

New SES122-S/123-S/124-S



Computerized Flat Knitting Machine with Full-Sinker System

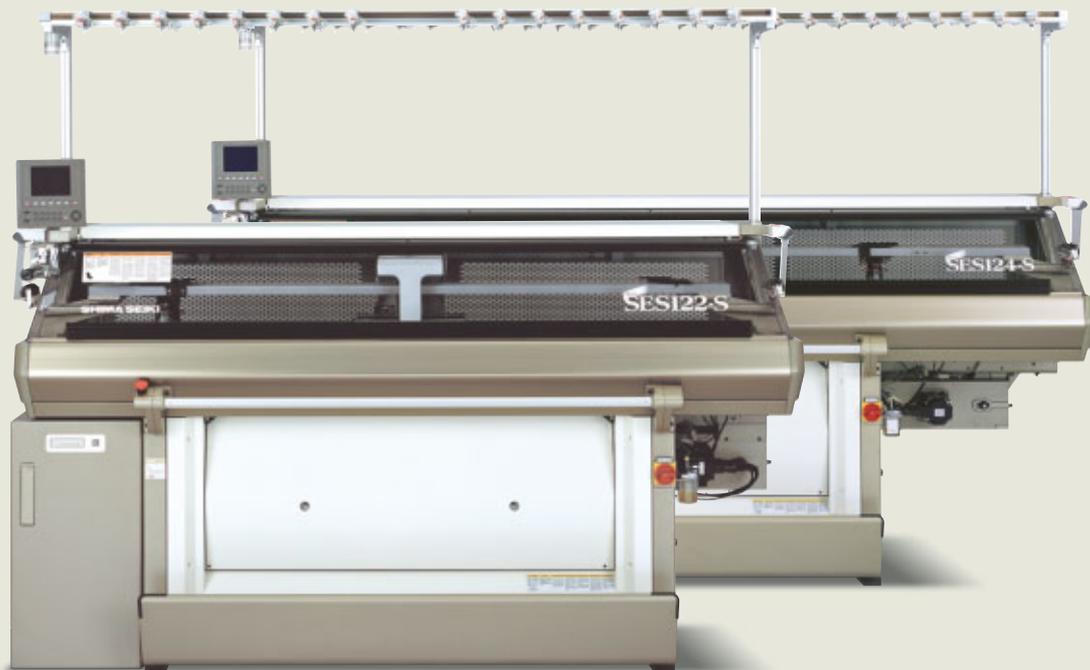


SHIMA SEIKI

New SES122-S/123-S/124-S

THE IDEAL SINKER SYSTEM: VERSATILITY WITH GENTLE YARN HANDLING.

Our compact, space-saving NewSES122-S double-system, NewSES123-S triple-system, and NewSES124-S four-system machines feature our original moveable full sinker system. This ideal sinker system not only offers tremendous variation in multicolored dimensional patterns, but does so with the gentle touch that only a spring-type system can offer. And with a useful gauge range from E6 through E16, these new S-type machines offer even greater production possibilities. This versatility is further enhanced with the latest in Shimatronic® computerized knitting technology, making these machines three of the most innovative products in the industry with their combined functionality, productivity and efficiency. And like all revamped NewSES machines, the new S-type machines feature increased memory capacity, a user-friendly control panel with improved interface, and even higher productivity.



Knitting
Width



Knitran® Systems



Ultra-
Lightweight
Carriage



Tandem
Operation



Belt-Drive
Operation



Tough
Needle Bed



Gauge Range



Gauge
Conversion



Solenoid
Needle
Selection



Stitch
Presser



Full-Time
Sinker

All- new controller and LCD monitor

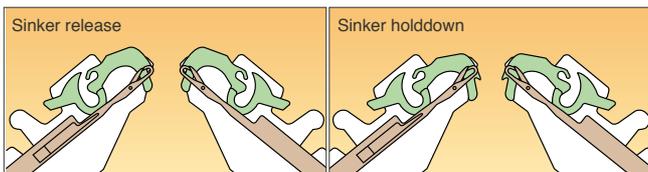
The NewSES S-type machines feature a brand-new computer-control unit with a significant increase in memory capacity. The NewSES controller boasts 50% more capacity as compared with the previous SES line, at 12,582,912 bits or 1,024 wales x 4,096 addresses. In addition to floppy disks, the new controller 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 filesharing 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 menu also features multi-lingual capability, available in 10 languages.

The Shima Seiki spring-type moveable full sinker system

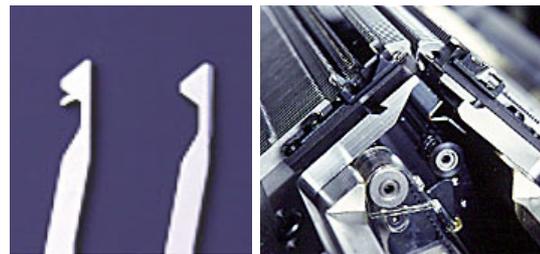
All S-type machines feature yet another breakthrough in Shima Seiki flatbed knitting technology. Based directly on the proven sinker configuration found in our glove knitting machines, the patented spring-type moveable full sinker system is the only application of this type in flatbed knitting machines. Unlike conventional forced-operation type sinkers which subject fabrics to unnecessary stress and cause compressed loops and even yarn breakage, the spring-type mechanism provides gentle holddown movement. Consequently, significant improvements in quality and texture for complicated three-dimensional fabrics are achieved, for such patterns as horizontal cable, bubble stitch and held stitches for a virtually unlimited number of courses. And with the combined use of our stitch presser, pattern vari-



ety previously unimaginable with conventional sinkers can now be had with ease. The end result is not only a great improvement in knit production, but a considerably greater potential for the exploration of new designs as well.

