

New
SES122RT/123RT



Computerized Flat Knitting Machine with Rib Transfer Capability



SHIMA SEIKI

New SESI22RT/123RT

ENHANCED PATTERN VARIETY WITH OUR INNOVATIVE FOUR-BED SYSTEM.

The world's first computerized application of a four-bed flat knitting machine, the SESI22RT has revolutionized flatbed knitting by offering the capacity to introduce new and unique patterns to market. Multiple transfer capability with the four-bed system enhances shaping and integral knitting through the use of inside narrowing of rib stitches, tubular stitches, Milano rib stitches and cardigan rib stitches, which had been considered impossible prior to the RT. These capabilities allow the exploration of new dimensions in knitwear. Tailored jackets, coats, suits, skirts, pants and dresses offer the sophisticated, high-quality look of woven textiles while maintaining the softness and stretchable characteristics that only knitwear can provide. And now, the newly revamped NewSESI22RT and NewSESI23RT feature increased memory capacity, a user-friendly control panel with improved interface, and even higher productivity.



Knitting
Width



122RT 123RT
Knitran® Systems



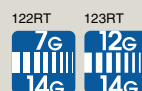
Ultra-
Lightweight
Carriage



Belt-Drive
Operation



Tough
Needle Bed



122RT 123RT
Gauge Range



4-Bed
Configuration



Solenoid
Needle
Selection



Stitch
Presser

All-New Controller and LCD Monitor

The NewSES machine line-up features a brand-new computer-control unit with a significant increase in memory capacity. The NewSES controller features 12,582,912 bits or 1,024 wales x 4,096 addresses worth of memory. In addition to floppy disks, the new controller can accept USB memory input, further increasing data capacity for knitting complex knits. Also standard is a

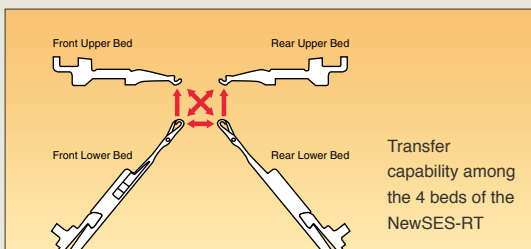


network interface which opens up new possibilities in file sharing and production management using Shima Network Solutions. A backup power supply is also standard, allowing work to resume after power failures. The new control panel features a simple monochromatic LCD monitor with an

improved graphic interface for intuitive operation. The eye-level display offers improved ergonomics, while menu-interactive function buttons offer easy input and editing. The multi-lingual menu is available in 10 languages

The unique transfer capabilities of a four-bed system

The innovative four-needlebed configuration of the NewSES122RT and NewSES123RT combines two additional beds to the conventional V-bed design. This arrangement combines conventional transfer between the lower front and back beds along with transfer with each of the additional



upper beds, resulting in a unique setup which allows tremendous capabilities never before possible in flatbed knitting. Moreover, productivity is not hampered in the slightest degree since these combined transfers can be made without even stopping the carriage.

The world's first digital stitch device

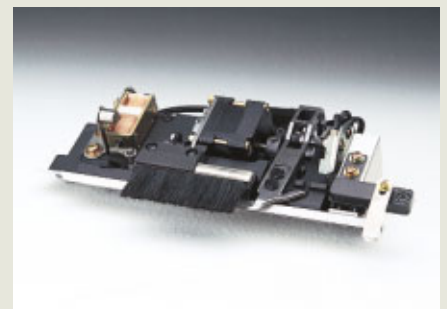
Considered one of the most significant breakthroughs in flatbed knitting technology, the patented Digital Stitch Control System (DSCS®), the first of its kind, treats each stitch as digital data. Once a specific loop length is programmed, it continuously adjusts yarn feed and tension to yield consistency in every loop of each



course, with tolerance to within a remarkable $\pm 1\%$. The result is quality control capability that is virtually impossible with conventional analog systems. DSCS® is a crucial factor in full-fashioning and integral garment production, as well as for maintaining consistency among different batches and repeat orders.

Increased opportunities with stitch presser technology

Shima Seiki's patented stitch presser unit features a special motor drive system which allows the pressers to carry out individual on/off adjustments in both knit and transfer, in either direction. In addition to providing better control for knockovers, these pressers gently hold down the fabric for improved consistency and control, contributing significantly to shaping capability. Moreover, stitch presser technology opens up opportunities for increased variety in knit patterns and flexibility in production when careful control of garment texture is a must.



