

# EA8A

FP-V power supply (standard)  
Compact, high-performance, high-accuracy EDM



MVH20T-ATC  
C-axis (option)

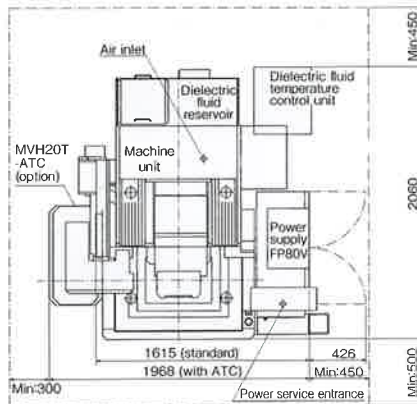
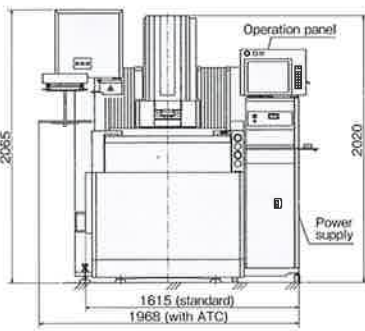
# EA12A

FP-V power supply (standard)  
High-performance, die-sinking EDM

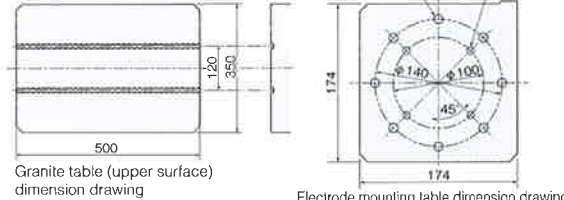


MVH20T-ATC  
C-axis (option)

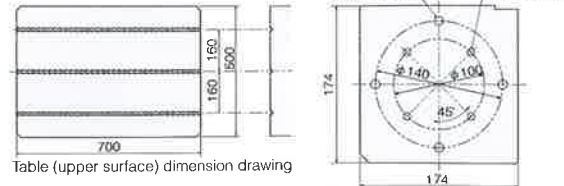
## EA8A



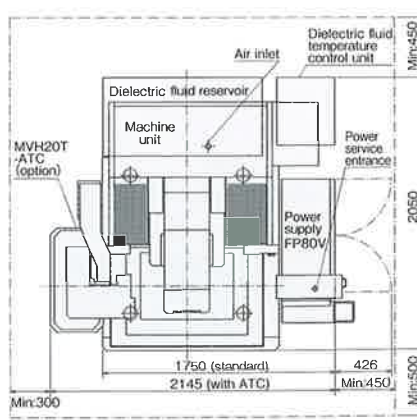
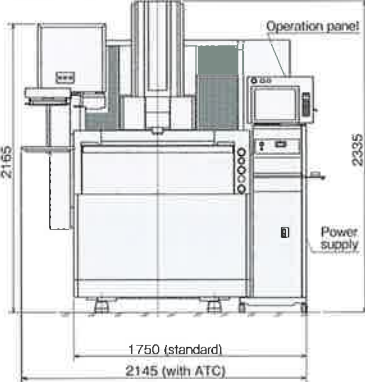
## EA8A



## EA12A



## EA12A



### Standard functions

- Tungsten carbide machining circuit
- Fine matte finish circuit (PS circuit)
- Glossy mirror finish circuit (GM2 circuit)
- Narrow gap circuit
- Thermal displacement compensation system
- Z-axis linear scale
- High-accuracy positioning circuit
- Working tank fluid flow adjustment function
- 70mm granite table (EA8A)
- LAN

### Options

- Highly rigid, built-in C-axis
- Automatic clamp
- Shuttle-type ATC
- MVH20T-ATC
- XY-axis linear scale
- High-function manual control box
- Dielectric fluid distributor
- Built-in scheduler

### Standard delivery entrance [mm]

	EA8AM		EA12AM	
	Width	Height	Width	Height
Standard specifications	1486	1486	1670	2380
Shuttle 4T-ATC specifications	1600	2120	1795	2380
Shuttle 7T-ATC specifications	—	—	1955	2380
MVH20T-ATC specifications	1616	2120	2065	2380

## Outstanding operability ①

- 15-inch LCD touch panel
- Machining conditions search (shape expert, VDI compatible machining conditions)

## High-accuracy technology perfect for ultra-precise machining ②

- Standard thermal displacement compensation function stabilizes the accuracy during long-term machining
- Maintain high accuracy during setup with the fluid circulation function and high-accuracy positioning function
- Z-axis equipped with a linear scale as standard equipment (option for XY-axis)

## New high-speed FP-V power supply

- Machining speed and electrode wear are both improved
- Circuit for tungsten, special material machining is standard equipment
- Optimized machining technology enables low-wear machining using graphite electrode
- Energy-saving power supply is standard equipment (20% reduction compared to Mitsubishi Electric FP power supply)

## Produce fine finishes ③

- Standard granite table (EA8A)
- Easy-to-polish fine matte surface finish machining
- Machine narrow pitch connectors using the narrow gap circuit