A smooth and reliable takedown system

Otherwise known as the takedown comb, Shima Seiki's patented setup device employs a row of special setup needles which provide even takedown for consistent fabric quality. These unique needles furthermore feature a special release mechanism which offers complete, reliable, snag-free fabric release. In addition, our takedown rollers provide smooth and even takedown with optimum control. These quality control characteristics of the various takedown mechanisms make essential contributions to the production of fully fashioned and integral garments.



The world's first digital stitch device

Considered one of the most significant breakthroughs in flatbed knitting technology, our 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.



Yarn Gripper/Cutter

option



Double Racking



Digital Knitting



Setup Device



Takedown Rollers



Dust Cleaner



Schedule Knit



Back-Lit LCD Panel



Network Interface



Pattern Memory

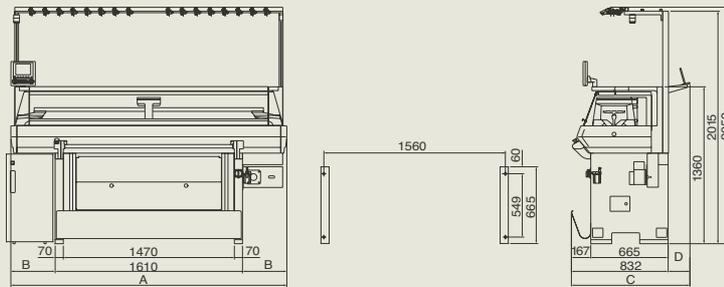


USB Memory Interface



Back-up Power

DIMENSIONS



Average Weight

NewSES122-S	1,060kg (2,332 lb.)
NewSES123-S	1,100kg (2,420 lb.)
NewSES124-S	1,260kg (2,772 lb.)

Actual weight is dependent upon gauge and optional equipment.

	A	B	C	D
NewSES122-S	2,370	380	1,020	188
NewSES123-S	2,720	555	1,020	188
NewSES124-S	3,090	740	—	—

All dimensions are in millimeters.

SPECIFICATIONS

Type	NewSES122-S	NewSES123-S	NewSES124-S
Knitting width	Variable stroke. Max 48" (122cm)		
Tandem width	—		16" (41cm) × 2
Gauge	6 · 7 · 8 · 10 · 12 · 14 · 16		6 · 7 · 8 · 10 · 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	Motor-driven racking mechanism. Max 2-inch racking ¹ . 1/2 and 1/4 pitch also available from any position.		
Knitting system	Double KNITRAN [®] system. Single carriage.	Triple KNITRAN [®] system. Single carriage.	Double KNITRAN [®] system. Twin carriage.
Transfer	Simultaneous transfer, front or back, independent of carriage direction. Split stitch.		
Stitch presser	Special motor-driven system allows individual adjustment for on/off in knit and transfer.		
Sinker system	Spring-type moveable full-sinker system.		
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.		Both sides
	Left side only ²		
DSCS [®]	Consistent loop length by digital control method. Left side standard. Left side yarn feed roller standard. ³ Yarn feed: 8 positions.		
Side tension	8 on each side ⁴	12 on each side	
Yarn carriers ⁵	9 carriers	12 carriers	
Top tensions	16 tension devices ⁴	24 tension devices	
	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.		
Stop motion	Yarn break, large knot, wraparound check, shock detection, piece count, over-torque, program error, etc.		
Drive system	Belt drive. AC servo motor. No lubrication necessary.		
Cleaner	Special blower operated cleaner.		
Safety devices ⁶	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).		
Operation lamp	Green/normal operation. Flashing green/normal stop. Flashing amber/abnormal stop.		

CONTROLLER

Data input	3.5" floppy disk. USB memory interface. Ethernet 10/100 BASE-T network.		
Pattern memory	12,582,912 bits (1,024 wales × 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	3.0KVA

OPTION : (1) Double racking device (Max 4-inch racking). (2) Right side yarn cutter (NewSES122-S/NewSES123-S only). (3) Right side yarn feed roller.
 (4) Additional tension devices (for a total of 24 top tensions and 12 side tensions on each side). NewSES122-S Only. (5) Intarsia device. (6) CE Mark.



SAFETY NOTICE

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

Shimatronic, Knitran and DSCS are registered trademarks of Shima Seiki Mfg., Ltd.
 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.

SHIMA SEIKI
 SHIMA SEIKI MFG., LTD.
 85 Sakata Wakayama Japan
 TEL+81-73-474-8210 FAX+81-73-474-8270

SHIMA SEIKI EUROPE, LTD.
 Sills Road, Willow Farm Business Park,
 Castle Donnington, Derbyshire DE74 2US U.K.
 TEL 01332-814770 FAX 01332-850272

SHIMA SEIKI U.S.A., INC.
 22 Abeel Road Monroe Twp., New Jersey 08831, U.S.A.
 TEL 609-655-4788 FAX 609-655-8463

SHIMA SEIKI MFG., LTD., TAIPEI BRANCH
 1F, 30, Lane 583, Ruey Kuang Rd., Neihu, Taipei 114, TAIWAN R.O.C.
 TEL 886-2-8752-3388 FAX 886-2-8797-5522

URL <http://www.shimaseiki.co.jp> Email info@shimaseiki.co.jp