Yarn Gripper and Cutter



Digital Knitting



Setup Device



Takedown Rollers



Dust Cleaner



Schedule Knit



Back-Lit LCD Panel



Network Interface



Pattern Memory

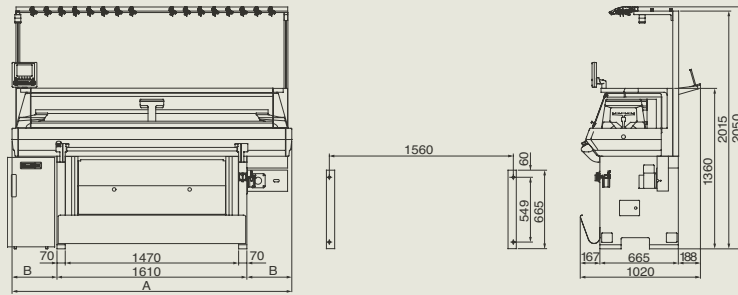


USB Memory Interface



Back-up Power

DIMENSIONS



Average Weight

NewSES122RT 1,080 (2,376 lbs)

NewSES123RT 1,110 (2,442 lbs)

Actual weight is dependent upon gauge and optional equipment.

	A	B
NewSES122RT	2,370	380
NewSES123RT	2,720	555

All dimensions are in millimeters.

SPECIFICATIONS

Type	NewSES122RT	NewSES123RT
Knitting width	Variable stroke. Max 48" (122cm)	
Gauge	7 · 8 · 10 · 12 · 14	12 · 14
Knitting speed	Max 1.2m/sec. Knitting speed varies according to gauge and knitting condition. Variably adjustable speed levels. 10 additional programmable speeds.	
Stitch density	60 levels, electronically controlled.	
Racking	Lower bed: Motor-driven racking mechanism. Max 2-inch racking. 1/2 and 1/4 pitch also available from any position. Upper bed: Motor-driven racking mechanism. Max 2-inch racking.	
Knitting system	Double KNITRAN® system. Single carriage.	Triple KNITRAN® system. Single carriage.
Transfer	Lower bed: Simultaneous transfer, front or back, independent of carriage direction. Split stitch. Upper bed: Lower needle bed to either upper bed through trailing system. Upper transfer bed to opposite lower bed through leading system.	
Stitch presser	Special motor-driven system allows individual adjustment for on/off in knit and transfer.	
Needle selection	Full jacquard selection via special solenoid actuators.	
Setup device	Takedown comb with special setup needles.	
Takedown device	Main/sub rollers. Changeable 31 levels, automatically adjustable on each level. Automatic opening and closing.	
Yarn cutter	Single-unit system includes 1 yarn cutter and 2 yarn grippers. Left side only. ¹	
DSCS®	Consistent loop length by digital control method. Left side standard. Left side yarn feed roller standard. ² Yarn feed: 8 positions.	
Side tension	8 on each side ³	12 on each side
Yarn carriers ⁴	9 carriers	12 carriers
Top tensions	16 tension devices ³	24 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.	
Cleaner	Belt drive. AC servo motor. No lubrication necessary.	
Safety devices ⁵	Special blower operated cleaner.	
Operation lamp	Full safety cover for noise-suppression and dust-proofing with stop motion sensor and interlock mechanism. Stop button. Power supply disconnecting device. Ultra-low speed "crawl" setting. Indicator lamps (see below).	
	Green/normal operation. Flashing green/normal stop. Flashing amber/abnormal stop.	

CONTROLLER

Data input	3.5" floppy disk. USB memory interface. 10/100 BASE-T network.	
Pattern memory	12,582,912 bits (1,024 wales x 4,096 addresses)	
Control system	Stored program for flat knitting machine.	
Control display	Monochrome LCD panel. Editing possible via display panel operation. Available in English, French, Italian, Spanish, Portuguese, German, Turkish, Chinese, Korean and Japanese.	
Back-up power	Power supply for resuming knitting after power failure.	
Power	3 phase AC200V±10% 2.0KVA	2.2KVA
	2.0KVA	

OPTION: (1) Right side yarn cutter. (2) Right side yarn feed roller. (3) Additional tension devices (for a total of 24 top tensions and 12 side tensions on each side). NewSES122RT only.
(4) Intarsia device. (5) CE Mark.



SAFETY NOTICE

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

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Shima Seiki maintains a policy of continuous improvement for its products, and therefore specifications and appearances are subject to change without notice.
Please contact your nearest authorized sales representative for the latest information.

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