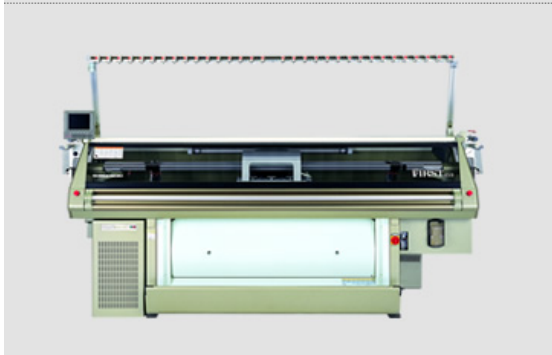


SWG-FIRST

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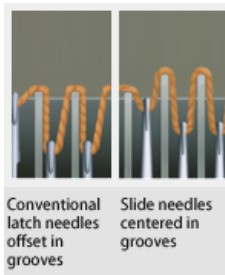
Computerized Flat Knitting Machine with WHOLEGARMENT Capability



## A Collective of Shima Seiki Know-How and Experience

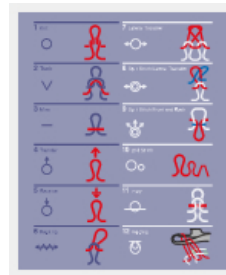
A synthesis of all of Shima Seiki's experience and know-how, the SWG-FIRST series computerized flatbed knitting machines offer tremendous capability previously unimagined in the world of knitting. Everything from full-fashioning, rib shaping to 3-dimensional shaping, as well as WHOLEGARMENT production can be performed. This all-purpose capability is made possible through the development of our revolutionary new SlideNeedle and offers remarkable improvements in quality, variety and productivity.

SlideNeedle and Contra-Sinker



SHIMA SEIKI has reinvented the most basic element of knitting—the needle. The new SlideNeedle is the result of a thorough reevaluation of the 150-year old design of the conventional latch needle, and offers knitting possibilities never imagined before. A flexible two-piece slider mechanism splits and extends beyond the needle hook for increased potential especially in complex transfers. Using the slider mechanism for transfer effectively eliminates the transfer clip, allowing the needle to be mounted in the center of the needle groove. The SlideNeedle thereby achieves perfectly symmetrical loop formation for knitting the highest possible quality fabrics. In addition, the new Contra-Sinker actively offsets, and consequently reduces, the total movement of the SlideNeedle with a counter-movement. The shallower angle of approach distributes yarn tension more evenly, reducing scuffing and thereby preventing yarn breaks. Together, the SlideNeedle and Contra-Sinker achieve better quality while using a wider variety

12-Way Technique



FIRST's SlideNeedle doubles the number of available knitting techniques from six to twelve variations. With both front and back beds in operation, this effectively offers 144 potential combinations of techniques as compared to 36 combinations possible with 6-way technique. As a result, all-new structures and sophisticated patterns never before possible raise knitwear to a higher level.

menu

of yarns, not to mention significant improvements in productivity.

○ Gaugeless Knitting



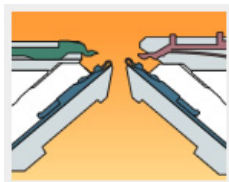
The new SlideNeedle does away with the concept of the fixed "gauge" by permitting an assortment of gauge sizes to be knit in a single garment. This allows the freedom to handle changing seasons and shifting trends without investing in a machine for every gauge or resorting to the complex, time-consuming task of gauge conversion. Product variety is also vastly increased by achieving interesting textures and sophisticated visual patterning effects. Unique Split Stitch techniques made possible with the SlideNeedle also allow smoother gauge-to-gauge transitions.

○ Pulldown Device



FIRST's new computer-controlled takedown system consists of front and rear panels over which tiny pins are distributed for separately controlling takedown tension for the front and back when knitting WHOLEGARMENT. In addition, each panel is separated into 1.5-inch sections which can be individually controlled for specific tension control across the entire width of the garment. This precise control over takedown tension permits three-dimensional shaping of WHOLEGARMENT items-for example, by allowing shoulder lines for set-in sleeves to be positioned over the shoulder toward the back-resulting in a more dimensionally accurate garment which conforms better to the shape of the torso.

○ Loop Presser Bed and Transfer Jack Bed



FIRST features two extra beds mounted above the conventional V-shaped needle beds. The loop presser bed is located above the rear needle bed, and features an improved presser system which works on individual loops for greater control of fabric holddown. The transfer jack bed is mounted above the front needle bed. From there, transfer can be made to and from both front and rear needle beds. The transfer jack bed can also be racked for a maximum of 1.5 inches to each side (3 inches total), and on some models can be split for individual left-right racking control.

For questions, purchasing advice or catalogue requests concerning SWG-FIRST, please inquire [HERE](#).

