

New
SES234FF/234-S/254-S



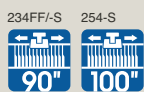
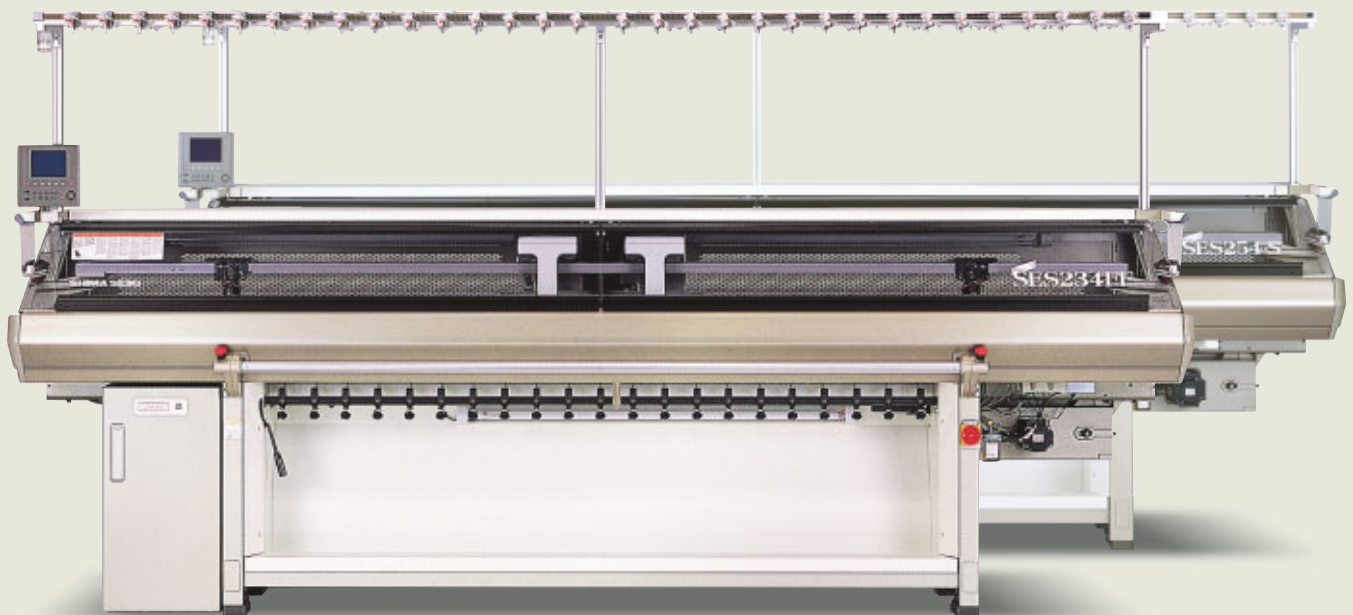
Computerized Flat Knitting Machine with Long-Bed Knitting Capability



New SES234FF/234-S/254-S

FLEXIBLE SOLUTIONS WITH OUR LONG-BED FOUR-SYSTEM MACHINES.

The NewSES234FF, NewSES234-S and NewSES254-S, each featuring four Knitran® cam systems, are the ideal machines for flexible production requirements. The NewSES234 models feature a 90-inch (229-centimeter) knitting width, while the extra-long NewSES254-S boasts a knitting width of 100 inches (254 centimeters). In addition to knitting full-width panels, twin-carriage tandem operation allows flexible production. With the optional DSCS® Digital Stitch Control System, even higher quality production and consistency are assured as well. Full sinker systems on S-type machines offer substantial pattern variations for supporting constantly changing fashion trends. Furthermore, the newly revamped NewSES line features increased memory capacity, a user-friendly control panel with improved interface, and even higher productivity across the board.



Knitting Width



Knitran®
Systems



Ultra-
Lightweight
Carriage



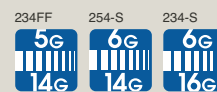
Tandem
Operation



Belt-Drive
Operation



Tough
Needle Bed



Gauge Range



Gauge
Conversion



Solenoid
Needle
Selection



Compound
Needles

All-new controller and LCD monitor

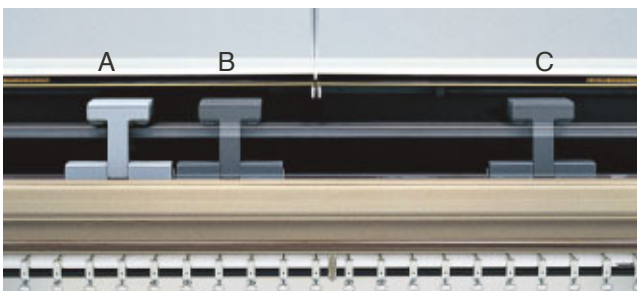
The NewSES machine line-up features a brand-new computer-control unit with a significant increase in memory capacity. The NewSES controller boasts 50% more capacity as compared with the previous SES line, at 12,582,912 bits or 1,024 wales x 4,096 addresses. In addition to floppy disks, the new controller 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.



