



JOEMARS

JOEMARS MACHINERY & ELECTRIC INDUSTRIAL CO., LTD.



**SUPER DRILL EDM
D SERIES**

JM325D, JM528D FA

"PAST" IS WHAT YOU HAVE DONE, "

DRILL HOLES JUST IN SECONDS!
SUPER DRILL EDM



JM325D & JM528D

SUPER DRILL EDM

DRILL HOLES JUST IN SECONDS!



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.

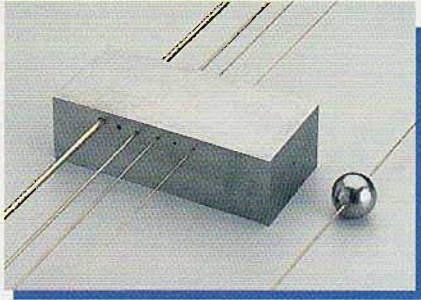


JM528D

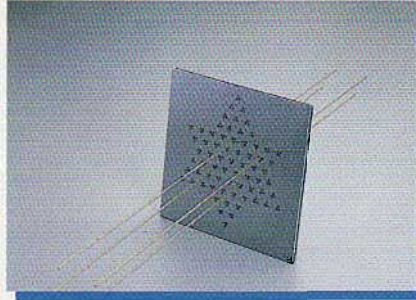
STER, HIGHER PRECISION

FUTURE" IS WHAT YOU ARE GOING TO CHOOSE!

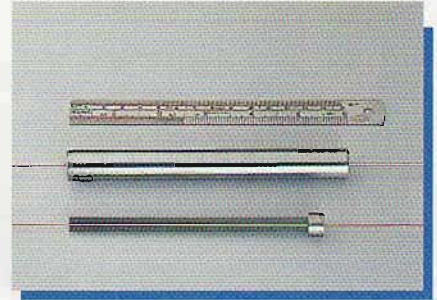
A WIDE RANGE OF APPLICATIONS:



■ Pre-hole drilling of workpiece for wire cut.



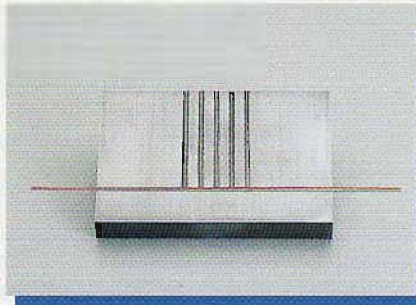
■ Machining of coolant holes.



■ 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		100-250 mm	5-355 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)

DRILL HOLES JUST IN SECONDS! SUPER DRILL EDM

JM325DZ, JM528DZ

"PAST" IS WHAT YOU HAVE DONE, "



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.

- "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

MORE ECONOMICAL!!

FUTURE" IS WHAT YOU ARE GOING TO CHOOSE!

JOEMARS THE FIRST BRAND, THE BEST LEADER IN THE FUTURE!

THE FEATURES OF DZ:

- 100 sets machining condition memories: Can store 100 sets user machining condition.
- 6 kinds machining parameters: includes peak current, capacitor, on time, off time, sparking gap, and Servo sensitivity.
- Function of choosing "Fuzzy" machining condition: through (a) Machining materials, (b) Electrode diameter, (c) Electrode wear, to choose the best machining conditions.
- Includes 3 axes DRO system: X, Y axes use linear scale, Z axis uses encoder.
- Five kinds of alarm indicators: will be lighten when depth arrival, arcing, low dielectric level, for safety, and a short on electrode and workpiece.
- Anti-hitting system for electrode.
- 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.
- Using "MOSFET" sparking circuits, suitable for tungsten carbide, hard alloys, hard steel, and powder metallurgical.
- Electrode range from $\varnothing 0.2$ to 3.0 mm, apply to slanting, spherical, and curved workpieces machining.
- Arcing protecting circuits: automatically adjust "off time" when machining is not stable. If arcing over certain time, sparking will be automatically 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 sparking, without affecting the stored parameters.

