



JOEMARS MACHINERY & ELECTRIC INDUSTRIAL CO., LTD.



認證通過



台灣精品



**SUPER DRILL EDM**

*FASTER*

**DRILL HOLES JUST IN SECONDS !!**

## **SUPER DRILL EDM** **JM325D, JM528D**



**JM325D**



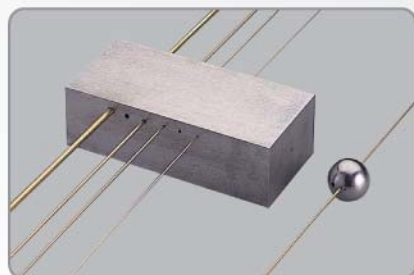
**JOEMARS JM325D & JM528D SUPER DRILL EDM** are specially designed for drilling hard materials, such as hardened steel or alloys, tungsten carbide in ranges of  $\varnothing 0.2\text{mm}$  -  $\varnothing 3.0\text{mm}$ .

### **ADVANCED TECHNOLOGY FROM JOEMARS, -ALWAYS TOWARD FUTURE**

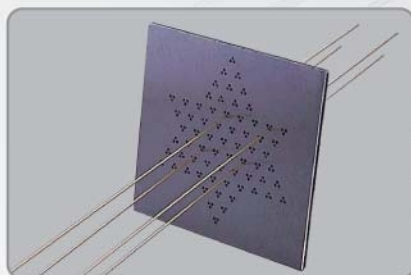
A newly developed sparking circuits special for SUPER DRILL EDM to enhance machining speed, excellent flushing, lower wear & higher accuracy.

# JM325D, JM528D R, HIGHER PRECISION

## A WIDE RANGE OF APPLICATIONS:



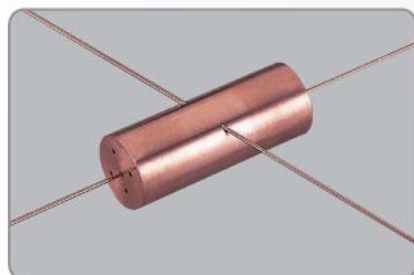
■ Pre-hole drilling of workpiece for wire cut.



■ Machining of coolant holes.



■ Deep hole drilling in ejector.



■ Drilling flushing holes in copper electrode.



■ Blind holes drilling.



■ Machining holes on inclined faces or in difficult position.

## Machine specifications:

ITEM	MODEL	JM325D	JM528D
Work table size		460x210 mm	600x300 mm
X, Y travel		330x200 mm	350x250 mm
Z Ram servo travel		345 mm	345 mm
W axis		-----	200 mm
Guide travel		150 mm	150 mm
Max. workpiece weight		100 kgs	450 kgs
Electrode size		Ø0.2mm - Ø3.0mm	Ø0.2mm - Ø3.0mm
Max. electrode length		400 mm	400 mm
Ram platen to worktable		120~270 mm	25~375 mm
Machining dielectric		Distilled water	Distilled water
Capacity of dielectric		10 Lx2	10 Lx2
Machine weight		620 kgs	900 kgs
machine dimension		865x1465x2070 mm	1020x1545x2070 mm

\* All specifications and design are subject to change without notices.

## Generator:

Max. current output	25A
Peak current settings	10 steps (0-9)
C-box setting	10 steps (0-9)
T-on settings	20 steps (0-19)
T-off settings	20 steps (0-19)
Gap voltage settings	10 steps (0-9)
Servo control	stepless (VR control)

# THE BEST LEA

- **"FUZZY" control system**  
Most admirable man machine interface. Easy to learn, easy to operate.
- **A new starter can do a good job only in 5 minutes.**
- **No more headache for learning.**



**JM528DZ**



**JM325DZ**

## FEATURES:

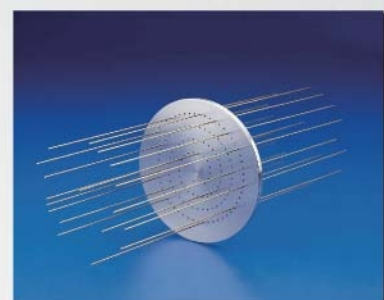
- 100 Sets machining condition memories: Can store 100 sets user machining condition.
- "Fuzzy" control circuits: Only input (A)
- Machining materials, (B) Electrode diameter, (C) Electrode wear. New starter learns how to operate on in 5 minutes.
- Electrode will automatically retract to home point when arriving depth, greatly reduce moving time.
- Z axes coordinate will automatically set to zero when finding edge.
- "Off time" will be adjusted when machining is not stable, if unstable situation over a certain time, sparking will be stopped.
- Special high pressure pump design, water come out quickly and with pressure releasing control system in order to reverse water without any dropping.
- Machining parameters can be modified temporarily while machining, without affecting the stored parameter.

