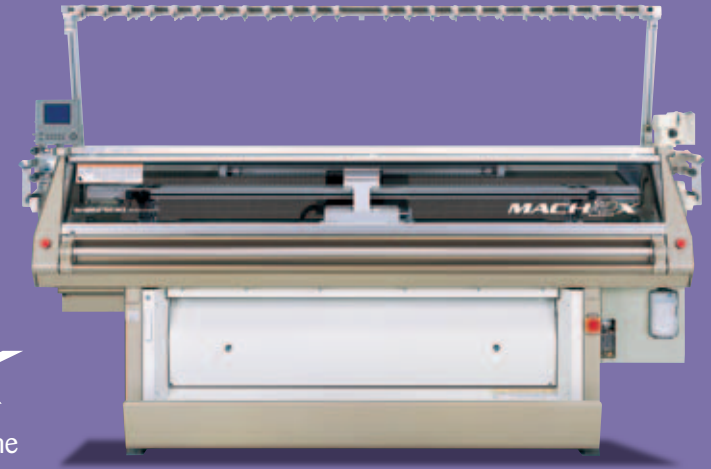


your choice
SHIMA SEIKI

MACH2X

WHOLEGARMENT® Computerized Flat Knitting Machine



DRAMATIC IMPROVEMENTS IN PRODUCTIVITY FOR HIGH QUALITY WHOLEGARMENT® KNITWEAR.

Like the SWG®-X on which it is based, the new MACH2®X is a WHOLEGARMENT specialty machine that features 4 needle beds and Shima Seiki's original SlideNeedle™. And like the SWG®-X, it can knit beautifully shaped, high-quality WHOLEGARMENT® products which conform to the body for improved comfort and a more elegant silhouette. As the "MACH" name suggests, what sets the MACH2®X apart is its speed and productivity. The new R2CARRIAGE® system increases maximum knitting speed and permits quicker carriage returns for higher efficiency per knitted course. New Split Stitch technique furthermore allows efficient knitting by eliminating empty courses. Additionally, on the 15L gauge machine a special large-hook version of the SlideNeedle™ is used for knitting 12-gauge fabrics at 15-gauge needle pitch for even higher productivity. The 15-gauge needle pitch also allows for a tighter fabric especially for ribs, contributing to higher-quality WHOLEGARMENT® items. i-DSCS® Digital Stitch Control

System with Intelligence is also standard. Additional improvements include a new control unit that is built-in to the machine for simplified shipping and installation, easier maintenance, and more efficient use of space. A USB memory interface and a backup power supply are standard. The new machines also feature a lower overall height for improved access to top tension units. Dramatic improvements in both quality and productivity make the new MACH2®X the ideal machine for high-quality WHOLEGARMENT production.

R2CARRIAGE®

The new R2(Rapid Response) CARRIAGE® System features a new carriage mechanism combined with improved software programming that results in a maximum knitting speed of 1.6m/s. More importantly, the R2CARRIAGE® achieves quicker carriage returns

after each course. Combined, these improvements result in significant increases in productivity depending on the gauge and type of fabric.

i-DSCS®

Standard on MACH2®X are both the world-famous DSCS® Digital Stitch Control System and i-DSCS® "with Intelligence." i-DSCS® carries over the benefits of DSCS®, with even better performance. Whereas DSCS® is a passive system which controls stitch length and yarn tension by limiting yarn-feed, i-DSCS® has the capability to actively control yarn-feed in both feed and retrieval directions as necessary, resulting in even higher quality and greater productivity using a wider variety of yarns. Like DSCS®, i-DSCS® provides consistent quality among different production batches and repeat orders, and is crucial to the precision knitting required in WHOLEGARMENT® production.