Machine specifications:

ITEM	MODEL	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 weight		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 worktable		100-250 mm	5-355 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

Generator specifications:

ITEM	MODEL	JM325DZ	JM528DZ
Power input		200 / 220 / 346 / 380 / 440 / 575 / 600 3 phase VAC	200 / 220 / 346 / 380 / 440 / 575 / 600 3 phase VAC
Max. power consumption		3.5 KVA	5 KVA
Max. peak current		38A	38A
Sparking condition number		100 sets (0~99)	100 sets (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		100 steps (0~99)	100 steps (0~99)

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DRILL HOLES JUST IN SECONDS! SUPER DRILL EDM

DNC42+DN40 MORE

"PAST" IS WHAT YOU HAVE DONE, "

Main Mechanical feature of DNC42:

1. Stainless worktank and watertank design.
2. High rigidity mechanical invention, fine thermal balance development.
3. Stainless workpiece design.
4. Machine base designed to assure the accurate stability.



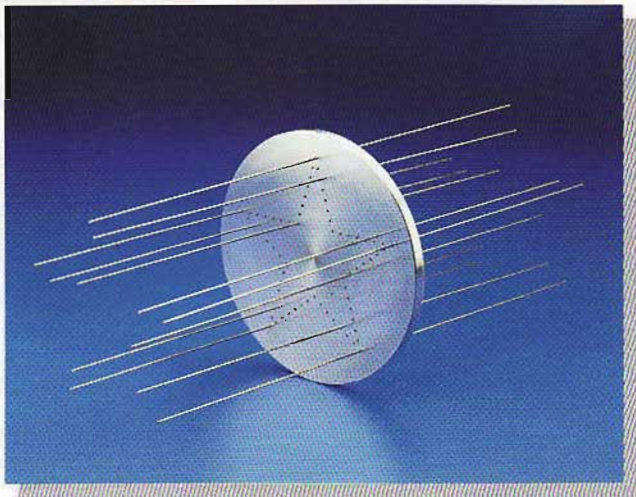
DNC42+DN40

THE FEATURES OF DN40:

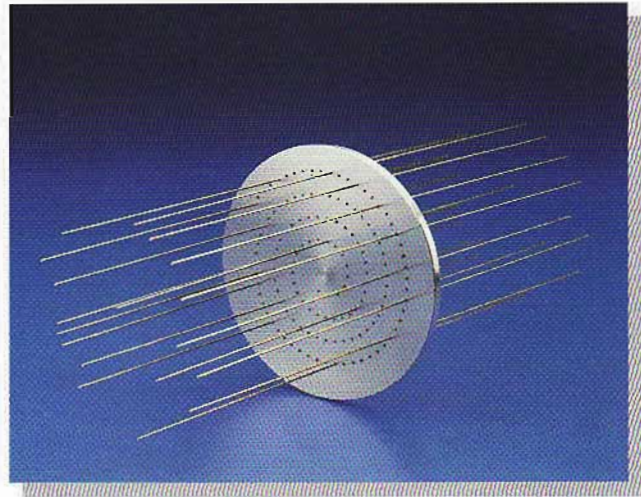
1. 100 sets machining condition memories: Can store 100 sets user machining condition.
2. 6 kinds machining parameters: includes peak current, capacitor, on time, off time, sparking gap, and Servo sensitivity.
3. Function of choosing "Fuzzy" machining condition: through (a) Machining materials, (b) Electrode diameter, (c) Electrode wear, to choose the best machining conditions.
4. Five kinds of alarm indicators: will be lighten when depth arrival, arcing, low dielectric level, for safety, and a short on electrode and workpiece.
5. Anti-hitting system for electrode.
6. Using "MOSFET" sparking circuits, suitable for tungsten carbide, hard alloys, hard steel, and powder metallurgical.
7. Electrode range from $\phi 0.2$ to 3.0 m/m, apply to slanting, spherical, and curved workpieces machining.
8. Arcing protecting circuits: automatically adjust "off time" when machining is not stable. If arcing over certain time, sparking will be automatically stopped.
9. Special high pressure pump design, water come out quickly and with pressure releasing control system in order to reverse water without any dropping of water.
10. Using Heidenhain TNC 310 controller with a great amount of "User Cycle".
11. X, Y, Z 3 axes can move at the same time.
12. Includes RS 232-C/V.24 interface, machining programs can be transferred by this interface to external periphery.
13. Background editing function: available to proceed another program of workpiece editing while machining.
14. Dialogue type programs editing function provides a simple operation.
15. TNC 310 controller can store 64 programs, Max. 6000 blocks.
16. Subprogram and program section can be repeatedly performed.
17. Coordinate datum shift function.
18. Mirror image function.
19. Coordinate rotation function.
20. Scaling factor function. (to enlarge or reduce)
21. Probing function for finding hole center, workpiece center, X axis center, Y axis center.
22. Workpiece corner coordinate finding function.