# JM325DZ, JM528DZ LEADER IN THE FUTURE!

1. 100 sets machining condition memories: Can store 100 sets user machining condition.
2. 6 kinds machining parameters: includes peak current, capacitor, on time, off time, sparking gap, and Servo sensitivity.
3. Function of choosing "Fuzzy" machining condition: through (a) Machining materials, (b) Electrode diameter, (c) Electrode wear, to choose the best machining conditions.
4. Includes 3 axes DRO system: X, Y axes use linear scale, Z axis uses encoder.
5. Five kinds of alarm indicators: will be lightened when depth arrival, arcing, low dielectric level, for safety, and a short on electrode and workpiece.
6. Anti-hitting system for electrode.
7. Electrode will automatically retract when arriving depth: Through DRO counter to set home point, electrode wear, and machining depth. The bottom of electrode will automatically retract to home point when arriving depth.
8. Using "MOSFET" sparking circuits, suitable for tungsten carbide, hard alloys, hard steel, and powder metallurgical.
9. Electrode range from  $\varnothing 0.2$  to 3.0 mm, apply to slanting, spherical, and curved workpieces machining.
10. Arcing protecting circuits: automatically adjust "off time" when machining is not stable. If arcing over certain time, sparking will be automatically stopped.
11. Special high pressure pump design, water come out quickly and with pressure releasing control system in order to reverse water without any dropping.
12. Machining parameters can be modified temporarily while sparking, without affecting the stored parameters.



■ Multiple holes machining.



■ Collant holes machining.

## ■ Machine specifications:

ITEM	MODE	JM325DZ	JM528DZ
Work table size		460x210 mm	600x300 mm
X, Y travel		330x200 mm	350x250 mm
Z Ram servo travel		345 mm	345 mm
W axis		-----	200 mm
Guide travel		150 mm	150 mm
Max. workpiece weigh		100 kgs	450 kgs
Electrode size		$\varnothing 0.2$ mm - $\varnothing 3.0$ mm	$\varnothing 0.2$ mm - $\varnothing 3.0$ mm
Max. electrode length		400 mm	400 mm
Ram platen to worktab		120~270 mm	25~375 mm
Machining dielectric		Distilled water	Distilled water
Capacity of dielectric		10 Lx2	10 Lx2
Machine weight		620 kgs	900 kgs
machine dimension		1090x1465x2070 mm	1090x1545x2070 mm

\* All specifications and design are subject to change without notices.

## ■ Generator specifications:

ITEM	MODE	JM325DZ	JM528DZ
Power input		200 / 220 / 346 / 380 / 415 / 440 3 phase VAC	200 / 220 / 346 / 380 / 415 / 440 3phase VAC
Max. power consumption		3.5 KVA	3.5 KVA
Max. peak current		38 A	38 A
Sparking condition number		100sets (0 ~ 99)	100sets (0 ~ 99)
Peak current setting		15 steps (0.3A ~ 38A)	15 steps (0.3A ~ 38A)
Capacitor setting		16 steps (0 ~ 15)	16 steps (0 ~ 15)
On time setting		99 steps (1 ~ 99)	99 steps (1 ~ 99)
Off time setting		99 steps (1 ~ 99)	99 steps (1 ~ 99)
Sparking gap setting		16 steps (1 ~ 16)	16 steps (1 ~ 16)
Servo sensitivity setting		100steps (0 ~ 99)	100steps (0 ~ 99)

# NO.1 PERFORMANCE

- All supported design to provide the high accuracy and stability of work piece.
- Half-submerged work tank for user-friendly design.
- Mechanical body, water tank and power supply system (generator) are all separated.



**DNC645T+DN38**

## **Mechanical Features of DNC645T:**

- 1.Hardened stainless steel work table and all supported design to provide the high accuracy and stability of work piece.
- 2.Welding parts are all sealed and balanced to ensure high rigidity and well thermo-balance.
- 3.High precision ball-screw applied on each axis, X/Y axis with big diameter pin preloading system and with linear guide way.
- 4.High flow rate water pump, saves water supply time for work tank.
- 5.Half-submerged work tank for user-friendly design.
- 6.Stainless steel water tank and work tank, de-ion exchange resin and with paper filter function to create the working performance and accuracy.
- 7.Rotary electrode auto tool change system (ATC system) equipped.
- 8.Mechanical body, water tank and power supply system (generator) are all separated to avoid water with humidity influence the machine performance. Also can increase machine life time with heavier duty job requests.
- 9.Well supported ATC system to bring high accuracy when machining.
- 10.Simple mechanical & water tank, saves space for users and easy for maintenance.
- 11.High pressure pump with air pressure control circuit, to bring high stability.

