

Creator CNC EDMs

Make Mould and Die Machining a Fast
and Easy Operation



CREATOR

DESIGNED TO HELP MOULD MAKERS STAY AHEAD

With the Creator CNC Series EDM, you get full capability to produce the ultimate in working efficiency, machining capabilities and surface finish. You also get some advanced design concepts that will enable you to reduce cycle time.

Each Creator CNC EDM features extra rigid machine construction, high performance power supply unit and advanced CNC control that assure maximum reliability and ease of operation. Creator also gives you the widest selection of models in the industry. You can choose the right model for your specific application.

RAM Type Machine Structure

- The ram type machine structure, combined with precision linear ways on 3 axes, assure extremely smooth movement and high accuracy.
- The structural parts are manufactured from high quality cast iron (FC-30), tempered and stress relieved for deformation-free performance.
- High precision and rigid spindle assembly assures excellent eroding performance.
- Table surface is hardened and precision ground, assuring high machining accuracy and long service life.
- Three axes movements are transmitted by precision ball screws.
- Three axes are driven by DC servo motors.
- Three axes are equipped with 1 μ linear scale for closed loop control.
- Central lubrication system.



Model	CNC-850	CNC-1060	CNC-1270
Table travel (X axis) mm / inch	800 / 31.6	1000 / 39.4	1200 / 47.2
Table travel (Y axis) mm / inch	500 / 19.7	600 / 23.6	700 / 27.6
Quill travel (Z1 axis) mm / inch	400 / 15.7	450 / 17.7	450 / 17.7

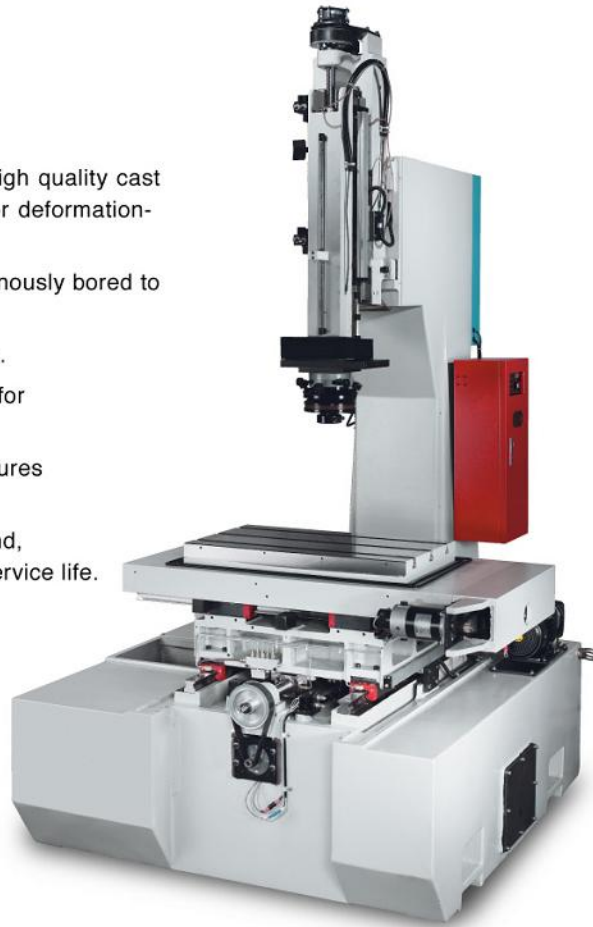
Model	CNC-1570	CNC-2010
Table travel (X axis) mm / inch	1500 / 59.1	2000 / 78.7
Table travel (Y axis) mm / inch	700 / 27.6	1000 / 39.4
Quill travel (Z1 axis) mm / inch	500 / 19.9	550 / 21.7



Model	CNC-230S	CNC-341S	CNC-430	CNC-640
Table travel (X axis) mm / inch	300 / 11.8	400 / 15.8	400 / 15.8	600 / 23.6
Table travel (Y axis) mm / inch	200 / 7.9	300 / 11.8	300 / 11.8	400 / 15.7
Quill travel (Z1 axis) mm / inch	180 / 7.1	320 / 12.6	320 / 12.6	350 / 13.7

C Type Machine Structure

- Compact construction with small footprint.
- The structural parts are manufactured from high quality cast iron (FC-30), tempered and stress relieved for deformation-free performance.
- Base, saddle column and spindle are synchronously bored to achieve the highest accuracy.
- "V" shaped and flat slideways on X and Y axis.
- Slideway surfaces are coated with Turncite-B for maximum wear resistance.
- High precision and rigid spindle assembly assures excellent eroding performance.
- Table surface is hardened and precision ground, ensuring high machining accuracy and long service life.
- "GRUNDFOS" horizontal pump.



