Team analyzes each application to come up with the configuration that best suits each customer's needs.

Whatever you produce – appliances, electronic stampings, hardware, even running a high speed canning line – the Bullet can make your lines run faster, more efficiently, and ultimately more profitably.

EXAMPLE 1

- 7.05" (179mm) Wide x.013" (0,32mm) Thick Brass
- 1.65" (42mm) Feed Length
- 60° Feed Window

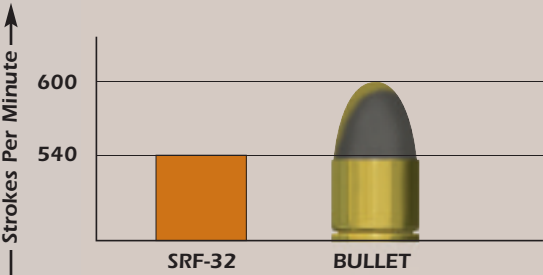
With SRF-105P Mini and P/A K350 Mini – 60 SPM
With Bullet – 140 SPM



EXAMPLE 2

- 26" (660mm) Wide x .024" (0,61mm) Thick Steel
- 0.625" (15,88mm) Feed Length
- 270° Feed Window

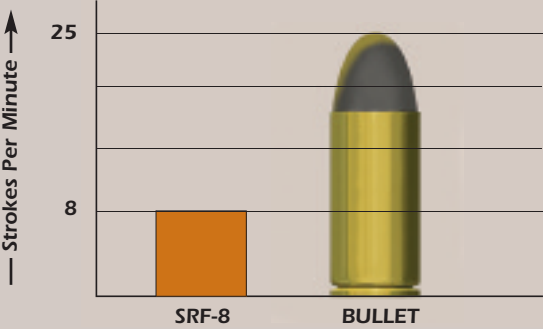
With SRF-32 P/A K350 Advantage – 540 SPM
With Bullet – 600 SPM



EXAMPLE 3

- 3.03" (77mm) Wide x .060" (1,5mm) Thick Steel
- 91" (2,3m) Feed Length
- 120° Feed Window

With SRF-8 P/A K350 Advantage – 8 SPM
With Bullet – 25 SPM



Available w/Servo Pilot Release for Speeds above 350 SPM. Performance data shown is for estimating purposes only. Production rates and capacities are dependent upon feed length and material. Consult P/A for specific application needs.

SEQUENTIAL CONTROLS

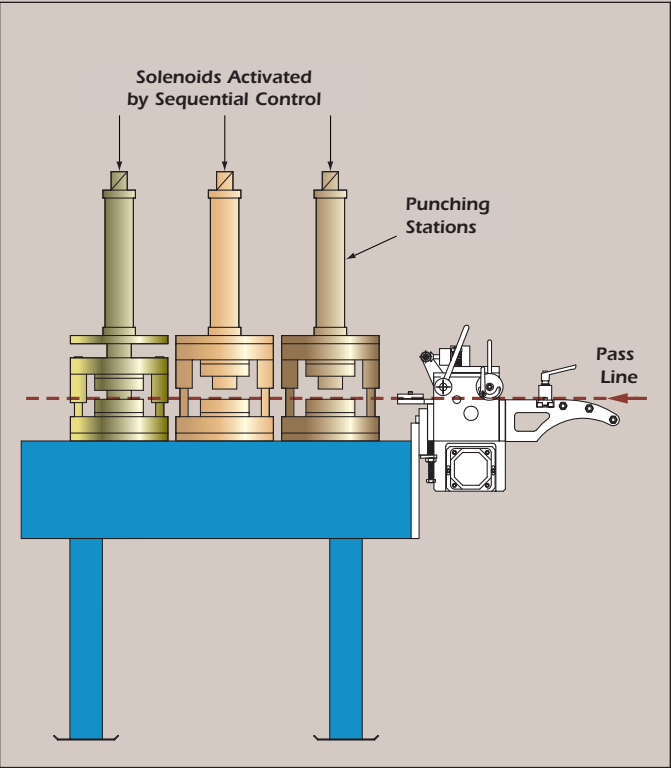
Sequential software provides the ability for step feeding, tool signaling, gagging and multiple parts on one press or punching machine. Ideal for the racking, lighting, strapping, appliance, screen perforating and other industries that make parts where changing the feed pitch during the operation is necessary. Easy step-by-step programming and job storage provide maximum flexibility and reduced set-up time.

SEQUENTIAL

- Capable of sequential, multiple length feeding
- Provides programmable outputs for tool and/or machine signaling
- Standard programs are available with up to 1000 programmable steps
- 6 Programmable outputs complete with relays.

