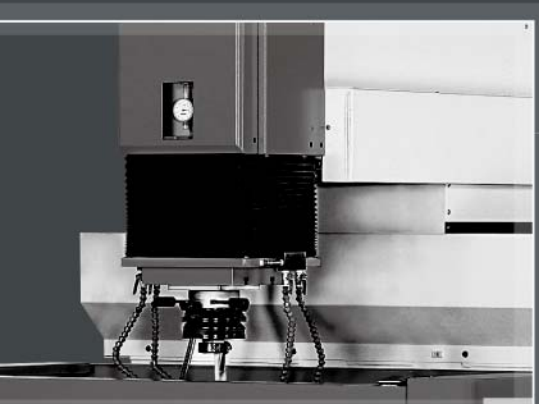




Super High Quality For Precision
Heavy Duty Oil Country LATHE

ZNC

ELECTRIC DISCHARGE MACHINE



JS EDM

To be Perfect is Our Nature



"EDM Technology Leader Since 1982"
Smart e , Wise Technology

ZNC

ELECTRIC DISCHARGE MACHINE

- High-Quality
- High-Stability
- High-Performance
- Multi-Functions
- Easy-Operation

EB3010N-2H



CNC

MACHINERY SALES AUSTRALIA

<http://www.jsedm.com>

JS EDM EVOLUTION >>

- 1983 - "JS" is the first manufacturer to utilize DC servo motor to control EDM in Taiwan.
- 1985 - "JS" developed the first CNC ORBITING- CUT SYSTEM with patent no 36630 of CNS.
- 1986 - "JS" purchased a 5950 square meters of land in Taichung Industrial Park.
- 1987 - The new factory was built.
- 1989 - The CNC ORBITING- CUT SYSTEM was awarded as the "Best Product Design" in Taiwan.
- 1991 - "JS" developed to the next level by expanding the R&D department and upgrade the technology for CNC EDM & Wire Cut EDM.
- 1996 - "JS" obtained the "CE Certificate" of CNC EDM.
- 1997 - "JS" obtained ISO-9002 certification.
 - CNC EDM and Wire Cut EDM both obtained good reputation.
- 1999 - "JS" is the first company to develop the technology for Wire Cut EDM to adapt AC power.
 - "JS" obtained the CE Certificate based on the new technology.
- 2001 - The Submerge type Wire Cut EDM has developed.
- 2002 - New CNC control and EDM system has developed and passed the performance test.
- 2005 - Initially design the Auto Wire Threading for Wire Cut EDM.
- 2006 - Developing Fine Cutting technology for Wire Cut EDM with patent pending.
- 2009 - Developing new technology to automatize Wire Cut EDM.
- 2010 - Developing PCD machine.
- 2012 - Upgrading the performance of Wire Cut EDM to be more accurate by installing linear servo motor on X & Y axis and allow the machine using smaller diameter wires during machining.
- 2013 - Tilt Machining is allowed in EDMs.
- 2014 - Designing various kinds of EDMs.
- 2015 - Designing customize robot arm.



