MARTIN AUTOMATIC
EC PLUS ZERO-SPEED SPLICERS

Martin Engineers Solutions !

Martin model ECP roll-over-roll lap splicers are available for a wide range of web widths, roll diameters and splicing speeds.

In addition to the standard ECP splicers, Martin manufactures other ECP models for special applications.

ECP machines are also available for the in-register splicing of pre-printed webs.

Martin Standard Electric Hoist

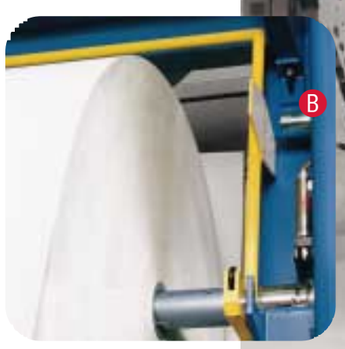
The Martin Standard Electric hoist and ECP design provide direct roll placement of the upper and lower rolls, with unobstructed viewing of shaft connections. Limit switch controls eliminate the chance of raising the hoist hooks into the splice head from the pick-up position.

HOIST OPTIONS

Optional low-headroom electric hoists are available

Hoist Lock-Out Shaft

A) The risk of picking up a shaft while the roll is in the run position is eliminated with the hoist lock-out shaft.



B) The shaft that blocks the hoist cross bar is retracted automatically when the splicer shifts from a running to non-running roll by splice-switch activation. The hoist hooks can then pick the shaft from the splicer.

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MARTIN AUTOMATIC INC EC PLUS ZERO-SPEED SPLICER

Like its forerunner the EC, the Martin EC PLUS is designed to complete its function in the simplest manner possible. Additional operator convenience features and enhanced design / construction make the EC PLUS a popular alternative to the EC.

The EC Plus uses Martin's ultra-simple pneumatic control logic. Years of splicer control development enable Martin Splicers to be fully functional with fewer pneumatic components than are used by competing splicer designs that require additional electronic logic components.

The EC PLUS incorporates direct roll loading of both roll positions. With over 21 standard models, the EC PLUS can accommodate speeds up to 2200 fpm and a large range of roll weights, diameters and web widths.

Martin EC PLUS zero-speed lap splicers are used in processes running papers, films, nonwovens, tag and light board stock.

UNWIND OPTIONS

To run multiple webs simultaneously, two dual unwind options are offered. Full Dual Unwind provides independent tension control of the second web while Basic Dual Unwind provides for operator-adjusted tension regulation of the second web.

OTHER CONSIDERATIONS

Splicing speed is related to roll weight and web tension requirements. The maximum splicing speed figures given are based on the listed roll weights. Please contact Martin Automatic Inc for evaluation of your specific application.

The models represent standard web widths. Martin manufactures splicers to fit the application/per request.

Martin Automatic Model EC Plus zero-speed splicers are built as welded steel fabrications for maximum frame rigidity and operator accessibility and are built for higher speeds and heavier roll weights. EC Plus models rated for splicing speeds above 1000 fpm use a pull-roller accelerator, and those for 1600 fpm and above use core acceleration.

SPLICER MODELS

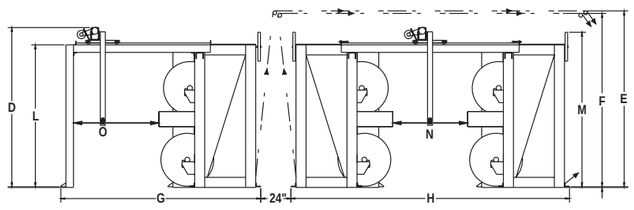
MODEL	Maximum Splicing Speed FPM	MPS	Maximum Web Width IN	MM	Maximum Roll Weight LBS	KG
800	800	4.0	20.0	508	1200	545
826	800	4.0	26.5	673	1500	680
838	800	4.0	38.0	965	2200	998
840	800	4.0	40.0	1016	2200	998
1020	1000	5.0	20.0	508	1200	545
1026	1000	5.0	26.5	673	1500	680
1038	1000	5.0	38.0	965	2200	998
1040	1000	5.0	40.0	1016	2200	998
1320 RA	1300	6.6	20.0	508	1200	545
1326 RA	1300	6.5	26.5	673	1500	680
1338 RA	1300	6.5	38.0	965	2200	998
1340 RA	1300	6.5	40.0	1016	2200	998
1520 RAL	1500	7.5	20.0	508	1200	545
1526 RAL	1500	7.5	26.5	673	1500	680
1538 RAL	1500	7.5	38.0	965	1900	860
1540 RAL	1500	7.5	40.0	1016	1900	860
1620 A	1600	8.0	20.0	508	1200	545
1626 A	1600	8.0	26.5	673	1500	680
1638 A	1600	8.0	38.0	965	2200	998
1640 A	1600	8.0	40.0	1016	2200	998
1820 A	1800	9.0	20.0	508	1200	545
1826 A	1800	9.0	26.5	673	1500	680
1838 A	1800	9.0	38.0	965	2200	998
1840 A	1800	9.0	40.0	1016	2200	998
2038 RAAL	2000	10.0	38.0	965	2200	998
2040 RAAL	2000	10.0	40.0	1016	2200	998
2048 RAAL	2000	10.0	48.0	1219	2600	1180
2238 AE	2200	11.0	38.0	965	3500	1585