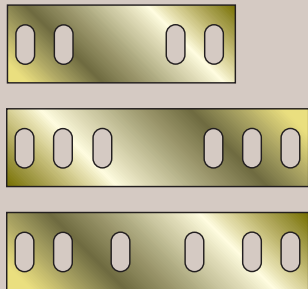
OMNIMAX and PAK Controls

- RS Logix Platform
- Kinetix Servo Drive
- Compact Logix PLC
- Sequential, multiple length feeding and provides programmable outputs for tool and/or machine signaling
- Unlimited programmable outputs available complete with relays. Selectable multiple output capability (Gag Tooling)
- Inputs for Tool Verification
- 50 steps per tool
- 200 tools

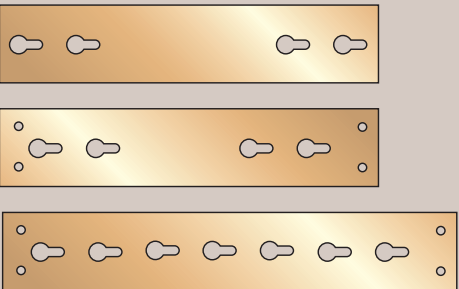


TYPICAL PARTS PRODUCTION

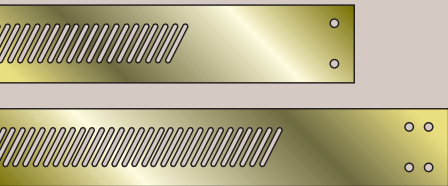
Straps and Hangers



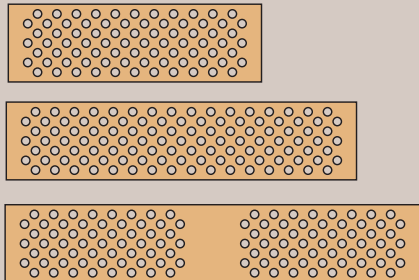
Adjustable Shelving and Hangers



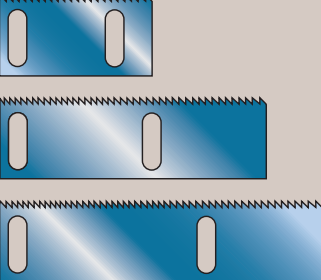
Hose Clamps



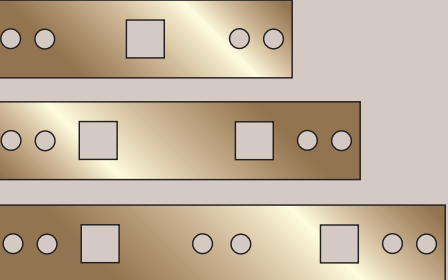
Perforating – Filter Screens, Electronic Shielding



