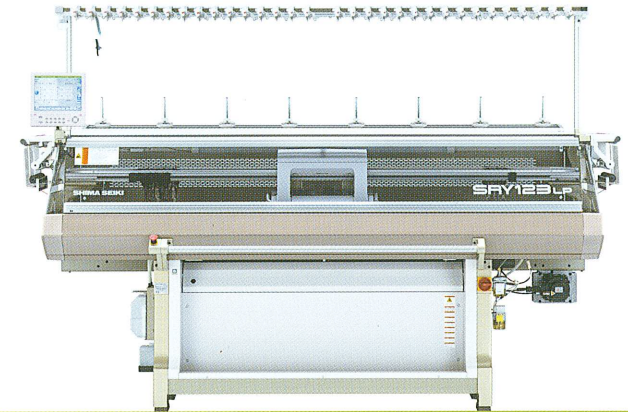


SRY123LP

Computerized Flat Knitting Machine



New Proposals in Textiles Using Two Loop Presser Beds

SHIMA SEIKI's latest SRY[®]123LP is a completely new computerized knitting machine that inherits SHIMA SEIKI's highly advanced mechatronics know-how based on the company's unique experience with four-bed knitting, beginning with SES[®]122RT, and continuing with SWG[®]-FIRST[®] and MACH2[®]X. Two loop presser beds improve on the stitch presser by controlling pressdown of individual loops. This presents unprecedented capability in shaped knitwear, especially with flechage and inlay patterns. New fabrics with woven effects offer great opportunities in expanding into other markets. Specialty yarns such as metallic and monofilament yarns can be knit as well, opening new doors to areas other than fashion. A high level of productivity typical of SHIMA SEIKI is carried over, with a maximum knitting speed of 1.4 meters per second combined with quick carriage returns realized with the proven R2CARRIAGE[®] system. SHIMA SEIKI's original DSCS[®] Digital Stitch Control System, yarn gripper and cutter, and takedown rollers all contribute to high quality and productivity as well.

Loop Presser Beds

Loop presser beds are placed above both front and back needlebeds, and feature the same number of loop pressers as the number of knitting needles. This typically yields loop pressdown capability that outperforms the conventional stitch presser, and even our own spring-loaded full sinker system. Individual loops can be pressed even for rib patterns, and flechage and inlay patterns are especially easy to knit. Inlay fabric is produced by inserting yarn into existing knit fabric in a weave fashion, opening opportunities for expansion into markets for wovens. Inlay also suppresses typical stretch characteristics of knitwear, and since new materials such as metallic and monofilament yarns can be used for inlay structures, new applications in industrial textiles can be anticipated.

R2CARRIAGE[®]

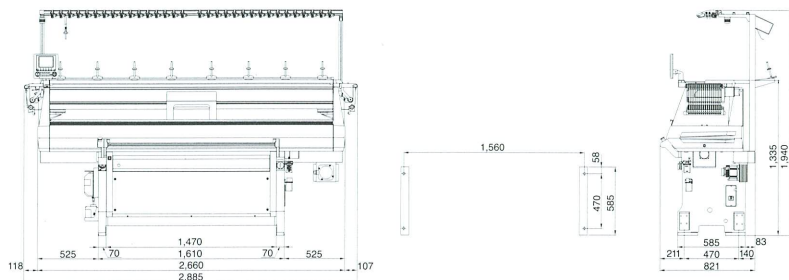
The R2CARRIAGE[®] (R2=Rapid Response) System features an advanced carriage mechanism combined with improved software programming that achieves quicker carriage returns after each course for higher overall productivity.

WIDEGAUGE[®] Knitting

Special knitting needles on SRY[®]123LP realize WideGauge[®] capability whereby a variety of gauges—from finer-gauges using all-needle knitting, to lower-gauges using half-gauge knitting—can be knit on a single machine. This allows the freedom to handle changing seasons and shifting trends without investing in a machine for every gauge or resorting to the complex, time-consuming task of gauge conversion.