CE Superior Quality with CE Approval

- Products with CE approval from "AMTRI VERITAS LIMITED".
- EDM series meet the standard of EC machinery directive 98/37/EC, low voltage directive 73/23/EEC, electro magnetic compatibility directive 89/336/EEC, CE marking directive 93/68/EEC.
- The research and development of new products will refer to the following standards :

- 1991 EN 292-1, EN292-2
- 1993 EN 418
- 1996 EN 954-1, EN1050
- 1997 EN 60204-1
- 2001 BS EN 12957



Model	CNC-230S	CNC-341S
Table travel (X axis) mm / inch	300 / 11.8	400 / 15.8
Table travel (Y axis) mm / inch	200 / 7.9	300 / 11.8
Quill travel (Z1 axis) mm / inch	180 / 7.1	320 / 12.6

Products Certificate





Standard Functions

- Built-in parameter list for standard materials.
- 50 sets of workpiece coordinates.
- Automatic depth table creating function.
- Automatic setting for square circular pattern.
- Machine trouble record function.

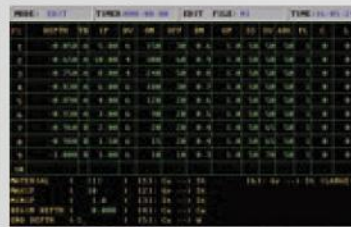
Optional Functions

- Path retrace orbital function.
- 3 D coordinate rotating function.
- 3 D coordinate rotating orbital function.
- Automatic offset function for C-axis.
- Automatic spark reset function.
- MPG function.
- C-axis simultaneous eroding.
- LORAN discharge orbit function.
- Cone type discharge orbit function.

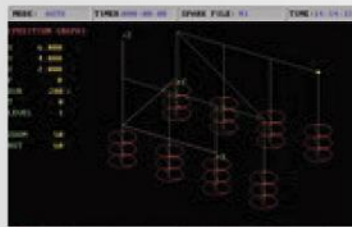
► Convenient Machining Programs Input Interface



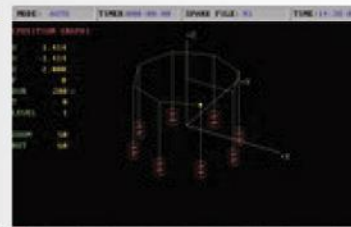
Conversational setting for machining hole positions list.



Conversational automatic creating of depths list.



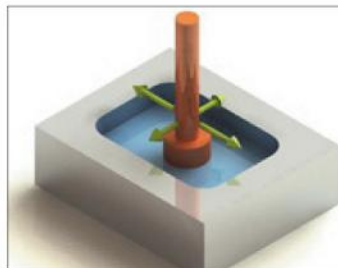
Machining mode simulation graphic.



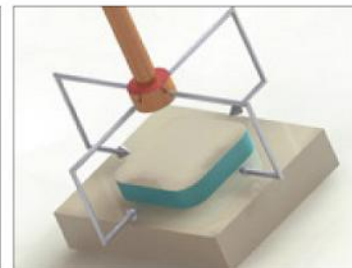
► Touch Point Function



The display provides convenient touch point function by automatic and manual modes, and 50 sets of touch point memory. The edge-search values are automatically memorized into machining programs.

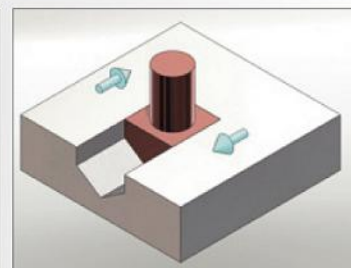
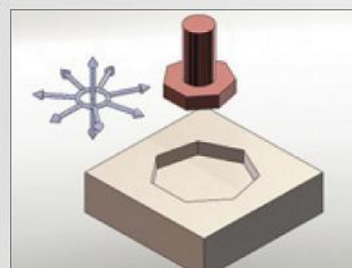
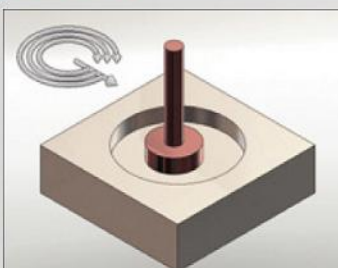


In addition to single point touch function, the control also allows for automatic internal center touch.