Hole Saw Blades or Hack Saw Blades

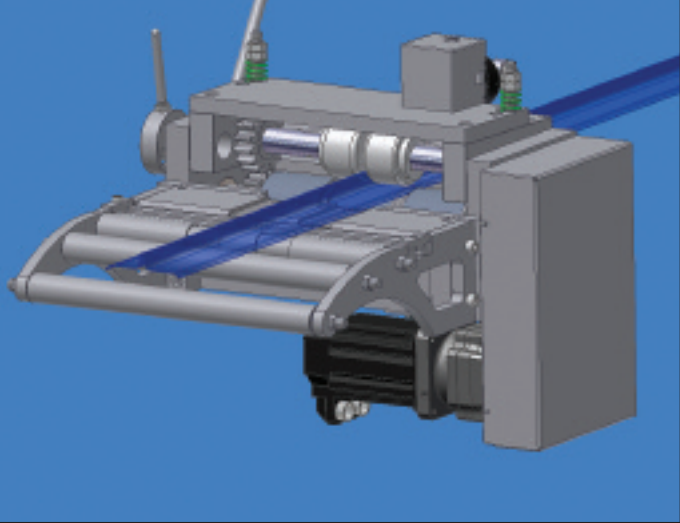


Light Fixtures and Drawer Slide Frames

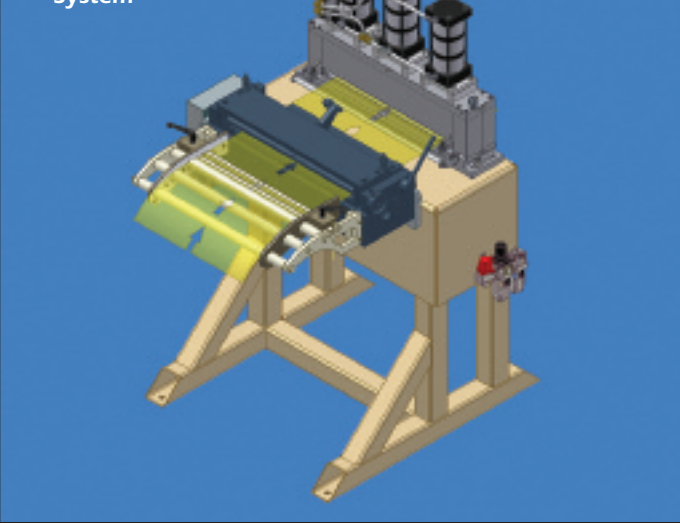


OPTIONS

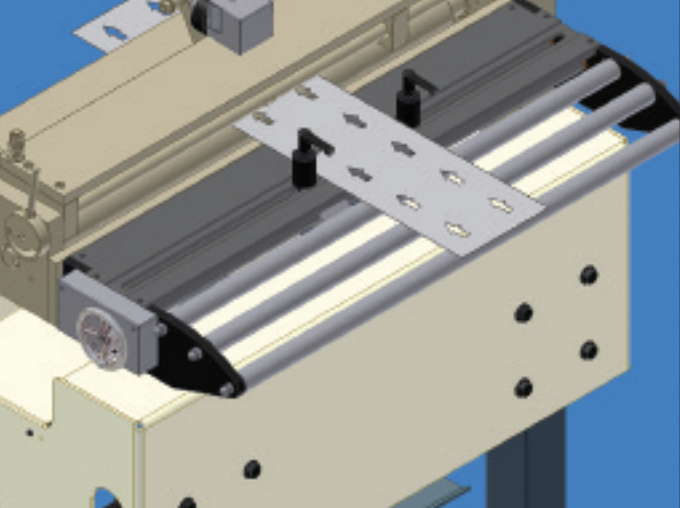
Profiled Rolls



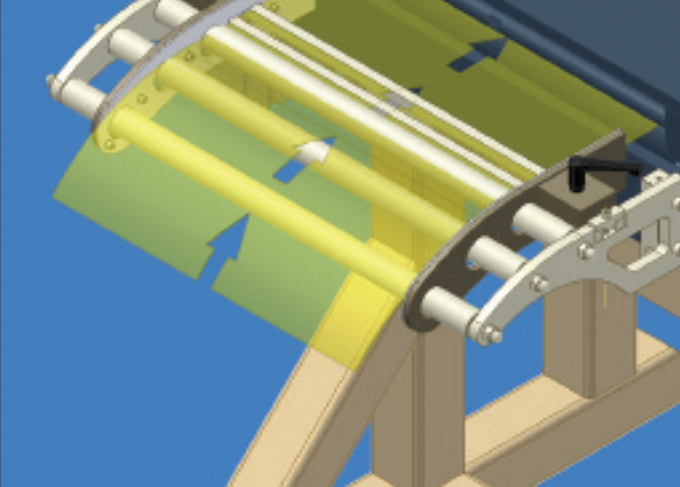
Cut-To-Length System



Adj. Self-Centering Guides



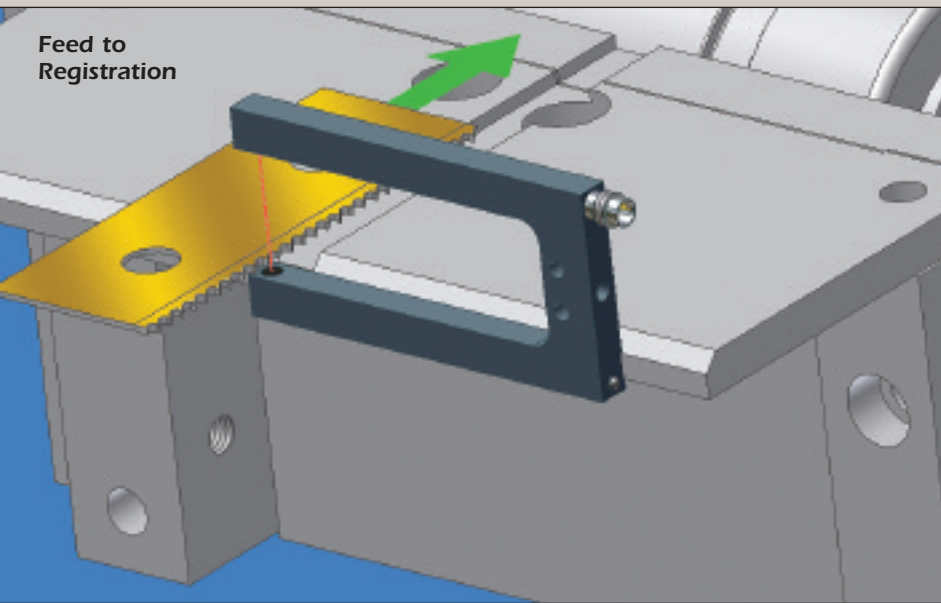
Squaring Guides



FEED TO REGISTRATION

- Used when it is more important to register to a feature than a length
- Picture shown to the right is showing a saw blade profile. The customer requires the blade to be sheared at the root (lowest part) of the tooth. A light fork sensor is used to detect that the blade is positioned to cut at the root
- Other features to register include marks, notches, color changes and any other feature that can be sensed electronically

Feed to Registration



REFERENCE DATA

PRODUCTION – PARTS PER HOUR (Figures Based Upon One Part Per Press Stroke)

Press Speed (Strokes Per Minute)		40	60	70	80	100	120	150	200	250	300
Efficiency Rate	100%	2400	3600	4200	4800	6000	7200	9000	12000	15000	18000
	90%	2160	3240	3780	4320	5400	6480	8100	10800	13500	16200
	80%	1920	2800	3360	3840	4800	5760	7200	9600	12000	14400
	75%	1800	2700	3150	3600	4500	5400	6750	9000	11250	13500
	70%	1680	2520	2940	3360	4200	5040	6300	8400	10500	12600
	60%	1440	2160	2520	2880	3600	4320	5400	7200	9000	10800
	50%	1200	1800	2100	2400	3000	3600	4500	6000	7500	9000