EBN control screen description (AI / FUZZY / Control) >>



EBN (ZNC) controller specification >>

1. Auto Index has been introduced to the controlling system to be more user friendly. The new function allows the user to select the conditions (material of the work piece, depth, working area, etc.) in order to generate the sparking parameter.
2. Sparking parameters (ON Time, OFF Time, Working Time, Jump Height, Jump Height, Jump Speed, etc.) are able to be adjusted during machining via FUZZY in order to improve the sparking efficiency and the quality of the final product.
3. Color LCD. PC Base, 32bit Industrial Level Computer (IPC).
4. Chinese / English and Inch / Metric Mode.
5. The Spark Circuit Design includes MOS-FET high power transistor and High Speed POWER-SINK reduce electrode wear and increase working speed.
6. Reduce electrode wear and increase working speed.
7. Modules insert card design is used in power controller for easily maintain.
8. Two groups of coordinates are both switchable and editable ; this helps user to set the reference point easier.
9. Allow user to have the option of choosing absolute depth or relative depth based on the preference.
10. Sparking parameter and depth input are displayed under the same mode for user to read easier.
11. 200 lines of working conditions are provided in the system, user can select any block as start and ending line. In addition, the system can save up to 50 files.
12. The Jog mode includes 3 functions, Jog, Feed and Protect / Unprotect switch. Regarding to the Jog and Feed function, Jog mode has 4 speeds (x5.x50.x250.x500μm) allow user to have the flexibility when adjusting the position of the workpiece and z-axis.
13. The Z-Axis Alignment function can be operated without using Manual Edge Find so that the time for edge find is reduced. The value of current can be changed as needed.
14. EDM allows the cutting process to be automatized, start from rough cut to fine finish.
15. A standard EDM features the Z-Axis lock function allows to expand the orbiter.
16. The system features the Center Find function which helps the user during alignment on a circular workpiece.
17. The Z-axis features multiple kinds of slag tapping. This function is utilized based on various of machining such as deep machining, corner sharpening, machining at large area, machining on thin workpiece, tilt machining, etc.

EBN (ZNC) Machine Structure >>

1. The machine frame has run through FC30 by having heat treatment and annealing process to ensure the metal with high toughness and prevent deformation.
2. The working table has gone through high frequency induction hardening and surface polishing to increase hardness and decrease tolerance.
3. Ball screws are utilized in X, Y Axis. (EB304B, EB606N, EB707B, EB808B)
4. One V and one flat design for maximum accuracy. (EB304B, EB606N, EB707B, EB808B)
5. The contacting faces of X, Y Axis are TURICE-B for smoother movement. (EB304B, EB606N, EB707B, EB808B)
6. Linear Guide Way and High Accuracy screw are used on Z axis, with PWM servo system (Same class as CNC model) can perform maximum working efficiency. (EB304B, EB606N, EB707B, EB808B)
7. Back slide is provided for Z axis. (EB304B, EB606N, EB707B, EB808B)
8. Remote Controller is provided to the user.
9. Model that travels more than 800mm on both X, Y axis (EB860N), utilizes precision ball screws on X, Y, Z axis.
10. Model that travels more than 800mm on both X, Y axis (EB860N), utilizes precision Linear Guide Way on X, Y, Z axis.
11. A standard Up/Down door is installed in model that travels more than 800mm on both X, Y axis (EB860N).
12. Model that travels more than 800mm on both X, Y axis (EB860N), the movement of X, Y axis are controlled by servo motor.
13. Model that travels more than 800mm on both X, Y axis (EB860N), the movement of the X, Y axis are relied on a movable column.

Standard accessories >>



Optional Accessories >>

1. Super Sparking : Able to generate a high energy pulse of current instantly. This function is used on steel or tungsten steel alloy that have 60 degree of hardness or above.
2. DC servo motor control is able to add on X/Y axis for model EB707B & EB808B.
3. The resolution of the linear guide can upgrade to 0.001mm.
4. All models (except for 304B & 606N) can upgrade to PNC or CNC control system.