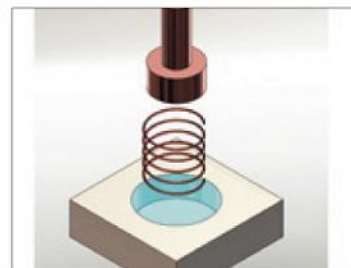
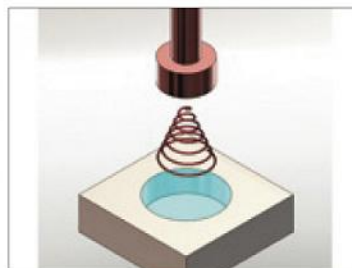
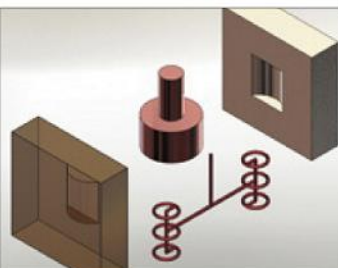
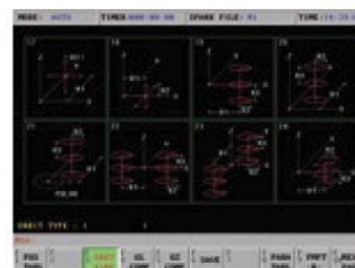
Automatic external center touch.

► Orbital Eroding Function (Standard orbital eroding function display)



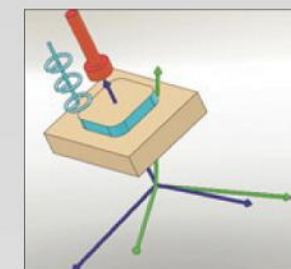
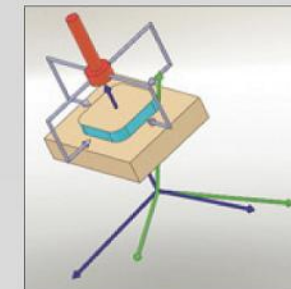
The orbital eroding function provides various orbital eroding modes. In addition to standard eroding modes, this function also provides complicated and advanced orbital eroding modes. When combining with the path return function of the controller, the machine can perform complicated inside chamfering operation.

► Orbital Eroding Function (Advanced orbital eroding function display)



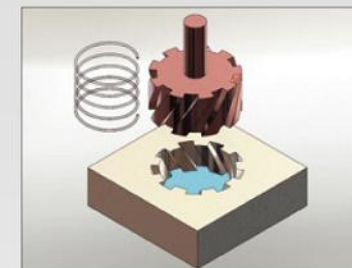
Standard LORAN and conical bumping LORAN functions.

► Coordinate rotation Function

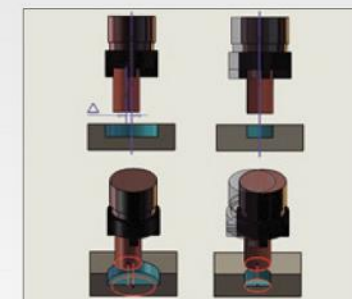


The coordinate rotation function permits machining axes to be rotated as desired. With this function, the machine can perform point touch after 3D rotation, single/multiple points machining or orbital eroding.