STRIP CONSUMPTION – FEET PER MINUTE

Feed Length (Inches)		0.5	1	1.5	2	3	4	5	6	8	10	12	16
Press Speed (Strokes Per Minute)	40	1.7	3.3	5.2	6.5	10	13	16	20	26	33	40	52
	60	2.5	5	7.5	10	15	20	25	30	40	50	60	80
	70	2.9	5.8	8.8	11	17	23	29	35	46	57	70	92
	80	3.3	6.6	10	13	20	26	33	40	52	66	80	105
	100	4.2	8.2	13	16	25	33	41	50	66	82	100	131
	120	5.0	10	15	20	30	40	50	60	80	100	120	160
	150	6.3	12	18	25	37	50	62	75	100	125	150	200
	200	8.3	16	25	34	50	66	82	100	131	164	200	266
	250	10.4	21	31	41	62	83	103	125	164	205	250	328
	300	12.5	25	40	50	75	100	125	150	200	250	300	400

COIL ROTATIONAL SPEEDS – REVOLUTIONS PER MINUTE

Strip Consumption (Feet Per Minute)		5	15	30	45	60	75	90	120	150	180	210	240	270	300	330	360
Coil Diameter (Inches)	60	0.3	1.0	1.9	2.9	3.8	4.8	5.7	7.6	9.5	11.5	13.4	15.3	17.2	19.1	21.0	22.9
	48	0.4	1.2	2.4	3.6	4.8	6.0	7.2	9.5	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.6
	36	0.5	1.6	3.2	4.8	6.4	8.0	9.5	12.7	15.9	19.1	22.3	25.5	28.6	31.8	35	38.2
	24	0.8	2.4	4.8	7.2	9.5	11.9	14.3	19.1	23.9	28.6	33.4	38.2	43.0	47.7	52.5	57.3
	18	1.1	3.2	6.4	9.5	12.7	15.9	19.1	25.5	31.8	38.2	44.6	50.9	57.3	63.7	70.0	76.4
	12	1.6	4.8	9.5	14.3	19.1	23.9	28.6	38.2	47.7	57.3	66.8	76.4	85.9	95.9	105.0	114.6
	6	2.2	6.4	12.7	19.1	25.5	31.8	38.2	50.9	63.7	76.4	89.1	101.8	114.6	127.3	140.0	152.7

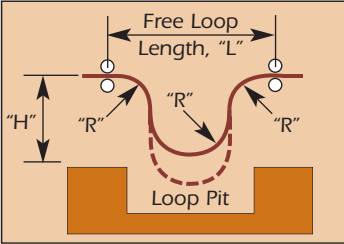
COIL WEIGHT REFERENCE CHART

Based on 1 Inch Strip Width – Steel.
Factor From Chart x Width of Coil = Total Coil Weight.