# DNC645T+DN38

## CE! YOUR BEST PARTNNER!

### Futures of DN38:

- Chinese / English display
- Metric and GB unit display and program setting  
Machine Coordinate Work Coordinate and Following Error display
- Three manual modes (continuous, increment movement, without protection)
- Home search and position
- Automatic edge, Center of two PT., Locate Center, Locate Corner, work axis Rotation, Mirror.
- GM Code Program and 500 blocks of workpiece program
- Help on Line.
- DXF file and WireCut Program Transfer
- Provides the dialog program edit function of Rectangular Pattern. Circle Pattern etc.
- Provides the function of calling machining sub-program with max. 8 Layers
- Has multi-set machining parameters database, each set of database can store 100 set of machining parameter of operators.
- Can store 100 machining depths of 100 operators
- Single and Multi Hole Machining
- Machining path display
- Machining Simulation
- Software limit
- Program Set(Start block and end block setting)
- When the machining reach the depth, the electrode will automatically detect and move to the fixed height of the machining surface.
- Single/ Multi Hole Machining when the electrode is run out during the machining, shift to the function of automatic compensation.
- Variable Depth Machining
- Automatic Electrode Change (DNC645T only)
- RS-232 file transfer
- Using "MOSFET" sparking circuits, suitable for tungsten carbide, hard alloys, hard steel, and powder metallurgy.

### Machine specifications:

ITEM	MODE	DNC645T	DNC645
Work table size	mm	730x540	730x540
X ,Y axis travel	mm	650x450	650x450
Z axis travel	mm	400	400
W axis travel (Spindle servo travel)	mm	400	400
Max. workpiece weight	kgs	1500	1500
Electrode size	mm	Ø0.2 ~Ø3.0 (Ø0.2 ~Ø6.0 is optional )	Ø0.2 ~Ø3.0 (Ø0.2 ~Ø6.0 is optional )
Max. electrode length	mm	400	400
Guide plate to work table	mm	62 ~ 462	62 ~ 462
Max. workpiece dimensions (WxDxH)	mm	1020x950x260 / 680x950x400	1020x950x260 / 680x950x400
Machining dielectric		Distilled water	Distilled water
Dielectric tank capacity	l	280	280
Machine weight	kgs	2000	2000
Machine dimension (WxDxH)	mm	1500x1745~2195 x2150~2550	1500x1745~2195 x2150~2550
ATC tool number	pcs	20	Without ATC function

### Generator specifications:

ITEM	MODE	DN38
Power input		200/220/346/380/415/440 3 phase VAC
Maximum. power consumption		5 KVA
Max. peak current		38A
Sparking condition number		100 sets ( Each file)
On time setting		99 steps ( 1~ 99)
Off time setting		99 steps (1 ~ 99)
Peak current setting		15 steps ( 1~ 15)
Capacitor setting		16 steps ( 0 ~ 15)
Gap voltage setting		0 ~ 100
Max. speed setting of spark machining.		0 ~ 100%
Servo sensitivity		0 ~ 100%
CNC controller		Industrial PC-based CNC controller
Monitor		12.1" TFT LCD
Input resolution		0.001 mm
Command code format		GM code
Net weight		320 kgs
Outside dimensions		680x1070x1820 mm

\* All specifications and design are subject to change without notices.

### Standard accessories:

- Tool box ----- 1 Set
- Stainless clamping kits ----- 1 Set
- Electrode holder  $\varnothing 0.2\sim\varnothing 3.0\text{mm}$  ----- 1 Set
- Electrode ceramic guide  $\varnothing 1.0\text{mm}$  ----- 1 Pc
- Electrode tube  $\varnothing 1.0\text{mm}$  ----- 10 Pcs
- Dielectric tank ( 10 liter ) -For D/DZ only ----- 2 Sets
- Rubber water stopper ----- 10 Pcs
- Filter ----- 1 Set
- Operation manual ----- 1 Set

### Optional accessories :



- Filter
- Brass / copper electrode Tube (Length 300mm or 400mm).
- Ceramic guide & rubber water stopper.
- Range:  $\varnothing 0.2\sim\varnothing 3.0\text{mm}$ , per 0.1 mm increment.



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