Specifications >>

	EB304B	EB606N	EB707B	EB808B	EB860N	EB1060N	EB1270N	EB1470N
Capacity of work tank	850x530x340mm	1100x600x400mm	1170x700x430mm	1700x1000x550mm	1800x1100x620mm	1900x1100x620mm	2100x1250x620mm	2250x1350x620mm
Work table size	600x300mm	700x400mm	800x450mm	1100x600mm	1200x700mm	1250x750mm	1350x820mm	1850x1000mm
Longitudinal travel (X-axis)	300mm	400mm	500mm	700mm	800mm	1000mm	1200mm	1400mm
Cross travel (Y-axis)	250mm	300mm	400mm	550mm	600mm	600mm	700mm	700mm
Z axis travel (Z-axis+W-axis)	150+200mm	180+250mm	200+300mm	250+300mm	500mm	500mm	500mm	500mm
Distance between platen to table	160~510mm	640mm	240~740mm	250~830mm	450~950mm	450~950mm	510~1010mm	550~1050mm
Max. Electrode weight	60kgs	100kgs	150kgs	250kgs	350kgs	350kgs	400kgs	450kgs
Max. Work piece weight	500kgs	1500kgs	1500kgs	2000kgs	4000kgs	4500kgs	5000kgs	6000kgs
Fluid tank capacity	300L	350L	550L	1250L	1400L	1600L	1900L	2100L
Machine outside dimensions (WxDxH)	2100x1300x2000mm	2500x1500x2250mm	2800x1600x2250mm	3300x2000x2300mm	3400x3250x3200mm	3600x3250x3200mm	4000x3400x3250mm	4300x3400x3250mm
Machine weight	1000kgs	1800kgs	2000kgs	3100kgs	4700kgs	5200kgs	6500kgs	8000kgs
Max. Machining current	30A 60A(Optional)	60A 90A(Optional)	60A 90A(Optional)	60A 90A(Optional)	90A 120A(Optional)	90A 120A(Optional)	90A 120A(Optional)	90A 120A(Optional)
Max. Power input	4KVA 7KVA	7KVA 10KVA	7KVA 10KVA	7KVA 10KVA	10KVA 13KVA	10KVA 13KVA	10KVA 13KVA	10KVA 13KVA
Max. Machining rate (mm ³ /min)	200 400	400 600	400 600	400 600	600 800	600 800	600 800	600 800
Min. Electrode wear ratio	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Best surface / Ra	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm
Min. D. R. O. resolution(mm)	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm

Specifications >>

	EB1510N	EB1675N	EB1880N	EB2010N	EB2210N	EB2210N-2H	EB3010N	EB3010N-2H
Capacity of work tank	2300x1700x800mm	2400x1320x700mm	2600x1320x700mm	2700x1700x800mm	2900x1700x800mm	2900x1700x800mm	3900x1700x800mm	3900x1700x800mm
Work table size	1580x1100mm	1850x1000mm	1850x1000mm	2250x1100mm	2250x1100mm	2250x1100mm	3100x1100mm	3100x1100mm
Longitudinal travel (X-axis)	1500mm	1600mm	1800mm	2000mm	2200mm	1550(SM)775(DM)mm	3000mm	2550(SM)1275(DM)mm
Cross travel (Y-axis)	1000mm	750mm	800mm	1000mm	1000mm	1000mm	1000mm	1000mm
Z axis travel (Z-axis+W-axis)	600mm	550mm	600mm	600mm	600mm	600mm	600mm	600mm
Distance between platen to table	650~1250mm	500~1050mm	450~1050mm	660~1260mm	660~1260mm	720~1320mm	660~1260mm	720~1320mm
Max. Electrode weight	500kgs	450kgs	500kgs	500kgs	500kgs	500kgs	500kgs	500kgs
Max. Work piece weight	11000kgs	6500kgs	7000kgs	9500kgs	9500kgs	10000kgs	16000kgs	16000kgs
Fluid tank capacity	3500L	2600L	2800L	3800L	4100L	4700L	5800L	6000L
Machine outside dimensions (WxDxH)	4600x4800x3620mm	4800x3800x3200mm	5000x4000x3200mm	5200x4500x3570mm	5500x4600x3570mm	6500x4600x3570mm	6000x4600x3620mm	7000x4600x3620mm
Machine weight	14500kgs	8500kgs	9000kgs	12500kgs	13500kgs	15000kgs	19000kgs	21000kgs
Max. Machining current	90A 120A(Optional)	90A 120A(Optional)	90A 120A(Optional)	90A 120A(Optional)	120A	120A	120A	120A
Max. Power input	10KVA 13KVA	10KVA 13KVA	10KVA 13KVA	13KVA 18KVA	13KVA	13KVA	13KVA	13KVA
Max. Machining rate (mm ³ /min)	600 800	600 800	600 800	600 800	800	800	800	800
Min. Electrode wear ratio	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
Best surface / Ra	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm
Min. D. R. O. resolution(mm)	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm	0.005mm

Note : • The data above is the test result base on certain working condition. The actual result will be varied depends on the input voltage, shape and size of electrode, spark condition, material of work piece and working fluid.

• All specifications and designs are subject to change without notices.