## Advanced machining control ④

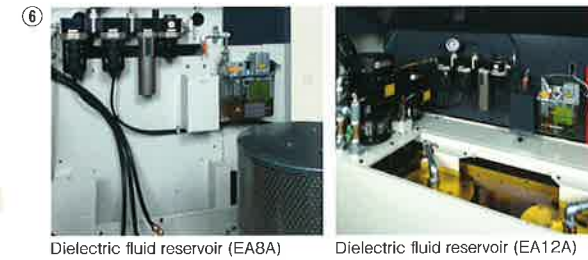
- Stabilized machining and increased speed with SS Jump 3

## Improved setup workability ⑤

- The three-sided drop tank improves access for work setup
- Adjustable fluid flow rates increase the range of no-flush machining

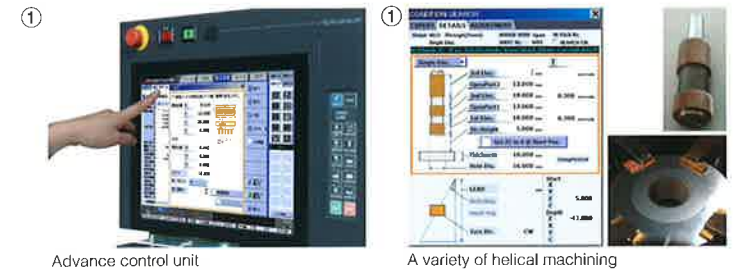
## Maintenance ⑥

- Maintenance space has been arranged at the back of the machine to improve workability
- A long-life fine mesh filter is incorporated



Dielectric fluid reservoir (EA8A)

Dielectric fluid reservoir (EA12A)



Advance control unit

A variety of helical machining



Fluid circulation function (standard)  
Granite table (EA8A)



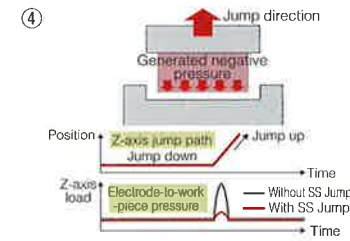
Fine high-accuracy machining



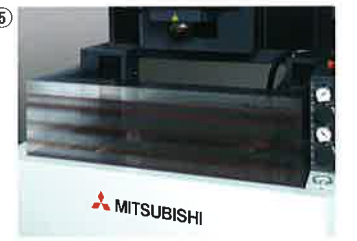
Glossy mirror finishing (GM2 circuit)



Fine matte surface finishing (□50mm)  
(PS circuit)



Stable machining which lessens the load during large-area machining



Automatic elevation tank

## Machine unit (Standard specifications)

Applicable model		EA8AM	EA12AM
Machine unit	Dimensions (WxDxH) [mm]	1615×2060×2020	1750×2050×2335
	System total weight [kg]	2000	3725
Axis stroke: (X×Y×Z) [mm]		300×250×250	400×300×300
Spindle	Distance between table and electrode mounting surface [mm]	223~473	270~570
	Max. electrode weight [kg]	25	50
Working tank	Method	Automatic elevation	Automatic elevation
	Inner dimensions (WxDxH) [mm]	760×520×260	850×600×350
Table (Granite)	Fluid level adjustment range (from top of table) [mm]	85~210	100~300
	Dimensions (WxD) [mm]	500×350	700×500
Dielectric fluid reservoir	Max. workpiece dimensions (WxDxH) [mm]	730×490×160	800×550×250
	Max. loading weight [kg]	550	700
Capacity (initial dielectric fluid supply amount) [L]	T-slot	Two slots at 13-120mm pitch	Three slots at 12-160mm pitch
	Filtering method	One line paper filter	Two line paper filters
	Dielectric fluid temperature control unit	Unit cooler	Unit cooler

## Distance between table and electrode mounting surface

		3R-MACRO		EROWA		3R-Combi	
		MACRO	Jr	MACRO	Jr	MACRO	Jr
EA8AM	C-axis [mm]	158~408	175.5~425.5	158~408	168~418	158~408	168~418
	Automatic clamp [mm]	221~471	230.5~480.5	221~471	231~481	221~471	231~481
EA12AM	C-axis [mm]	135~435	152.5~452.5	135~435	145~445	135~435	145~445
	Automatic clamp [mm]	198~498	207.5~507.5	198~498	208~508	198~498	208~508

## C-axis/ATC (Option)

C-axis		Max. electrode weight	10 <sup>*1</sup> [kg]	3R		EROWA	
				MACRO	Combi	ITS	COMBI
Shuttle 4T <sup>*5</sup>	Max. electrode dimensions	70×70×100 [mm]	—	—	—	—	—
	Max. electrode weight	5kg / electrode	—	—	—	—	—
Shuttle 7T <sup>*5</sup> (EA12A)	Max. electrode dimensions	35×35×100 <sup>*2</sup> [mm]	—	—	—	—	—
	Max. electrode weight	2.5kg / electrode	—	—	—	—	—
MVH 20T	Max. electrode dimensions	70×70×175 [mm]	—	—	—	—	—
	Max. electrode weight	10kg / electrode	—	—	—	—	—

\*1: For MACRO Jr of 3R-Combi and Compact of EROWA-COMBI, the weight is 2.5kg / electrode.  
\*2: When using four electrodes, the dimensions are 70 x 70 x 100 (mm). The magazine total is 10kg.  
\*3: For MACRO of 3R-Combi, the weight is 5kg / electrode, and is 2.5kg / electrode with MACRO Jr. In both cases, the magazine total is 40kg.  
\*4: ATC can be used with EROWA ITS50, but not with EROWA Compact (manual only).  
\*5: The working tank elevation position is limited.