POWERFUL, HIGH QUALITY

FUTURE" IS WHAT YOUR ARE GOING TO CHOOSE!



■ Multiple holes machining.



■ Collant holes machining.

Machine specifications:

ITEM	MODEL	DNC42
Work table size	mm	650x400
X, Y travel	mm	420x320
Z Ram servo travel	mm	345
W axis	mm	250
Guide travel	mm	150
Max. workpiece weight	kgs	900
Electrode size	mm	ø 0.3~ ø 3.0
Max. electrode length	mm	400
Ram platen to worktable	mm	20~420
Machining dielectric		Distilled water
Capacity of dielectric	l	400
Machine weight	kgs	1200
machine dimension	mm	1200Wx1350Dx2110H

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

Generator:

ITEM	DN40
Power input	200 / 220 / 346 / 380 / 440 575 / 600 3 phase VAC
Max. power consumption	5 KVA
Max. peak current	38 A
Sparking condition number	100 sets (0 ~ 99)
Peak current setting	15 steps (0.3A ~ 38A)
Capacitor setting	16 steps (0 ~ 15)
On time setting	99 steps (1 ~ 99)
Off time setting	99 steps (1 ~ 99)
Sparking gap setting	16 steps (1 ~ 16)
Servo sensitivity setting	100 steps (0 ~ 99)
CNC control axes	3 axes
Program memory	128KB
Program files	64 files (Max. 6000 NC blocks)
Input resolution	0.001mm
Interpolation	Linear in 3 axes circular in 2 axes
Block processing time	40 ms
Data interface	RS-232-C/V.24
Program input	HEIDENHAIN plain language
Tool table	Tool table for 99 tools
Subprogramming	Program section repeats and subprograms
Background editing	standard
Fixed cycles	Many kinds
Coordinate transformation	Shift, rotation, mirror and scaling
Position capture	Actual position can be transferred directly into the program

COMPACT DESIGN!

SIMPLE OPERATION!

NO.1 PERFORMANCE!!

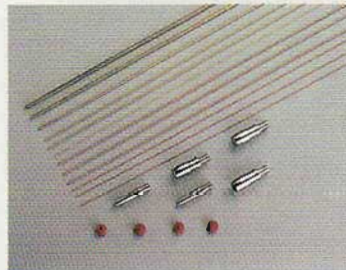
YOUR BEST PARTNER-

JOEMARS SUPER DRILL EDM

Standard accessories:

- Tool box 1 Set
- Stainless clamping kits 1 Set
- Electrode holder $\varnothing 0.2\text{--}\varnothing 3.0\text{mm}$ 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) 2 Sets
- Rubber water stopper 10 Pcs
- Filter 1 Set
- Flashing nozzle 1 Set
- Operation manual 1 Set

Optional accessories :



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



The View Of Factory



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