

SPL122GS



Flat Knitting Machine with Warp Insertion Capability



SPL122CS

A UNIQUE MACHINE FOR CREATING ORIGINAL PRODUCTS.

Heralded as a historic breakthrough in flat knitting machine technology, Shima Seiki's original SPL of 1971 was the first machine to offer warp insertion through the use of a plating cam. Now, Shima Seiki revolutionizes the flatbed industry once again by offering improved warp insertion technology in a fully computerized machine with full shaping capability. The result is evident in the unique products the SPL122CS can produce. Warp knitting patterns such as vertical stripes and warp jacquard can be combined freely with jacquard and intarsia patterns to provide an unprecedented range of fashionable items, allowing today's knitter to explore new and creative opportunities for original products.



Knitting Width



Knitran® Systems



Ultra-Lightweight Carriage



Belt-Drive Operation



Tough Needle Bed



Gauge Range



Warp Insertion



Solenoid Needle Selection



Compound Needles



Stitch Presser



Full-Time Sinker

Front bed only

Warp insertion technology: a revolutionary concept

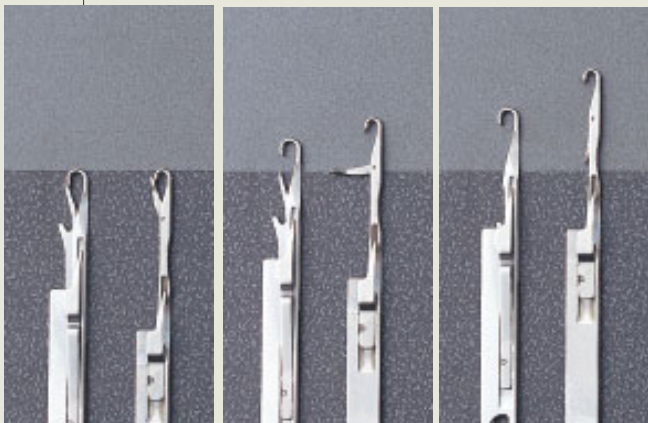
Only the most cutting-edge mechatronics technology could realize the revolutionary concept of combining warp and weft knitting. Weft is controlled by 6 independent yarn carriers while warp is inserted through the use of 8 lace bars, permitting 14-color selection for each needle. Warp and weft functions are carried out simultaneously with the use of a special plating system found on each side of the single-Knitrans® system.



Warp insertion through the use of integrated lace bars.

Special compound needles for increased stability

Shima Seiki's special compound needles are featured in the SPLI22CS. Compared with conventional latch-type needles, the special needle design offers higher operational stability and increased uniform quality of finished items. Moreover, compound needles offer significant reductions in needle stroke to allow for similar reductions in needle bed and carriage size, further improving productivity and efficiency.



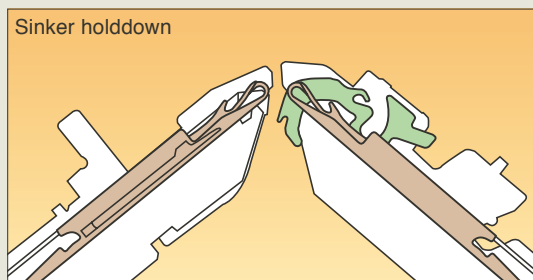
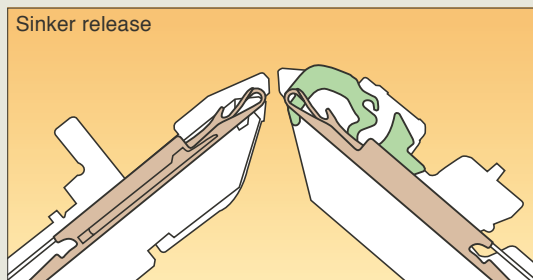
Increased opportunities with stitch presser technology

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 to increased 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.



The Shima Seiki spring-type moveable full sinker system

The SPLI22CS features our patented spring-type moveable full sinker system. Unlike conventional forced-operation type sinkers, the spring-type mechanism provides gentle holddown movement which prevents the fabric from being subject to undue force. Consequently, significant improvements in quality and texture for complicated structure patterns and dimensional fabrics are possible.



Takedown Rollers



Dust Cleaner

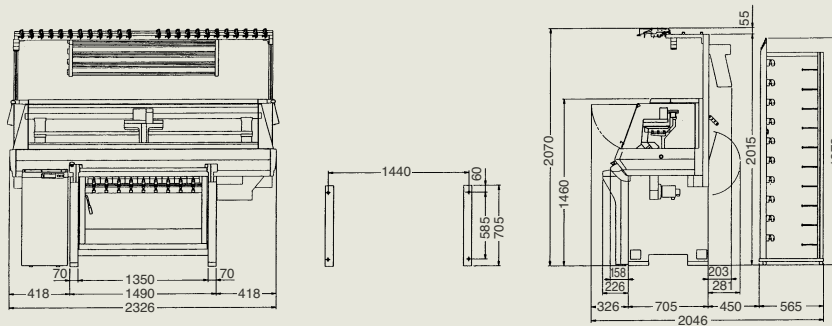


Schedule Knit



Pattern Memory

DIMENSIONS



Average Weight

SPL122CS 1,140 kg (2,508 lb.)
Actual weight is dependent upon gauge and optional equipment.

All dimensions are in millimeters.

SPECIFICATIONS

Model	SPL122CS
Knitting width	Variable stroke. Max. 48"(122cm)
Gauge*	7 • 10
Knitting speed	Max 1.3m/sec. Knitting speed varies according to gauge and knitting condition. Variably adjustable speed levels. 7 additional programmable speeds.
Stitch density	60 levels, electronically controlled.
Racking	Motor-driven recirculating-ball type mechanism. Max 2-inch racking. 1/2 and 1/4 pitch also available from any position (7G only).
Knitting system	Single KNITRAN® cam system for flat knitting featuring three-way technique and transfer with split stitch function. Single plating cam system for warp knitting.
Transfer	Simultaneous transfer, front or back, independent of carriage direction. KNITRAN® cam system only.
Stitch presser	Special motor drive system allows individual adjustment for on/off in knit and transfer.
Sinker system	Front bed: Spring-type moveable full sinker system. Rear bed: Fixed sinkers
Needle selection	Full jacquard selection via special solenoids.
Lace bar ¹	Eight 20" bars standard. Supplemental two 4" bars included (interchangeable with various sizes).
Lace bar racking	20" lace bar: Max 8-inch racking 4" lace bar: Max 40-inch racking
Fabric takedown	Main roller: Changeable 31 levels, automatically adjustable on each level. Sub roller: Changeable 31 levels, automatically adjustable on each level. Automatic opening and closing.
Stop motion	Yarn break, large knot, needle break, shock detection, wraparound check, over-torque, piece count, program error, etc.
Drive system	Belt-drive. AC servo motor. No lubrication necessary.
Top tensions	One-touch easy threading. Large knots cause machine stop. Small knots cause 0-9 courses at low speed.
Cleaner	Dust cleaner is blower operated. Built-in type compact jet compressor.
Safety devices	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. Amber/abnormal stop.

CONTROLLER

Data input	3.5" floppy disk
Pattern memory	8,386,560 bits (1,024 wales x 2,730 addresses)
Control system	Stored program for flat knitting machine.
Control display	CRT indication (English, French, Italian, Spanish, Chinese, Japanese, etc)
Power	3 phase AC 200/220V 2.2KVA

OPTION: (1) Additional lace bars of various sizes.

*All gauges limited production by special order only



SAFETY NOTICE

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