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**Products**

Knitting Machines

Computerized Flat Knitting Machines  
MACH29C

WHOLEGARMENT Knitting Machines  
MACH2V

Glove/Sock Knitting Machines  
NewSFG  
SEB

Apparel Design Systems

SDS-ONE APEX  
SDS-ONE

**MACH201G**

N.SIG  
SIG123  
N.SSG  
SSG Series Longbed  
NewSES122CS/124CS/  
234CS  
LAPIS  
SFF Series

**MACH2A**

MACH2S  
SWG041N/061N/091N  
SWG-FIRST  
SWG-X  
NewSWG-V  
NewSES-S·WG  
NewSES-C·WG

**SPG**

SPG  
SPF-W

**Networking System**

Shima Network Solutions

Out of Production

**CAD/CAM Systems**

P-CAM100/160/200  
P-CAM161/162/181/182/  
SDS-ONE(P)



English

中文

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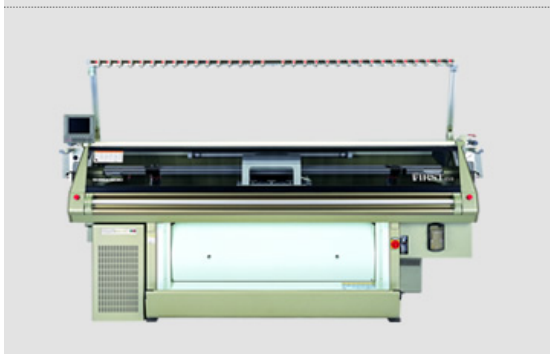
Inquiry

# SWG-FIRST

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Computerized Flat Knitting Machine with WHOLEGARMENT Capability

## SWG FIRST



### A Collective of Shima Seiki Know-How and Experience

A synthesis of all of Shima Seiki's experience and know-how, the SWG-FIRST series computerized flatbed knitting machines offer tremendous capability previously unimagined in the world of knitting. Even ranging from full-fashioning, rib shaping to 3-dimensional shaping, as well as WHOLEGARMENT production can be performed. This all-purpose capability is made possible through the development of our revolutionary new SlideNeedle and offers remarkable improvements in quality, variety and productivity.

Menu

#### SPECIFICATIONS

Model	F123	F124	F153		F183	F184
Type	S12	S12	S14	S18	M12	L12
Needle hook size	Standard				Medium	Large
Needle pitch (mm)	2.1		1.8	1.4	2.1	
Knitting width	Variable stroke. Max 50" (126cm)		Variable stroke. Max 62" (156cm)		Variable stroke. Max 72" (180cm)	
Knitting speed	Max 1.3m/sec. Knitting speed varies according to various knitting conditions. Variably adjustable speed levels. 16 additional programmable speeds.					
Stitch density	70 levels, electronically controlled.					
Second Stitch	Motor-controlled second stitch cam allows individual adjustment of loose/tight stitches for shaping.					
Racking	Motor-driven. Max 1.5-inch racking in each direction (3 inches total) for front and rear needle beds, transfer jack bed and loop presser bed. Racking of rear needle bed and loop presser bed are performed as one. Transfer jack bed is split for individual racking control.					
Knitting system	Ultra compact KNITRAN system + holding cam. Single carriage.					
	3-system	4-system	3-system		4-system	
Transfer	Front-back: Simultaneous transfer, independent of carriage direction. Split stitch. Horizontal split stitch. Upper-lower: Lower front and rear (needle beds) <--> upper front (transfer jack bed).					

Sinker system	Fixed Sinker	Contra-Sinker
Stitch presser	Special motor-driven system allows individual adjustment for on/off in knit and transfer.	
Loop presser	Individual selection possible. Positioned on upper rear loop presser bed.	
Needle selection	Electromagnetic direct selection.	
Setup device	Takedown comb with special setup needles. Full-width operation. Rear comb (optional(1)): Adjustable working width.	
Takedown device	Main/sub rollers. Changeable 99 levels, automatically adjustable on each level. Automatic opening and closing (F123/F124 only).	
Pulldown device	Special pulldown mechanism with independent operation of front and rear. Adjustable working width. Adjustable tension. Optional on F123/F124 (2).	
Exit rollers(4)	Special rollers for fabric pulldown and release. Consists of two rollers. Optional on F123/F124 (3).	
Yarn cutter	Single-unit system includes 1 yarn cutter and 2 yarn grippers. Both sides standard.	
Air Splicer	Instant color changes using pressurized air. 8 colors per unit. Optional (5).	
DSCS	Consistent loop length by digital control method. Left side standard (6). Left side double yarn feed roller standard (7). Yarn feed positions: 8 (8) (F123/F124/F153) or (10) (F183/F184).	
i-DSCS	—	DSCS with Intelligence. Actively controls yarn feed in both feed and retrieval directions. 16 positions. Optional (9)
Side tensions	12 on each side (8)	16 on each side
Yarn stopper	Positions on left side (10): 8 (8)	Positions on left side (10): 10
Yarn carriers (11)	12 carriers (8)	16 carriers
Yarn carrier kickback (12)	Kickback device using servo control. 2 tracks on each side (4 tracks total) as standard configuration.	
Top tensions	24 tension devices (8)	32 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. Automatic operation available upon knitting a set number of pieces. Manual operation also available.	
Safety devices (13)	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.	