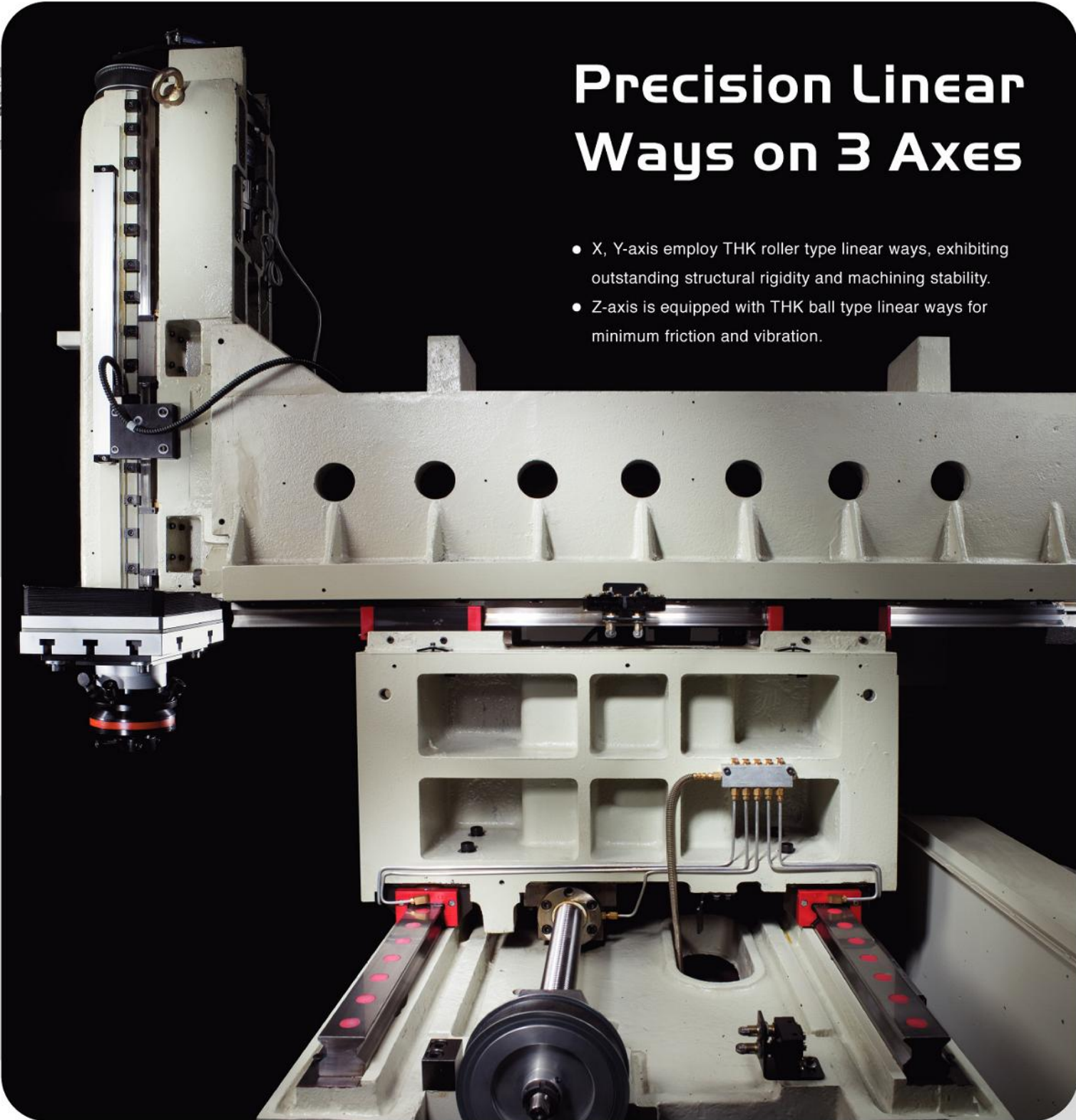
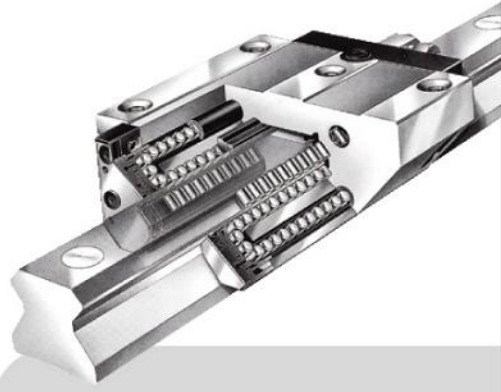
► C-axis Function



When applying the optional C-axis function, the C-axis and Z-axis can perform machining simultaneously. This function is suitable for helical eroding operation such as helical gear, etc.

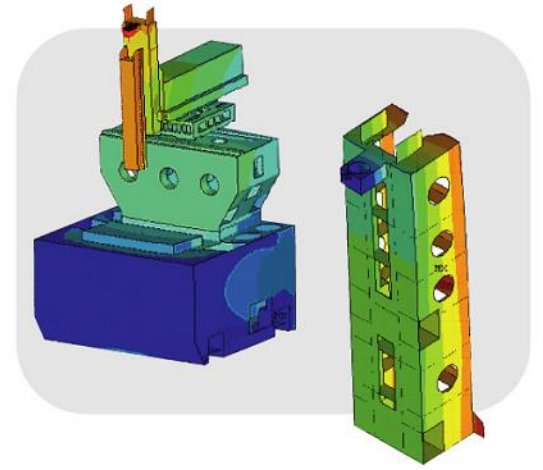


In addition to the standard angular positioning function, the C-axis also provides real time compensation function for rotating part. In case of mold offset on C-axis, the X and Y axis will move simultaneously according to rotating angle. This will ensure centering for part on C-axis.