To Obtain Weight of:
Aluminum. Multiply Total Wt. x .344
Brass Multiply Total Wt. x 1.08
Copper. Multiply Total Wt. x 1.14
Stainless Steel Multiply Total Wt. x 1.02

Inside Diameter		6	8	10	12	14	16	18	20	22	24
Outside Diameter	10	15	–	–	–	–	–	–	–	–	–
	12	25	15	–	–	–	–	–	–	–	–
	14	35	20	20	–	–	–	–	–	–	–
	16	50	40	35	25	–	–	–	–	–	–
	18	65	60	50	40	30	–	–	–	–	–
	20	80	75	65	55	45	35	–	–	–	–
	24	120	110	105	95	85	70	55	40	–	–
	28	170	160	150	140	130	120	105	85	65	45
	32	220	210	205	195	185	170	155	140	120	100
	36	280	270	265	255	245	230	215	200	180	160
	40	350	340	330	325	310	300	285	265	250	230
	44	420	410	405	400	385	375	360	340	325	305
	48	500	490	485	480	470	455	440	425	405	385
	52	590	580	575	570	560	545	530	510	495	470
	56	690	680	670	665	655	640	625	610	590	570
	60	800	790	780	770	760	745	730	710	695	675

FREE LOOP AREA & SLACK MATERIAL
AVAILABILITY FOR MILD STEEL COIL STOCK



“R” = Radius desirable to avoid distortion of material in free loop calculated at approximately 360 times metal thickness.

Loop Pit can provide 2 inches of additional slack material for each inch of depth; once “H” is equal to at least two times “R”.

Chart below shows inches of loop required for a given thickness & inches of slack material in a full loop.

Material Thickness T (Inch)	Free Loop Length L (Inch)	Pass Line Height H (Inch)						
		36	42	48	54	60	66	72
0.015	22	63	75	87	99	111	123	135
0.031	45	53	65	77	89	101	113	125
0.062	90	34	46	58	70	82	94	106
0.093	135	22	30	40	51	62	74	86
0.125	180	16	22	29	38	47	57	67
0.187	270	10	14	19	24	30	37	57
0.250	360	8	10	14	20	22	27	32

P/A OFFERS A COMPLETE LINE OF PRESS FEEDING
AND COIL & WIRE HANDLING EQUIPMENT

YOU SUPPLY THE PRESS . . . WE’LL SUPPLY THE REST.

PAYOFF REELS

STRAIGHTENERS

SENSORS

FEEDS

OILERS

CUTTERS

TRANSPORTERS

WINDERS

COMPLETE SYSTEMS

Air Feeds



Straighteners



Shears



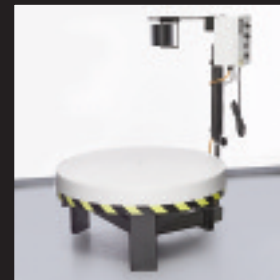
Transporters



Wire Feeds



Coil Handling Equipment



WARRANTY

We warrant our mechanical parts against defects under normal use and service for a period of 1 year after date of shipment. We warrant all components installed, but not manufactured by P/A, for 1 year after date of shipment. Our obligation under this warranty is limited to replacing or repairing (at our option) the defective part without charge, F.O.B. our plant in Bloomfield, Connecticut. The defective part must be forwarded to our plant, freight-prepaid, for our inspection prior to replacement or repair. EXCEPT AS EXPRESSLY PROVIDED HEREIN, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

WARNING !

This equipment offers various means of operating metal forming machines, delivers material or parts to the machine, or removes material, parts, or scrap from the machine. The operator's hands must NOT be in or near the point-of-operation of the machine, or the operating parts of any equipment installed on the machine, or bodily injury could result. The EMPLOYER must post adequate warning signs on the press with proper warnings for his machine and the specific application to which the machine and equipment are being applied. If the EMPLOYER requires help in preparing wording for his application after he has determined the details of that application, he is invited to contact P/A Industries for such help.

The EMPLOYER must meet all OSHA regulations including, but not limited to, 1910.211, 1910.147, 1910.212, 1910.217 and all applicable state laws. All equipment manufactured by P/A Industries is designed to meet the construction standards of OSHA in effect at the time of sale, but the EMPLOYER installs the equipment, and therefore the EMPLOYER is responsible for installation, use, application, training, and maintenance, as well as adequate signs on the press or other machine onto which this equipment will be installed.

All P/A products are sold for use only in accordance with our installation and operating instructions which accompany the products. P/A accepts no responsibility for any use or application not in accordance with our instructions, or for any modification or alteration of the product.

Accident-free press operation will result from a well developed, management-sponsored and enforced press safety program. P/A Industries is not responsible for notifying the user of this equipment of further changes in State or Federal laws, construction standards, or changes in P/A designed and built products.

www.pa.com



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