DSCS[®]

Considered one of the most significant breakthroughs in modern-day knitting, our patented Digital Stitch Control System (DSCS[®]) is the only proven digital system field-tested and market-proven in the industry for over 30 years. No other manufacturer can claim this kind of experience or level of refinement.

**Average Weight**SRY[®]123LP 854kg (1,879lbs.)

Actual weight is dependent upon gauge and optional equipment.

All dimensions are in millimeters.

SPECIFICATIONS

Type	SRY123LP		
Variation		SV	SC
Gauge		7 · 12 · 14	10
Knitting width	Variable stroke. Max 48" (122cm)		
WideGauge [®]	Wide range of gauge knit on a single machine.	○	—
Knitting speed	Max 1.4m/sec. Knitting speed varies according to gauge and knitting condition. Variably adjustable speed levels. 10 additional programmable speeds.		
Stitch density	120 levels, electronically controlled.		
Racking	Motor-driven racking mechanism. Max 2-inch racking. 1/2 and 1/4 pitch also available from any position.		
Knitting system	Triple KNITRAN [®] system. Single R2CARRIAGE [®] system.		
Transfer	Simultaneous transfer, front or back, independent of carriage direction. Split stitch possible without exchanging yarn carriers.		
Sinker system	Fixed sinker system.		
Loop presser	Individual selection possible. Positioned on upper front and rear loop presser bed.		
Needle hook conversion	Conversion between LL-size and MM-size possible without exchanging cams.	○	—
Needle selection	Full jacquard selection via special solenoid actuators.		
Setup device	Takedown comb with special setup needles.		
Takedown device	Main/sub rollers. Changeable 99 levels, automatically adjustable on each level. Automatic opening and closing.		
Yarn cutter	Single-unit system includes 1 yarn cutter and 2 yarn grippers. Both sides standard. Lint remover.		
DSCS [®]	Consistent loop length by digital control method. Left side standard. 8 lightweight, compact encoders		
Yarn feed roller	16 positions on each side.		
Side tensions	16 on each side. Brake disk with multi-step adjustable dials. Both sides standard.		
Yarn carriers	2 normal carriers + 21 intarsia carriers. (30 max. intarsia carriers) ¹ .		
Top tensions	32 tension devices.		
Stop motion	One-touch easy threading. Large knots cause machine stop. Small knots cause 0-9 courses at specified knot detection speed, then automatically resume at set speed.		
Drive system	Yarn break, large knot, wraparound check, shock detection, piece count, over-torque, program error, etc.		
Safety devices	Belt drive. AC servo motor. No lubrication necessary.		
Operation lamp	Full safety cover for noise-suppression and dust-proofing with stop motion sensor and interlock mechanism. Emergency stop switch. Emergency power off device. Ultra-low speed "crawl" setting.		
	CE Mark. Operation lamps (see below).		
	Green/normal operation. Flashing green/normal stop. Flashing amber/abnormal stop.		
CONTROLLER			
Data input	USB memory interface. Ethernet 10/100 BASE-T network interface.		
Pattern memory	25,165,824 bits (1,024 wales x 8,192 addresses)		
Control unit	Built-in controller. Stored program for flat knitting machine.		
Control display	10.4-inch color LCD touch panel (800 x 600 pixels). Editing possible via display panel operation. Help/Message function (for cleaning and lubrication). Available in English, French, Italian, Spanish, Portuguese, Turkish, Arabic, Russian, Chinese, Korean and Japanese.		
Back-up power	Power supply for resuming knitting after power failure		
Power	Single phase AC220V/230V (200V-250V)		
	2.2kVA		

OPTION: (1) Additional intarsia carriers.

SAFETY NOTICE

In order to ensure safe operation of the equipment, please review all operation manuals carefully before use.

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Fully Fashioned High-Speed Knitting Machine

your choice
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