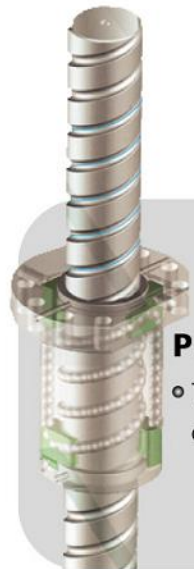
Precision Linear Ways on 3 Axes

- X, Y-axis employ THK roller type linear ways, exhibiting outstanding structural rigidity and machining stability.
- Z-axis is equipped with THK ball type linear ways for minimum friction and vibration.



Finite Element Analysis (FEA)

The structural parts of Creator CNC EDM are designed and analyzed by applying the advanced Finite Element Analysis (FEA). This enables Creator machines to achieve the best machine rigidity, stability and dynamic performance of operation.



Precision Ball Screw

- Three axes are transmitted by class C5 precision ball screws.



1 μ Linear Scale on 3 Axes

Three axes are equipped with FAGOR 1 μ differential type precision linear scales, providing fully closed circuit control. The linear scale features excellent anti-interfering signal performance while ensuring high positioning accuracy.

Advanced PC Based Control combined with Superior Power Supply Unit Dramatically Boost Eroding Efficiency!



- PC BASED controller
- PENTIUM 586 micro processor
- 30A - 100A working current

- 3D path working capacity
- Machine/human dialogue
- Auto parameter table



Features of CNC Control

- The control employs INTEL PENTIUM industrial grade master board.
- 15" TFT LCD monitor.
- Conversational operation interface.
- Automatic table type editing for 10-step machining programs creation.
- Tungsten steel, extra hard and special material eroding circuit.
- MPG handwheel for micrometric positioning adjustment.



Operational Interface

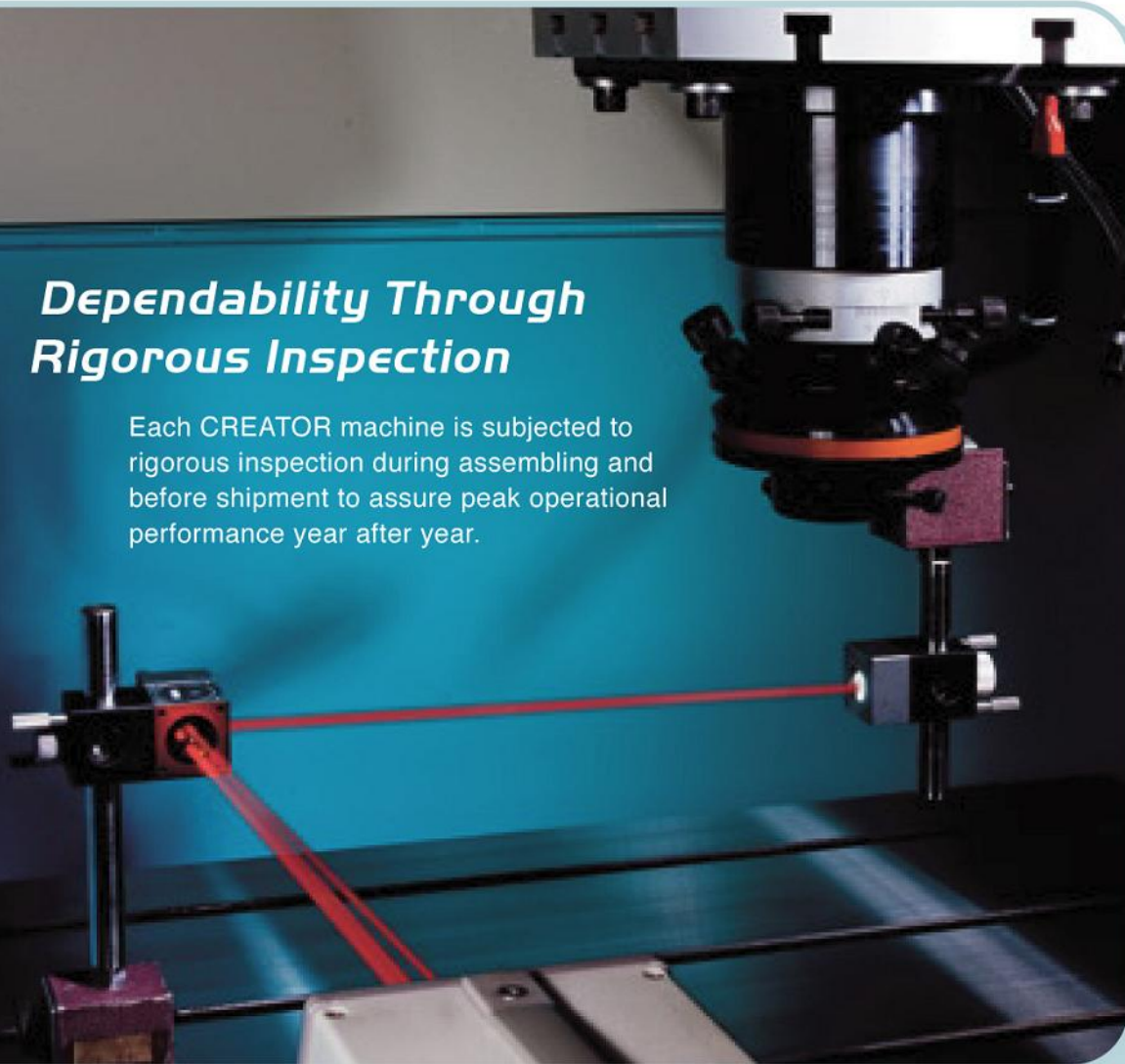
- Conversational Chinese/English operational interface.
- Graphic automatic touch mode interface.
- Table type program input interface.
- Selection type 2D/3D orbital setting.
- Self-diagnostic interface for system I/O.
- Graphic display interface for moving path.
- Table type program input interface.
- Selection type 2D/3D orbital setting.
- Self-diagnostic interface for system I/O.
- Graphic display interface for moving path.