EC PLUS SPLICER DIMENSIONS

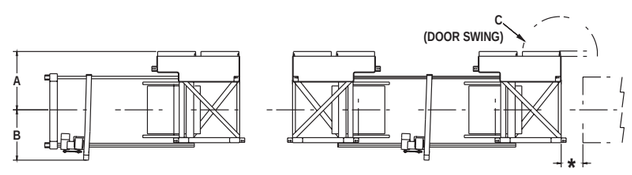
	20 Inch Max. 45" Diam.		Web Width 52" Diam.		26 1/2 Inch Max. 45" Diam.		Web Width 52" Diam.	
A	37	(940)	37	(940)	40	(1016)	40	(1016)
B	26	(660)	26	(660)	30	(762)	30	(762)
C	30	(762)	35	(889)	30	(762)	35	(889)
D	128	(3251)	148	(3759)	2	(3251)	148	(3759)
E	142	(3607)	161	(4089)	4	(3607)	161	(4089)
F	140	(3556)	160	(4064)	40	(3556)	160	(4064)
G	159	(4039)	179	(4547)	59	(4039)	179	(4547)
H	221	(5613)	253	(6426)	221	(5613)	253	(6426)
L	114	(2896)	134	(3404)	14	(2896)	134	(3404)
M	124	(3150)	144	(3658)	24	(3150)	144	(3658)
N	57	(1448)	68	(1727)	57	(1448)	68	(1727)
O	67	(1702)	77	(1956)	67	(1702)	77	(1956)
P	114	(2896)	114	(2896)	27	(3226)	127	(3226)
Q	77	(1955)	77	(1955)	87	(2210)	87	(2210)
R	122	(3099)	142	(3607)	22	(3099)	142	(3607)
S	144	(3658)	176	(4470)	44	(3658)	176	(4470)

	38 Inch Max 45" Diam.		Web Width 52" Diam.		40 Inch Max. 45" Diam.		Web Width 52" Diam.	
A	46	(1168)	46	(1168)	47	(1194)	47	(1194)
B	37	(940)	37	(940)	38	(965)	38	(965)
C	30	(762)	35	(889)	30	(762)	35	(889)
D	128	(3251)	148	(3759)	128	(3251)	148	(3759)
E	142	(3607)	161	(4089)	140	(3607)	161	(4089)
F	140	(3556)	160	(4064)	140	(3556)	160	(4064)
G	159	(4039)	179	(4547)	159	(4039)	179	(4547)
H	221	(5613)	253	(6426)	221	(5613)	253	(6426)
L	114	(2896)	134	(3404)	114	(2896)	134	(3404)
M	124	(3150)	144	(3658)	124	(3150)	144	(3658)
N	57	(1448)	68	(1727)	57	(1448)	68	(1727)
O	67	(1702)	77	(1956)	678	(1702)	77	(1956)
P	50	(3810)	150	(3810)	154	(3912)	154	(3912)
Q	103	(2616)	103	(2616)	104	(2642)	104	(2642)
R	122	(3099)	142	(3607)	122	(3099)	142	(3607)
S	144	(3658)	176	(4470)	144	(3658)	176	(4470)

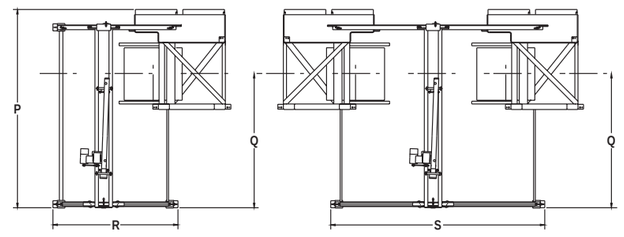
EC PLUS DIMENSIONS
SIDE ELEVATION



PLAN ELEVATION



OPTIONAL AISLE-LOADING HOIST



EC PLUS DIMENSIONS

Dimensions in () are millimeters. All dimensions shown are for preliminary information only. Contact Martin to assist you in determining exact requirements for your application.

Maximum splicing speeds listed are for 40 inch roll diameters. Consult Martin for information concerning larger roll diameters.

