EA12ST CNC Sinker EDM

Advance

Introducing the new EA12ST with Mitsubishi's M700 Series Advance CNC Control System and the new FP80S power supply with the ultra-low wear Power Master (GF2 control).

Ergonomic Design

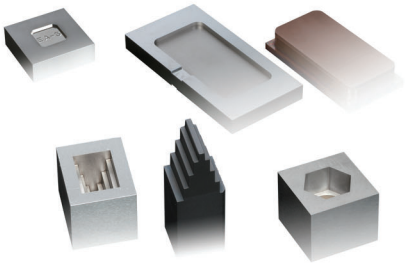
- Easy-to-view screen (15-inch)
- Intuitive operations using touch-panel control
- User friendly keyboard and mouse

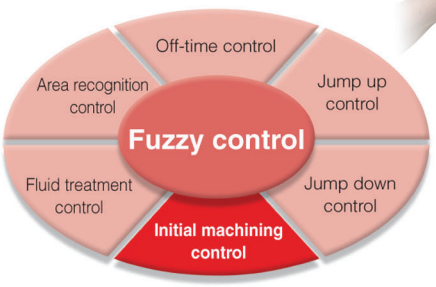
Standard Features:

- **Mitsubishi M700 Series Control uses Windows Embedded OS**
- **1GB User Program Storage on a 40GB Hard Drive**
- **Fuzzy Pro 3 Plus Emulates an Experienced Operator Optimizing the Burn Process From Rough Burn to Finish Orbit**
- **SS Jump 5 Optimizes Jump Up and Acceleration Control to Stabilize High-Speed NO-FLUSH Machining (592"/min. in Z and 197"/min. in X, Y)**
- **Power Master** (GF2 Adaptive Control) **Reduces Graphite Electrode Wear by as Much as 80%**
- **New Digital AC Smart Servo System Improves Resolution to 0.05µm (2 millionths) Speeding Response Time**

MITSUBISHI EDM

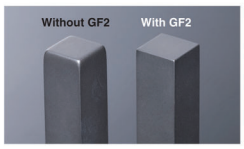
Integration of Highly Evolved Technology and Advance Control





Power Master: GF2 Adaptive Control

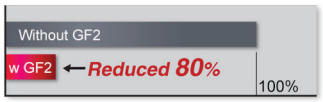
GF2 Control optimizes spark control to greatly improve electrode wear while improving speed when using graphite electrodes.



Less wear of corner shape of the electrode.

Smooth electrode surface.

Electrode wear comparision for 0.6 x 0.6" and 1.6" depth

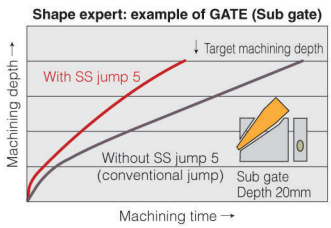


Wear using a graphite electrode is reduced up to 80%

Compared to conventional Mitsubishi Electric EDM (EA series)

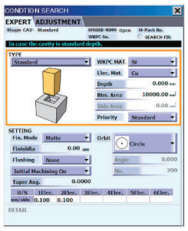
Machining Stabilizing Control: SS Jump 5

SS Jump 5 control is suitable for various shapes, such as the sub-gate shown, by optimizing the smoothing of the jump up operation with the high-speed and acceleration control. New jump speeds are 590"/min. (15M/min.) in Z and 197 "/min. (5M/min.) in the X, Y-axis.



Initial Machining Control

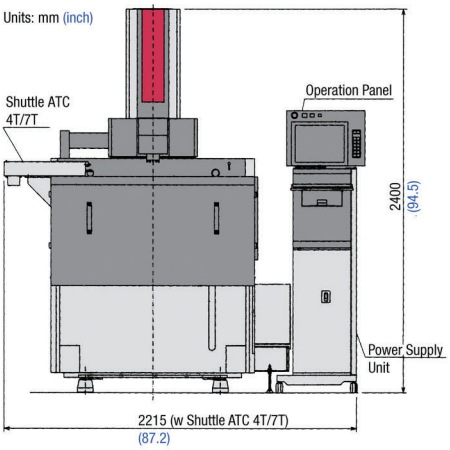
Faster machining is realized with improved initial machining control for the start of machining after rough milling.

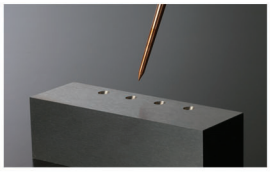


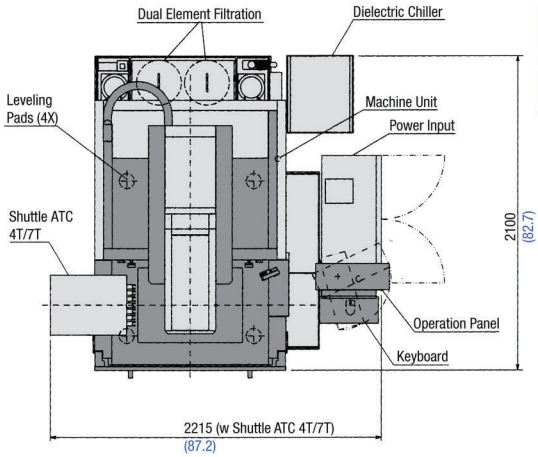
Machining time reduced up to 50% for the start of machining after rough milling

EA12ST Advance

Large Fixed Tank







Machine Specifications

	Machine Type		EA12ST
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)	41.3 x 27.6 x 17.7
	Dielectric fluid level range	(inch)	7.1 ~ 15.7
	Table dimensions (W x D)	(inch)	19.7 x 13.8
	Max. workpiece weight	(lb.)	2200
	Max. electrode weight *"Manual Change"*	(lb.)	110
	Table to platen distance Table to ERWOA ITS 50 Chuck Table to 3R MACRO Chuck	(inch) (inch) (inch)	11.8 – 23.6 10.4 – 22.2 9.8 – 21.6
	Machine unit dimensions (W x D x H)	(inch)	75.6 x 82.7 x 94.5
	Machine system weigh	(lb.)	7,496
Power Supply	Type (option)		FP80S (FP120S)
	Machining current: Peak		80 (120)
Control Unit	Program support function		E.S.P.E.R Advance
	Machining function		Fuzzy Pro 3 Plus
	Graphic display		15" TFT color LCD
	CPU / type		64-bit / PC
Dielectric Fluid System	Reservoir capacity	(gal)	156
	Filtering method		Paper cartridge (2 pc)
	Temperature control type		Chiller
Machine Layout	Installation dimensions (W x D)	(inch)	103.9 x 99.2 w ATC
	Floor space requirement	(sq. ft.)	71.6
C-axis	Max. electrode weight *"w MVH-20 ATC"*	(lb.)	22 *(11 w 4T Shuttle ATC)*
	Speed	RPM	1 to 30
	Min. indexing angle		.001°
	Min. drive unit		.001°

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