Features of Power Supply Unit

- Isolated modular circuit design increases convenience of maintenance and stability of circuit.
- Fully digital discharge pulse control combined with the use of FPGA extra large IC components.
- This permits high efficiency discharge pulse control, minimizes ARC and greatly upgrades discharging efficiency.
- Power output system provides a choice of CR6C standard type or CR2C type for extra hard material machining.
- Extra hard discharge circuit is available upon request.

Dependability Through Rigorous Inspection

Each CREATOR machine is subjected to rigorous inspection during assembling and before shipment to assure peak operational performance year after year.



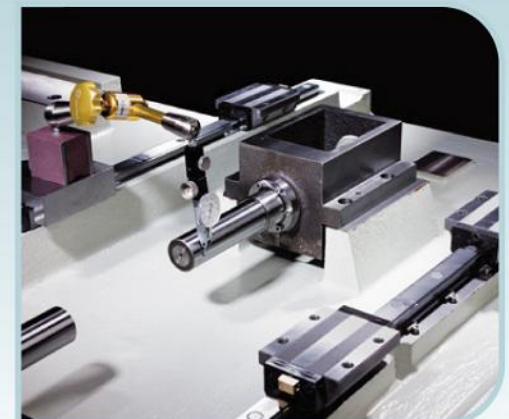
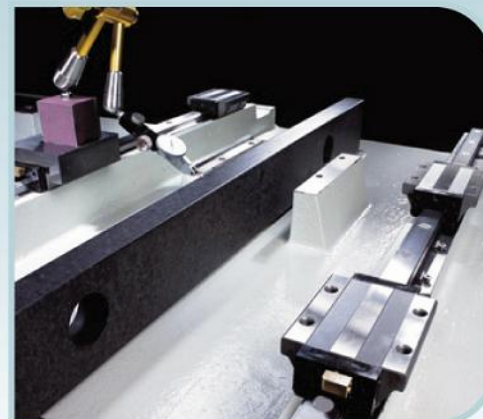
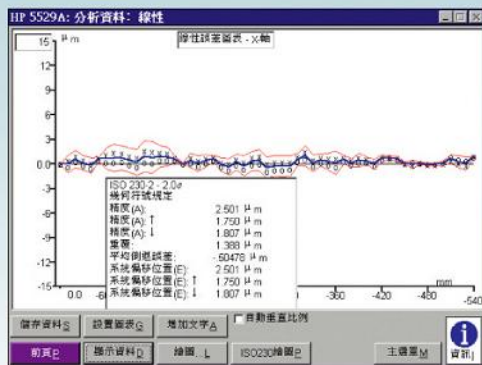
Excellent for Sophisticated Mirror Finish. High Precision and Extra Hard Material Machining.



