MC-320

**Two-System
Computer Controlled
Flat Bed Knitting Machine**

UNIVERSAL

Whatever you knit

Dimensions	**E5-14**	
	Length: 4720 mm*	* including monitor
	Width: 960 mm	
	Height: 1680 mm	

Weight
net kg (approx.)   1220

Technical Specifications

Gauges   E 5, 7, 8, 10, 12, 14 (additional gauges on request)

Systems   2 identical systems. Any cam system can simultaneously and selectively transfer or receive stitches. Five-way technique: individual selection of long and short stitch, long and short tuck loop, and floating. Each system can be used for knitting or transferring not depending on the carriage traverse direction. Transferring can be carried out from the front to the rear, from the rear to the front, or in both directions simultaneously.

Working Width   90 inches = ca. 2286 mm

Main Drive   Reversible drive with AC servo motor and flat toothed belt. Programmable speed up to 1.2 m/s (for gauge E10-14: max. 1.1 m/s). Adjustable automatic traverse optimisation.

Carriage   One light alloy carriage of compact construction.

Needles   Retracted UNIVERSAL spring latch needle with spreading spring for transferring.

Needle Selection   Electronic individual needle selection via mono-magnets.

Stitch Length   Two different values controlled by separate step motors, can be programmed not depending on each other as static, dynamic, or selective stitch length, or as combination of those.

Racking   Racking distance max. ±2.5 inches (max. 5 inches). Unlimited number of individually adjustable racking positions. Programmable stretching. Two pre-defined transferring positions and semi-racking. Center racking for increased productivity.

Fabric Take-Down   Convenient electronically controlled fabric take-down unit. The take-down tension can be programmed or is calculated automatically depending on the number of needles used. Fast run and reverse nun (for releasing the fabric) can be controlled as required. Continuous fabric take-up roller.

Yarn Carrier Rails   4 double profile rails with 8 yarn carrier boxes. The yarn carrier boxes can be used as single or multiple boxes. The yarn carrier positions can be programmed as required, or they can be optimised automatically.

Yarn Guide Unit	Low bobbin board height of the yarn guide unit can be adjusted. 11 (16 for gauge E5) combined knot and yarn break detectors with indicator lamps. Yarn-retrieval unit.
Intarsia	Normal yarn carriers and special intarsia yarn carriers (option) can be combined on the rails 2 through 7.
Safety Units	Closed transparent cover with electrical end switch according to DIN EN 1088. Emergency shut-down according to EN 418
Signalling Device	Yellow colour highly-visible signal lamp indicating error stop
Fault Detectors	Yarn breakage, knot, load-up, shock, overload, fabric loss, fabric wind-up, and temperature control of important control units.

Control

Control	Modular multi-processor system with CAN field-bus system and standard PC as host Computer.
Pattern Memory	Dynamic memory management, large knitting programs can be processed. Multiple patterns can be loaded into the memory.
Operating console	Standard 15" multi-sync colour monitor. PC compatible keyboard with trackball (operating element).
Recording medium	3.5" HD diskette.
Programming	All the fabric can be programmed on the machine directly using convenient and clear lists.
Data storage	On hard disk.
Electrical Connection	Power consumption max. 2.5 kVA. Voltage adjustable for 190V, 200V, 230V, 280V, 346V, 380 V, 400V, 415V, 440V. Mains frequency 50/60 Hz. Mains fuse at the customers premises 16 A slow. For the mains connection, the customer has to provide a CEE form power outlet according to DIN 49462/63

Special Equipment

Powerfail (correct continuation of the knitting program after cutting-out of the circuit)

Stitch splitting on each cam system (front and rear), can be activated by the knitting program.

Intarsia yarn carriers for rails 2 through 7.

Working area illumination

Fabric area illumination

Network connection to the MA-8500 fabric design workstation

Three-colour highly-visible signal lamp indicating production, operational stop, and error stop

Carriage removal device

Additional bobbin plates

Bobbin supports (magnets)

Individually spring-suspended take-up rollers

Plush unit

Plating feeder

Positive feeding device

Lubricating unit

Blowing unit

Fabric spreader

The machine with the EC Machine Regulation, the EC Low-Voltage Regulation, the EC Electro-Magnetic Compatibility Regulation, and is provided with the CE mark

Construction and equipment subject to change without notice