Knitting Width 68"



Ultra-Lightweight Carriage



Belt-Drive Operation



R2Carriage®



Tough Needle Bed



Gauge Range 12e to 15e



WHOLEGARMENT® Knitting



4-Bed Configuration



Electromagnetic Needle Selection



SlideNeedle™



Stitch Presser



Loop Presser



Yarn Gripper and Cutter



Double Racking



DSCS®



i-DSCS®



Setup Device



Pulldown Device



Automatic Dust Cleaner



Schedule Knit



Back-Lit LCD Panel



Network Interface



Pattern Memory M768

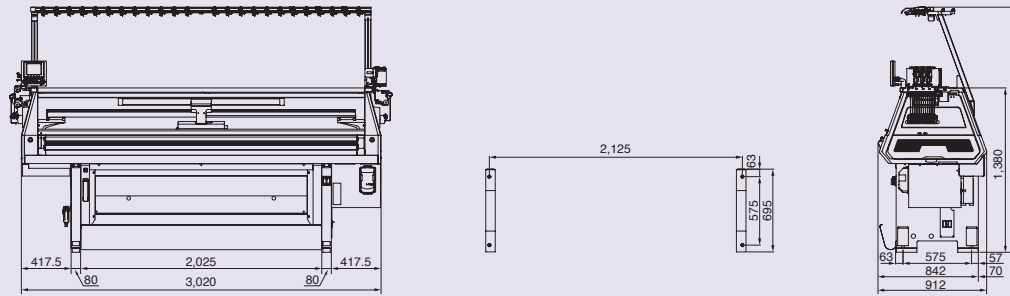


USB Memory Interface



Back-Up Power

DIMENSIONS



Average Weight

MACH2[®]X 1,450kg (3,190 lbs)

Actual weight is dependent upon gauge and optional equipment.

All dimensions are in millimeters.

SPECIFICATIONS

Type	MACH2 [®] X
Gauge	12 · 15 · 15L (L: Large hook)
Knitting width	Variable stroke. Max 68" (170cm)
Knitting speed	Max 1.6m/sec. Knitting speed varies according to various knitting conditions. Variably adjustable speed levels. 16 additional programmable speeds.
Stitch density	120 levels, electronically controlled.
Second stitch	Motor-controlled second stitch cam allows individual adjustment of loose/tight stitches for shaping. Lower carriage only.
Racking	Motor-driven. Double racking. Max 1.5-inch racking in each direction (3 inches total) for all four needle beds and loop presser bed. Front: Racking of upper and lower front beds are performed as one. Rear: Racking of upper and lower rear beds and loop presser bed are performed as one.
Knitting system	Ultra compact 3-system (1 knitting system + 2 transfer systems). Single R2Carriage [®] system.
Transfer	Lower beds: Simultaneous transfer, front and back, independent of carriage direction. Split stitch possible without exchanging yarn carriers. Upper beds: Upper beds to opposite lower beds, independent of carriage direction.
Sinker system	Fixed sinker system
Stitch presser	Special motor-driven system allows individual adjustment for on/off in knit and transfer.
Loop presser	Individual selection and independent control. Loop presser bed positioned above upper rear needle bed.
Needle selection	Electromagnetic direct selection.
Setup device	Takedown comb with special setup needles.
Pulldown device	Special pulldown mechanism with independent operation of front and rear. Precise control over entire garment width in 1.5-inch increments.
Exit rollers	Special rollers for fabric pulldown and release. Consists of two rollers.
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 ¹ .
DSCS [®]	Consistent loop length by digital control method. Left side standard. Yarn feed roller on Left side double roller standard. 8 positions on Left side. Left side yarn stopper device.
i-DSCS [®]	DSCS [®] with Intelligence. Actively controls yarn feed in both feed and retrieval directions. Right sides standard. Yarn feed roller on Right sides standard. 8 positions on Right side ² .
Side tensions	12 on each side
Yarn carriers ³	12 carriers
Top tensions	24 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 devices	Special blower-operated cleaner. Automatic operation available upon knitting a set number of pieces. Manual operation also available.
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. CE Mark. Indicator lamps (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	50,331,648 bits (1,024 wales × 16,384 addresses)
Control unit	Built-in controller. 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 and Japanese.
Back-up power	Power supply for resuming knitting after power failure.
Power	3 phase AC200V±10% 3.0KVA

OPTIONS: (1) Air Splicer. (2) i-DSCS[®] (Left side). (3) Plating Carrier.

Fully Fashioned High-Speed Knitting Machine

your choice
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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.



SAFETY NOTICE

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

MACH2X Printed in Japan