The Creator CNC EDMs are precision engineered machines incorporating all the advanced features that have been requested for mould and die industries. Creator EDMs can help you reach new levels of accuracy, surface finish and productivity.

Versatile Applications

- Precision tungsten steel moulds.
- Injection moulds.
- Mirror-finish injection moulds.
- Electronic parts moulds.
- Die casting moulds.
- Progressive IC punching moulds.



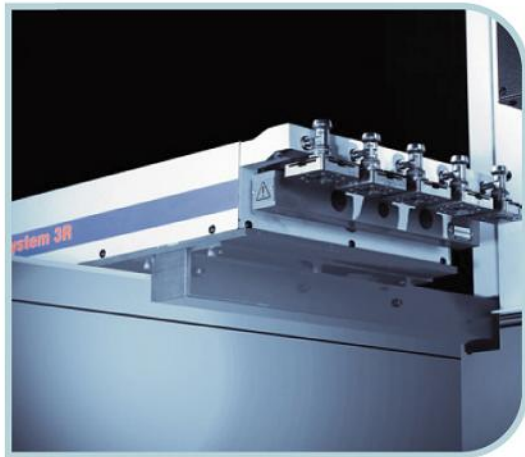
Excellent Accessories creat more convenience operation

Standard Accessories (Each Machine)

- Automatic Fire Extinguisher
- Halogen Lamp
- Filters
- Magnetic Nozzles
- Drill Chuck
- Tool Box And Kit

