

SG70

CNC SINKER EDM

SPEED

Introducing the Next-Generation SG70 Sinker EDM with Mitsubishi Electric's AI Technology (Maisart) and M800 Series Control System to pursue both ultra-low wear and high productivity.

ERGONOMIC DESIGN

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

 **Maisart**
Mitsubishi
Artificial Intelligence
State-of-the-art



STANDARD FEATURES

- Mitsubishi M800 Series Control including an all-new LCD Hand Pendant Control.
- New IDPM3 (Intelligent Digital Power Master) offers unparalleled jump speed, reduced electrode wear (up to 40%), and ease of operation for any experience level.
- SS Jump 5 optimizes jump up and acceleration control to stabilize High-Speed NO-FLUSH machining (590"/min. 1 .OG in Z and 197"/min in the X and Y-axis).
- Thermal Displacement Compensation System utilizes temperature sensors that constantly monitor any changes in the work tank and environment.
- High speed positioning and plotting, now at 4M/min. {157"/min.}, increases machine efficiency during set-up and dry-run check.
- ESPER II Navigator now simplifies programming inputs to a short question and answer session prompting the operator through the process.
- 1 GB User Program Storage

Integration of Highly Evolved Technology and Advanced Control



IDPM3 – Intelligent Digital Power Master

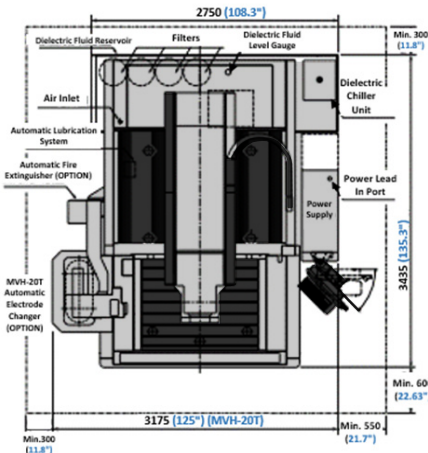
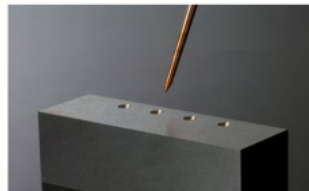
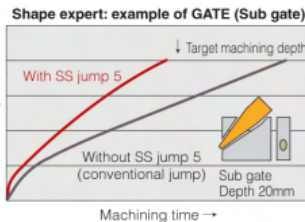
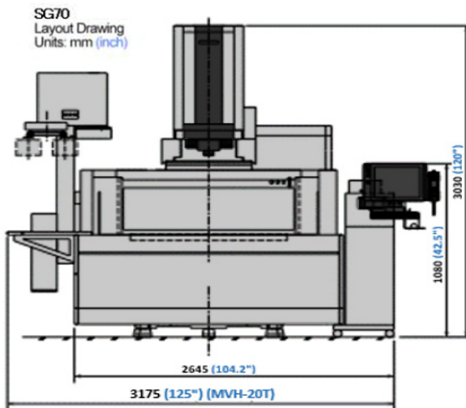


IDPM3 automatically adjusts the spark to reduce electrode wear while optimizing machining speeds with graphite electrodes.

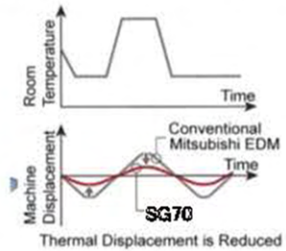
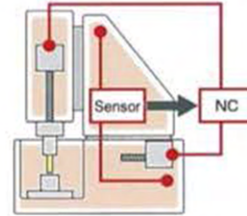
Dramatically improved corner wear allows for a reduction in electrodes, reducing manufacturing costs.

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 590"/min. (1.0G) shortens non-burn time with the high-speed / acceleration control. Machining speed is 40% faster with "IDPM" Intelligent Digital Power Master control.



Thermal Displacement Compensation Control



The thermal displacement, high accuracy, compensation control suppresses thermal displacement of the EDM machine caused by changes in the ambient temperature. In addition, a stable accuracy can be attained even during long continuous operation by automatically compensating the displacement amount.

Machine Specifications

	Machine Type	SG70
Machine Unit	X-axis stroke (inch)	39.3"
	Y-axis stroke (inch)	27.5"
	Z-axis stroke (inch)	19.6"
	Work Tank internal dim. (W x D x H) (inch)	59" x 43.3" x 21.6"
	Dielectric fluid level (Min-Max) (inch)	3.0" ~ 19.6"
	Table dimensions (W x D) (inch)	51.18" x 37.4" w 7 T slots
	Max. workpiece weight (lb.)	6614
	Table to platen (Min-Max) (inch)	15.0" ~ 34.6"
	Table to EROWA ITS 50 Chuck (Min-Max) (inch)	10.8" ~ 30.5"
	Table to 3R MACRO Chuck (Min-Max) (inch)	10.2" ~ 29.8"
	Machine system dimensions (W x D x H) (inch)	108.27" x 135.83" x 119.3"
	Machine weight, including power supply (lb.)	19,840
Power	Type	GV120P
	Machining current: Peak (optional)	120
Axis Speeds	Rapid Travel Speed (in/min)	157.5
	Max. Jump Speed/Acceleration (in/min/G)	.590/1.0
Control Unit	Program support function	E.S.P.E.R. II
	Machining function	IDPM 3/Orbit Pro
	Graphic display	19" TFT color LCD
	CPU / type	M800 Series / Industrial PC
Dielectric Fluid System	Reservoir capacity (gal)	343
	Filtering method	Paper cartridge (4pc)
	Temperature control type	Chiller FTS (Standard)
Machine Layout	Installation dimensions (W x D) w access (inch)	146" x 171" No ATC
	Floor Space Requirement (W x D) (sq. ft.)	175
C-axis	Max. Electrode weight (Manual / Auto Change) (lb.)	110 / 22
	Speed (RPM)	1 to 30
	Min. indexing angle	.001°
	Min. drive unit	.001°

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