

# SV12P CNC Sinker EDM

## M800 Control

Introducing the Next-Generation SV12P Sinker EDM with Mitsubishi Electric's AI Technology (**Maisart**) and M800 Series Control System to Pursue Both High Accuracy and High Productivity



M: Mitsubishi  
ai: Artificial Intelligence  
State-of-the-art



### Ergonomic Design

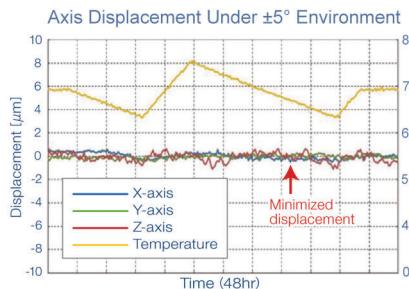
- Easy-to-view screen (19-inch)
- Intuitive operations using touch-panel control
- User friendly keyboard and mouse

### Standard Features:

- Thermal Buster Improves Accuracy with its new Thermal Displacement Compensation System and Z-Axis Cooling Mechanism.
- SS Jump 5 Optimizes Jump Up and Acceleration Control to Stabilize High-Speed NO-FLUSH Machining (984"/min. @1.6G acceleration in Z and 197"/min. in X, Y)
- NP2 Circuit Provides an Ultra-Fine Matte Finish (0.05µm Ra).
- Glossy Mirror Finish Circuit (LLTX) Improves Mold Releasability without the need for polishing.
- Exotic Material Machining (PCD, cBN, & Carbide) with Low Electrode Wear is now possible with the (HPS Circuit)
- Power Master (GF2 Adaptive Control) Reduces Graphite Electrode Wear by as Much as 40%

# Integration of Highly Evolved Technology and Advance Control

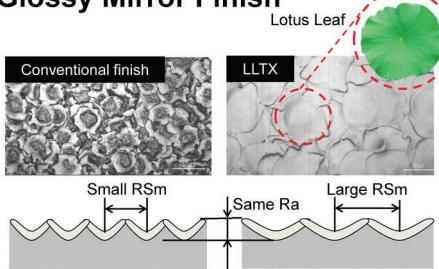
## Thermal Buster



Machining accuracy is improved through a Thermal Displacement Compensation system and Z-Axis cooling mechanism.



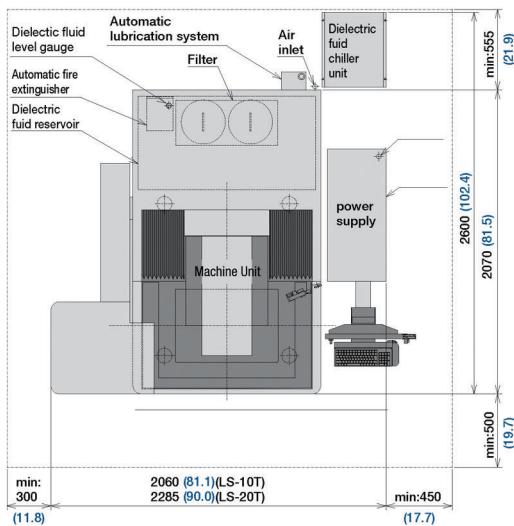
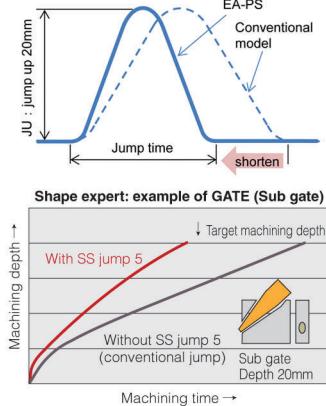
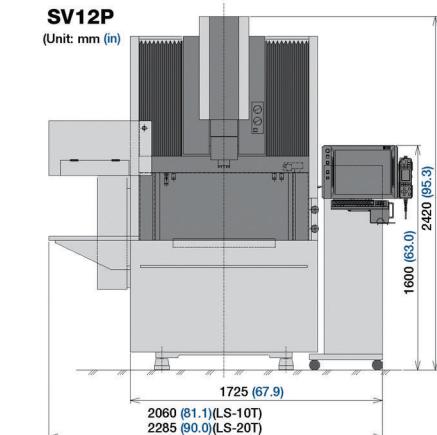
## Glossy Mirror Finish



The new Glossy Mirror LLTX Lotus Leaf TeXture circuit achieves a large RSm to improve mold releasability even with the same surface roughness. This provides non-polishing machining of plastic molds and forging dies.

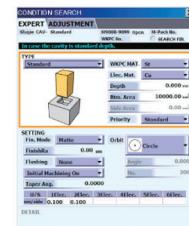
## Machining Stabilizing Control: SS Jump 5

SS Jump 5 control is suitable for various shapes, such as the sub-gate shown, by optimizing the smoothing of the jump up operation. Fast jump speed of 984"/min. (1.6G) shortens non-burn time with the high- speed / acceleration control. Machining speed is 40% faster with "IDPM" Intelligent Digital Power Master control.



## Initial Machining Control

Faster machining is realized with improved initial machining control for the start of machining after rough milling.



Machining time reduced up to 50% for the start of machining after rough milling

## Machine Specifications

	Machine Type	SV12P
Machine Unit	X-axis stroke (inch)	15.7
	Y-axis stroke (inch)	11.8
	Z-axis stroke (inch)	11.8
	Work tank internal dim. (W x D x H) (inch)	37.4 x 27.6 x 17.7
	Dielectric fluid level range (inch)	2.6 ~ 15.7
	Table dimensions (W x D) (inch)	27.6 x 19.7 w 5 T-Slots
	Max. workpiece weight (lb.)	2205
	Max. electrode weight "Manual Change" (lb.)	176
	Table to platen distance (inch)	7.9 ~ 19.7
	Table to EROWA ITS 50 Chuck (inch)	7.9 ~ 19.7
	Table to 3R MACRO Chuck (inch)	7.2 ~ 19.0
	Machine unit dimensions (W x D x H) (inch)	67.9 x 81.5 x 95.3
	Machine unit weigh (lb.)	7716
Power Supply	Type	GV80P
	Machining current: Peak	80
	Program support function	E.S.P.E.R Advance
Control Unit	Machining function	Maisart with IDPM3
	Graphic display	19" TFT color LCD
	CPU / type	64-bit / PC
Axis Speeds	Rapid Travel Speed (in/min.)	275
	Max. Jump Speed/Acceleration (in/min/G)	984/1.6
	Reservoir capacity (gal)	124
Dielectric Fluid System	Filtering method	Paper cartridge (2pc)
	Temperature control type	Chiller
Machine Layout	Installation dimensions (W x D) (inch)	110.6 x 102.4 w ATC
	Floor space requirement (sq. ft.)	78.6
	Max. electrode weight "w 20 pos ATC" (lb.)	22 (11 w LS-10 ATC)
C-axis	Speed RPM	1 to 30
	Min. indexing angle	.001°
	Min. drive unit	.001°



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