All model numbers carrying the suffix "L" will safely support and unwind 52" (54 line to line) diameter rolls. "RA" models are roller accelerated.

45 inch rolls will not run in a standard 44 inch model machine. This requires additional shimming of the 44 inch diameter model, or the upgrade to a 54 inch diameter machine.

* A minimum 24 inches is needed between splicer and first press unit

THE MARTIN ECP ADVANTAGES

Martin Inertia Compensation Flybar

This flybar "inertia compensates" the splicer festoon.

Martin Inertia Compensation provides better tension accuracy during normal running and splice cycles using this simple, entirely mechanical system, which requires no adjustment or maintenance.

Splice Initiation Switch

This pneumatic Splice Initiation Switch is attached to the Tension Control Air Cylinder and activates the splice unit nip rollers when closed.

The simplicity of the Splice Initiation Switch system to activate splices increases the reliability and operational efficiency of Martin's ECP splicers.

Tension Control Air Cylinder

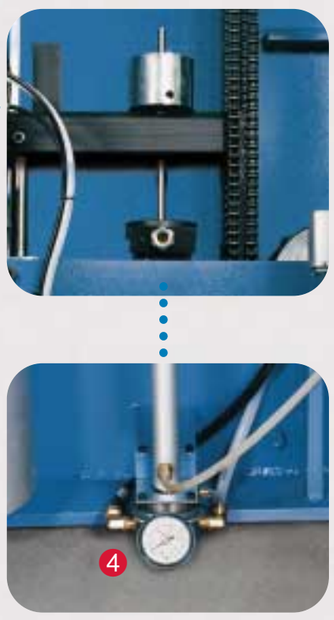
This cylinder, manufactured by Martin, is gimbal-mounted to allow it to self-align. Remote tension adjustment is available as an option.

Exceptionally low cylinder friction and constant air pressure in the Tension Control Air Cylinder during all phases of splicer operation are unique to Martin. These benefits ensure superior tension accuracy in the web leaving the splicer.

Oil Column

The Oil Column is Martin's uniquely simple solution for controlling the unwinding roll. No electronic components are used.

The simplicity of the Oil Column control system increases the reliability and operational efficiency of Martin's ECP splicers.



High Torque Pneumatic Brakes

Martin manufactures its own pneumatic brakes, designed to operate over a wide range of tension.

Martin's design of low maintenance, pneumatic brakes control torque accurately over an unusually wide range. This is aided by Martin's proprietary spiral groove feature, which prevents smooth brake pads sticking to the brake disk surface. The high torque capacity handles all operating conditions.

*ECP with Pull-Roll Acceleration. Brakeside view **

Splicer Control Panel
(adjacent to splice unit)

Conveniently located, the small number of controls attest to the simplicity of the ECP splicer, both to operate and maintain.

Automatic Splicing

Splices on Martin ECP splicers may be initiated manually or automatically.

The Martin ECP splicer Automatic Splicing system uses no electronics, is highly reliable and provides infinite diameter adjustment out to twelve inches

Auto splice is accomplished when the selected roll diameter has been reached. The roll following arm triggers the pneumatic splice signal.

Automatic Roll Coupling & Motorized Roll Sidelay

The brake drive is automatically coupled to the core shaft when the splice preparation vacuum is turned on, using the cam at the end of each splice unit nip roller. Incorporated into the Automatic Coupling system is a safety bar that extends when the brake is coupled and prevents the hoist hooks from reaching the core shaft to lift it out of the splicer.

Automatic Roll Coupling is a convenience feature for the operator and prevents the hoist from reaching a core shaft while it is coupled to its brake, preventing splicer damage.

Each Martin ECP roll position is equipped with motorized roll sidelay.

Conveniently located sidelay switches enable the operator to accurately align webs during splice preparation. Optional remote sidelay control is available for the convenience of press operators when web guides are not used.

Pull Roll Accelerator

Pull-Roll Acceleration reduces the amount of web tension and/or the amount of storage required to splice successfully.

At higher speeds, Pull-Roll Accelerators are a cost-effective way of keeping Martin splicers smaller, allowing them to run lower tensions without complicating splicer operation.

Core Acceleration
(option not shown)

For operating specifications beyond the capacity of the Pull-Roll Accelerator, the ECP uses Core Acceleration.

Core Acceleration provides higher splicing speeds without adding tension to the web or increasing the size of the splicer. This is achieved by driving the new roll through the core.

Vacuum Venturis

These Vacuum Venturis have no moving parts. They are used to provide a vacuum to the splice unit nip rollers.

Highly reliable and requiring only minimum maintenance, Vacuum Venturis are easier to maintain than vacuum pumps - another Martin ECP splicer advantage.

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