



CNC Powder EDM (NP series)

FAST MIRROR FINISHING CIRCUITS WITH POWDER DEVICE

Model :

JMNC53P+NP50+D53P



JOEMARS MACHINERY & ELECTRIC INDUSTRIAL CO., LTD.

FEATURES:

- Unique powder adding to dielectric, greatly increase the mirror finish working area.
- Application of powder machining technology, disperse sparking current, enhance machining stability and efficiency, also improve the surface roughness.
- Reduce the crack of workpiece surface, helps to save time by hand polishing.
- X,Y axis use high precision roller linear guide way, offers the high rigidity.
- X,Y axis use high precision big diameter ballscrew, pre-load design ensures mechanical stability.
- Use big diameter pin ballscrew pre-loading system, provides reliability of pre-load, and prevent ballscrew from bending or transforming.
- Big taper precision ball bearings used on each axis, provides high accuracy and smoothing.
- Advanced and well-balanced electrode & work head structure, increases the Z-axis sparking efficiency and reliability.
- Sealed box type and symmetrical casting structure, brings high rigidity and well thermal balance system.
- Auto lubricating system, no more headache for the operators, easy for maintenance.
- Total-covered metal protection on each axis, offers safety and better outlook of machine itself.
- Unique powder stirring and separating system, brings higher sparking efficiency.
- Simple dielectric selection system, operators can choose for powder or non-powder machining job.
- Flushing nozzles are located on the side of work tank and under the work head, the solution for different shape work piece machining.
- Special designed machine body / dielectric tank / generator design, reduces the space taking and easy for maintenance.
- Industrial grade PC based CNC controller.
- 12.1" TFT LCD color panel.
- Dialogue programming or GM code programming.
- Background editing.
- User Macro function.
- Multi language support.
- Machining path display.
- MPG positioning and discharging alignment.
- Multi-holes macro programming: Linear/Circular/Array/Arbitrary. Multi-holes.
- Multi-conditions macro programming for finish machining.
- 1000 machining condition tables with 1000 conditions in each table 17 kinds of Loran & Orbit function.
- LWF sparking circuit able to control the peak current rising slope, reduce the corner wear.
- Tracking mode OFF-TIME control circuit to prevent Arcing.
- All PC boards are sectioned in modular box design, reduce maintenance cost.

JMNC53 SERIES MACHINE UNIT & DIELECTRIC TANK SPECIFICATIONS:

ITEM	UNIT	JMNC53P	JMNC53
Work table size	mm	800x550	800x550
X travel	mm	500	500
Y travel	mm	350	350
Z travel	mm	350	350
Ram platen to work table	mm	310~660	310~660
Max. electrode weight	kgs	150	150
Max. work piece weight	kgs	1600	1600
Work tank (WXDXH)	mm	1160x670x340	1160x670x340
Weight of machine unit	kgs	2800	2800
Outside dimensions(WXDXH)	mm	1430x2175x2330	1430x2175x2330

NP SERIES GENERATOR SPECIFICATIONS:

ITEM	UNIT	NP50	NP75
Max. Machining Current	A	50	75
Total Power Input	KVA	4.5 (With JMNC53) 6.5 (With JMNC53P)	7 (With JMNC53) 9 (With JMNC53P)
Max. Metal Removal Rate	mm ³ /min	390	610
Electrode Wear Ratio	%	0.20	0.20
Best Surface Roughness	μmRa	0.20(Without powder) <0.20(With powder)	0.20(Without powder) <0.20 (With powder)
Net Weight	kgs	320	330
Outside Dimension(WXDXH)	mm	680x1070x1820	680x1070x1820

DIELECTRIC TANK:

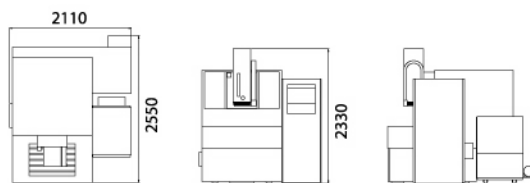
ITEM	UNIT	D53P	D53
Capacity	L	600	600
Pump	HP	0.85HPx1,0.5HPx2	0.85HPx1
Net weight	kgs	280	180
Filter method		Paper x 2 pcs	Paper x 2 pcs
Outside dimensions(WXDXH)	mm	2060x1000x1160	2060x800x1160

STANDARD ACCESSORIES:

- Paper filters 1 set
- Tool box 1 pcs
- Flushing nozzle 1 set
- Drill chuck 1 pcs
- Clamping kit 1 set
- Electrode holder 1 pcs
- Halogen work lamp 1 pcs
- Leveling pads 1 set

OPTIONAL ACCESSORIES:

- Auto fire extinguisher
- Permanent magnetic table
- Dielectric cooler
- Auto electrode Changer
- C axis
- Spare PCB set



JMNC53P+NP50/75+D53P LAYOUT



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