

# N.SSR 112

## Computerized Flat Knitting Machine

### Satisfaction Through a New Sense of Value

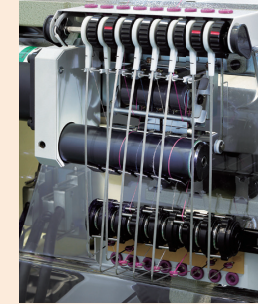
SHIMA SEIKI has renewed its global standard SSR®112 machine. The new N.SSR®112 features high productivity through a lighter, more compact carriage, combined with a maximum knitting speed of 1.2 meters per second and the R2CARRIAGE® System that achieves quicker carriage returns. It also carries over proven SHIMA SEIKI technology such as our renowned Digital Stitch Control System (DSCS®), spring-loaded moveable sinker system, stitch presser, yarn gripper and cutter and takedown comb. Made-in-Japan quality, reliability, productivity, user-friendliness and cost-performance combine to satisfy the high expectations of the world's fashion industry with a new sense of value only SHIMA SEIKI can provide.



#### Rapid Response R2CARRIAGE® System

The R2CARRIAGE® (R2=Rapid Response) System features an advanced carriage mechanism combined with improved software programming that achieves quicker carriage returns after each course.

**R2CARRIAGE®**  
RAPID RESPONSE CARRIAGE SYSTEM



#### WIDEGAUGE® Knitting

N.SSR®112V-type offers WideGauge® capability that allows a variety of gauges to be knit on a single machine. 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.

**WIDEGAUGE®**

#### The World's First Digital Stitch Device

Considered one of the most significant breakthroughs in modern-day knitting, SHIMA SEIKI's patented Digital Stitch Control System (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 shaping and integral garment production, DSCS® allows consistency among different batches and repeat orders. DSCS® is the only proven digital system field-tested and market-proven in the industry since 1984. No other manufacturer can claim this kind of experience or level of refinement.

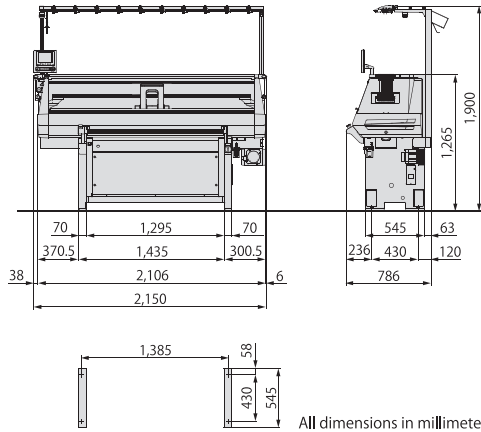


#### A User-Friendlier Knitting Machine

The network connector is positioned on the side of the machine for easier access while transferring data for production management using Shima KnitPLM®. The USB interface is also positioned directly below the control monitor for improved access in data exchange. For those moments when power suddenly becomes unavailable, a backup power supply allows work to resume after power failures. This offers peace of mind that an entire garment will not be lost due to blackouts.



## N.SSR®112 DIMENSIONS



All dimensions in millimeters.

### Average Weight

N.SSR®112 660kg (1,452 lbs.)

Actual weight is dependent upon gauge and optional equipment.

## SPECIFICATIONS

Type	N.SSR112	
Variation	V	C
Gauge	7 · 12 · 14	7 · 12 · 14 · 16
Knitting width	Variable stroke, max 45" (114cm)	
WideGauge®	Wide range of gauge knit on a single machine (V only).	
Knitting speed	Max 1.2m/sec. Knitting speed varies according to yarn, gauge and other knitting conditions. Speed can be programmed for 10 separate categories.	
Stitch density	120 levels, electronically controlled	
Racking	Motor-driven. Max 1-inch racking to each side (2 inches total). 1/2 and 1/4 pitch also available from any position.	
Knitting system	Double KNITRAN® system, single carriage (R2CARRIAGE® system)	
Transfer	Simultaneous transfer, front or back, independent of carriage direction. Split stitch possible by exchanging yarn carriers.	
Sinker system	Spring-type moveable full-sinker system. Provides gentle holddown instead of forcibly pressing down yarn. v-Sinker™ standard on 14G, and 16G.	
Stitch presser	Special motor-drive. On/off adjustment. Press-down amount can also be set according to knit, transfer, etc.	
Needle hook conversion	Conversion between LL-size and MM-size possible without exchanging cams (V only).	
Needle selection	Full jacquard selection via special solenoid actuators	
Setup device	Takedown comb with special setup needles	
Takedown device	Main rollers. Changeable 99 levels, automatically adjustable oneach level. Automatic opening and closing upon command.	
Yarn cutter	Single-unit system includes 1 yarn cutter and 2 yarn grippers. Left side standard.	
DSCS®	Digital Stitch Control System. Consistent loop length by digital control method. 4 lightweight, compact encoders. Left side standard.	
Yarn feed roller	6 positions (V7G only: 10 positions) on left side standard	6 positions on left side standard
Side tensions	8 on each side (V7G: 12 on each side). Brake disk with multi-step adjustable dials. Both sides standard.	
Yarn carriers	7 normal carriers. Plating yarn feeders standard on carrier rails no. 5 and no. 6 (7G: 9 normal carriers only).	
Top tension	10 units (V7G only: 16 units). 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, fabric pileup, shock detection, piece count, over-torque, program error, etc.	
Drive system	Belt drive. AC servo motor. No lubrication necessary.	
Safety devices	Full safety cover for noise-suppression and dust -proofing with stop motion sensor and interlock mechanism. Emergency stop switch. Emergency power off device. Ultra-low speed "crawl" setting. CE Mark. Operation lamp (see below).	
Operation lamp	Green/normal operation. Flashing green/normal stop. Flashing amber/abnormal stop.	
CONTROLLER		
Data input	USB memory interface. Ethernet 10/100 BASE-T network interface.	
Pattern memory	25,165,824 bits (1,024 wales x 8,192 addresses)	
Control unit	Built-in controller. Stored program for flat knitting machine.	
Control display	Monochrome LCD panel. Editing possible via display panel operation. Help/Message function (for cleaning and lubrication). Available in English, French, Italian, Spanish, Portuguese, Turkish, Arabic, Russian, Vietnamese, Chinese, Korean and Japanese.	
Back-up power	Power supply for resuming knitting after power failure.	
Power	Single phase AC220V/230V (200V-250V) 1.5kVA (0.5-1.0kW: Power consumption varies according to gauge and knitting condition)	

*your choice*  
**SHIMA SEIKI**

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Website



Global network



## Fully Fashioned High-Speed Knitting Machine

ISO14001 Certification: SHIMA SEIKI Headquarters is certified as an ISO14001 accredited company.

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### SAFETY NOTICE

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