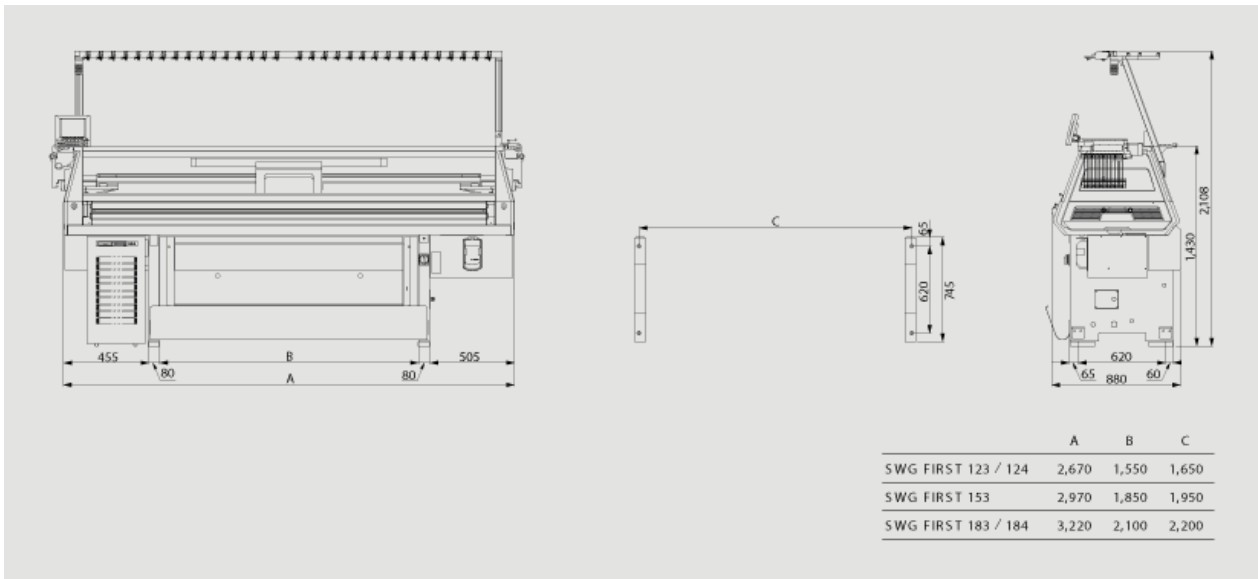
**CONTROLLER**

Data input (14)	3.5" MO disk. 3.5" floppy disk.
Pattern memory	25,165,824 bits (1,024 wales x 8,192 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, German, Turkish, Chinese and Japanese.
Power	3 phase AC200V+/-10% 3.0KVA

- OPTIONS:
- (1) Rear comb for setup device.
  - (2) Pulldown device (F123/F124).
  - (3) Exit rollers (F123/F124).
  - (4) Rubber strips for exit rollers.
  - (5) Air Splicer (F153S14/F183/F184 only).
  - (6) Right side DSCS.
  - (7) Right side yarn feed roller.
  - (8) Upgrade for yarn feed positions, side tensions, yarn stopper positions, yarn carriers and top tension devices (F123/F124/F153S only).
  - (9) i-DSCS (F153/F183/F184 only).
  - (10) Right side yarn stopper.
  - (11) Intarsia option.
  - (12) Additional yarn carrier kickback device (2 additional tracks on each side for 8 tracks total).

- (13) CE Mark.
- (14) Network interface.

**DIMENSIONS** All dimensions are in millimeters.



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**Products**

**Knitting Machines**

- Computerized Flat Knitting Machines
- MACH2SIG
- N.SIG
- SIG123
- N.SSG
- SSG Series Longbed
- NewSES122CS/124CS/234CS
- LAPIS
- SFF Series

- WHOLEGARMENT Knitting Machines
- MACH2X
- MACH2S
- SWG041N/061N/091N
- SWG-FIRST
- SWG-X
- NewSWG-V
- NewSES-S·WG
- NewSES-C·WG

**Glove/Sock Knitting Machines**

- NewSFG
- SFG
- SPG
- SPF-W

**Networking System**

- Shima Network Solutions
- Out of Production

**Apparel Design Systems**

- SDS-ONE APEX
- SDS-ONE

**CAD/CAM Systems**

- P-CAM100/160/200
- P-CAM161/162/181/182/183
- SDS-ONE(P)