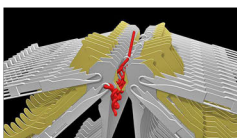
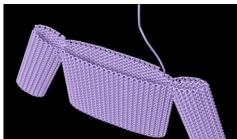


Unprecedented four-needle-bed seam-free flat knitting machine

Registration No.	Number 00399		
Registration Date	September 29, 2026	Registration Category	Category 1

Name (Model, etc.)	WHOLEGARMENT® Knitting Machine MACH2X
Location	Wakayama-shi, Wakayama
	SHIMA SEIKI Fusion Museum
Owner (Custodian)	SHIMA SEIKI MFG., LTD.
Manufacturer (Company)	SHIMA SEIKI MFG., LTD.
Year Manufactured	2007
Reason For Selection	This item is a four-needle-bed WHOLEGARMENT® knitting machine developed in 2007, equipped with SlideNeedle® technology, capable of producing seam-free knitwear. The machine achieved: (1) optimized control of reciprocating carriage stroke and quick carriage returns enabled by a compact carriage design; (2) higher carriage speeds; and (3) high cost-performance with highly optimized control programming for maximum efficiency. As a result, it enables three-dimensional knitting of fashionable, seam-free knitted garments in significantly less time. Furthermore, it has pioneered new applications for knits in emerging fields such as medical care and sports. Thus, this innovative four-needle-bed WHOLEGARMENT® flat knitting machine stands as a landmark in the history of knitting technology.
Registration Criteria	1-B (Shows a uniquely Japanese scientific or technological development from an international perspective.)
	2-A (Played a notable role in improving people's way of life and creating new ways of living.)

Open/Closed to the Public	Open to the Public
Photos	 WHOLEGARMENT® Knitting Machine MACH2X  Side View of Carriage and Four-Needle-Bed Configuration Left Side: Upper Front Bed (back stitching for the back body) Lower Front Bed (front stitching for the front body) Right Side: Upper Rear Bed (back stitching for the front body) Lower Rear Bed (front stitching for the back body) There is a carriage to the far left, which contains a cam. When it moves, the cams actuate the SlideNeedle®.  Four-Needle-Bed Configuration Equipped with SlideNeedle® Exceptional loop-transfer capability provides high-quality, beautifully finished knit fabrics. (Artist rendering)  Complete garments are knitted three-dimensionally on the knitting machine with no need for sewing. (Artist rendering)
Other useful information	