Tandem capability for 4-system or 2x2-system operation

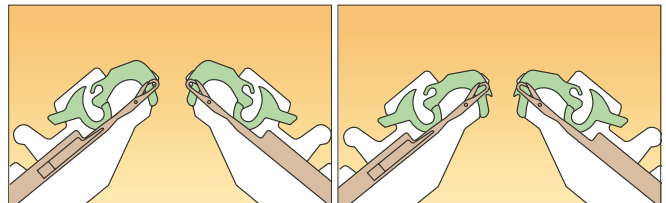
Our four-system machines feature twin carriages, each with two Knitran® systems. While both carriages can be used together along the entire width of the needle bed for knitting wide panels in four-system mode, the carriages can be separated into two double-Knitran® cam systems for knitting two identical pieces simultaneously. Tandem operation capability thereby allows the machine to perform two separate roles, significantly increasing the versatility and productivity of the machine.



A&B: 4-system use A&C: 2x2-system tandem use

The Shima Seiki spring-type moveable full sinker system

The NewSES234-S and NewSES254-S 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 variety 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.



Sinker release

Sinker holddown

The world's first digital stitch device (optional)

All long-bed machines can be optionally equipped with Shima Seiki's proven Digital Stitch Control System (DSCS®). Considered one of the most significant breakthroughs in flatbed knitting technology, our patented DSCS® continuously adjusts yarn feed and tension to yield loop consistency with tolerance to within a remarkable $\pm 1\%$. The result is quality control capability that is virtually impossible with conventional analog systems. In addition to being an essential element in quality-controlled shaping and integral garment production, DSCS® allows consistency among different batches and repeat orders as well.



Stitch Presser

S-type



Full-Time Sinker

option



Digital Knitting



Takedown Rollers



Dust Cleaner



Schedule Knit



Back-Lit LCD Panel



Network Interface



Pattern Memory

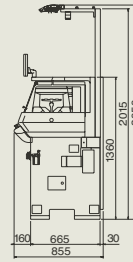
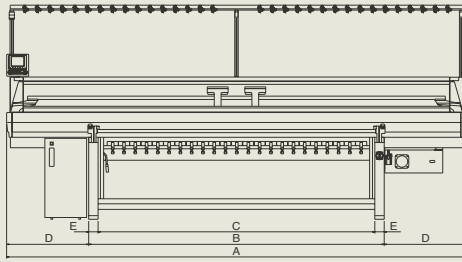


USB Memory Interface



Back-up Power

DIMENSIONS



Average Weight

NewSES234FF	1,490kg (3,278 lb.)
NewSES234-S	1,510kg (3,322 lb.)
NewSES254-S	1,720kg (3,784 lb.)

Actual weight is dependent upon gauge and optional equipment.

	A	B	C	D	E	F
NewSES234FF 234-S	3,960	2,540	2,400	710	70	2,490
NewSES254-S	4,400	2,830	2,650	785	90	2,760

All dimensions are in millimeters.

SPECIFICATIONS

* By special order only.

Type	NewSES234FF	NewSES234-S	NewSES254-S
Knitting width	Variable stroke. Max 90° (229cm)		Variable stroke. Max 100° (254cm)
Tandem width	37°(94cm) x 2		42° (107cm) x 2
Gauge	5°· 6°· 7°· 8°· 10°· 12°· 14°*	6 · 7 · 8 · 10 · 12 · 14 · 16	6 · 7 · 8 · 10 · 12 · 14
Knitting speed	Max 1.2m/sec (NewSES234FF 5G : Max 1.1m/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 (NewSES234FF 5G : Max 10-pitch racking). 1/2 and 1/4 pitch also available from any position.		
Knitting system	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	Moveable sinker (5G only)	Spring-type moveable full-sinker system.	
Needle selection	Full jacquard selection via special solenoid actuators.		
Takedown device	Main roller : Changeable 31 levels, automatically adjustable on each level. Sub roller : Changeable 31 levels, automatically adjustable on each level. Automatic opening and closing.		
DSCS®	Option¹: Consistent loop length by digital control method. Left side. Left side yarn feed roller². Yarn feed : 8 positions.		
Side tension	14 on each side (5G : 16 on each side)	16 on each side	
Yarn carriers	12 carriers	16 carriers	
Top tensions	28 tension devices (5G : 32 tension devices)	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.		
Cleaner	Belt drive. AC servo motor. No lubrication necessary.		
Safety devices³	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%		
	2.7KVA	3.2KVA	

OPTION : (1) DSCS®. (2) Right side yarn feed roller. (3) CE Mark.



SAFETY NOTICE

In order to ensure safe operation of the equipment, please read 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.



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