Optional Accessories

- ATC
- C axis
- Oil cooler
- Magnetic tools



3R ATC system



C axis simultaneously eroding

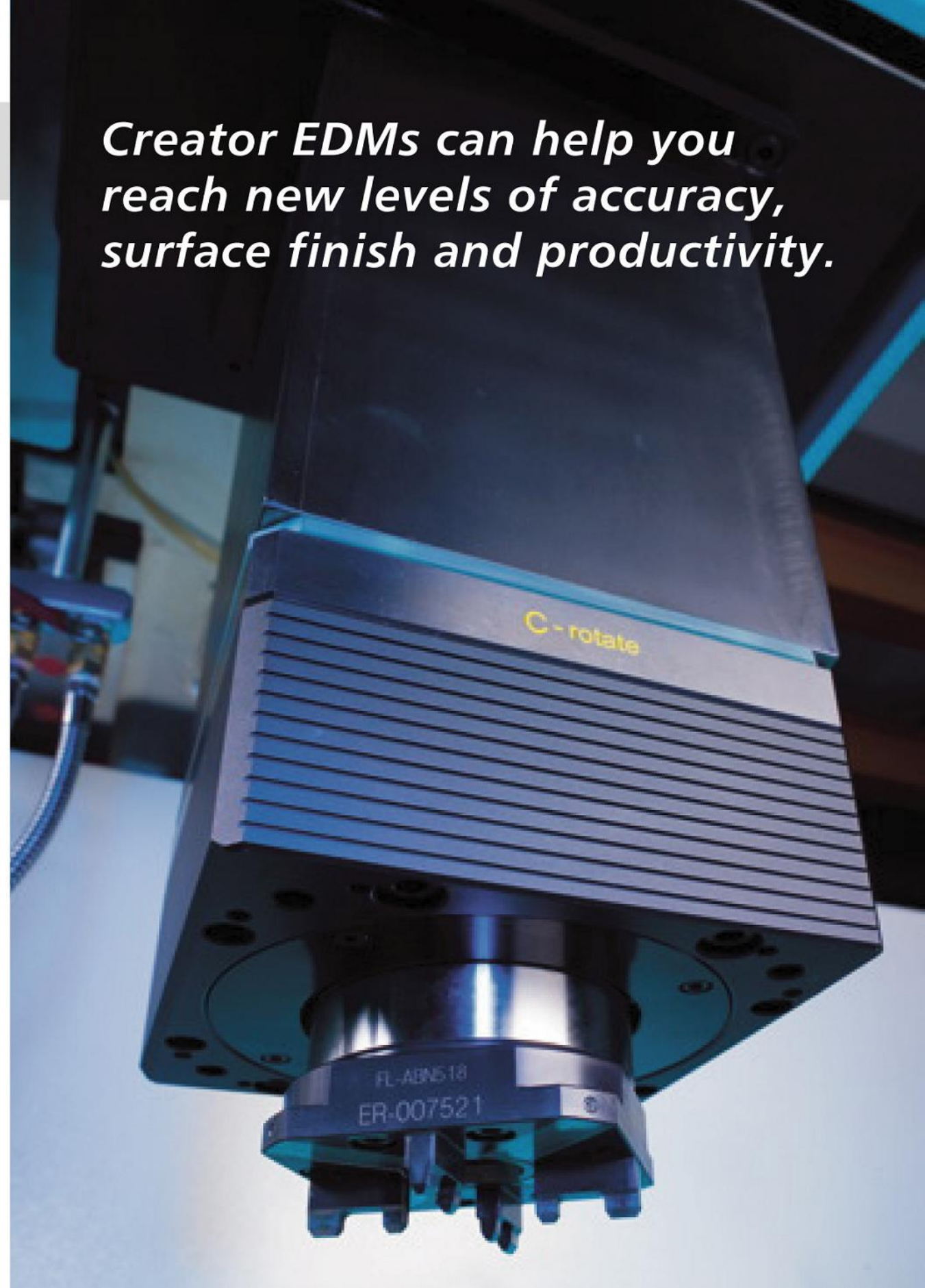


Oil cooler



Magnetic tools

Creator EDMs can help you reach new levels of accuracy, surface finish and productivity.



Specifications of Machine Unit C Type

Model		CNC-230S	CNC-341S	CNC-230S	CNC-341S	CNC-430	CNC-640
Table travel (X axis)	mm / inch	300 / 11.8	400 / 15.8	300 / 11.8	400 / 15.8	400 / 15.8	600 / 23.6
Table travel (Y axis)	mm / inch	200 / 7.9	300 / 11.8	200 / 7.9	300 / 11.8	300 / 11.8	400 / 15.7
Quill travel (Z1 axis)	mm / inch	180 / 7.1	320 / 12.6	180 / 7.1	320 / 12.6	320 / 12.6	350 / 13.7
Work head travel (Z2 axis)	mm / inch	190 / 7.5	-	190 / 7.5	-	-	-
Work table dimensions (LxW)	mm / inch	600 x 300 / 23.6 x 11.8	650 x 360 / 25.6 x 14.1	600 x 300 / 23.6 x 11.8	650 x 360 / 25.6 x 14.1	650 x 320 / 25.6 x 12.6	900 x 500 / 31.4 x 17.7
Distance between plate and table	mm / inch					675 / 355	760 / 410
Work tank inner dimensions (WxDxH)	mm / inch	800 x 520 x 325 31.5 x 20.5 x 12.8	920 x 570 x 355 36.2 x 22.4 x 14	800 x 520 x 325 31.5 x 20.5 x 12.8	920 x 570 x 355 36.2 x 22.4 x 14	935 x 556 x 352 36.8 x 21.9 x 13.9	1200 x 785 x 492 47.2 x 30.9 x 19.4
Max. capacity of dielectric fluid	Litre / Gallon	440 / 100	450 / 113	440 / 100	450 / 113	450 / 113	850 / 212
Max. electrode weight	kg / lbs	40 / 88	75 / 165	40 / 88	75 / 165	75 / 165	100 / 220
Max. workpiece weight	kg / lbs	500 / 1100	1000 / 2200	500 / 1100	1000 / 2200	1000 / 2200	1500 / 3300
Machine unit dimensions (WxDxH)	mm / inch	1175 x 1370 x 2100 46.3 x 53.9 x 82.7	1200 x 1300 x 2150 45.3 x 66.9 x 88.7	1175 x 1370 x 2100 46.3 x 53.9 x 82.7	1200 x 1300 x 2150 45.3 x 66.9 x 88.7	1150 x 1700 x 2280 45.3 x 66.9 x 89.7	1520 x 2325 x 2465 59.8 x 39.1 x 97.0
Machine unit weight	kg / lbs	870 / 1914	2000 / 4405	870 / 1914	2000 / 4405	2300 / 5066	4150 / 9140

Specifications of Machine Unit RAM Type

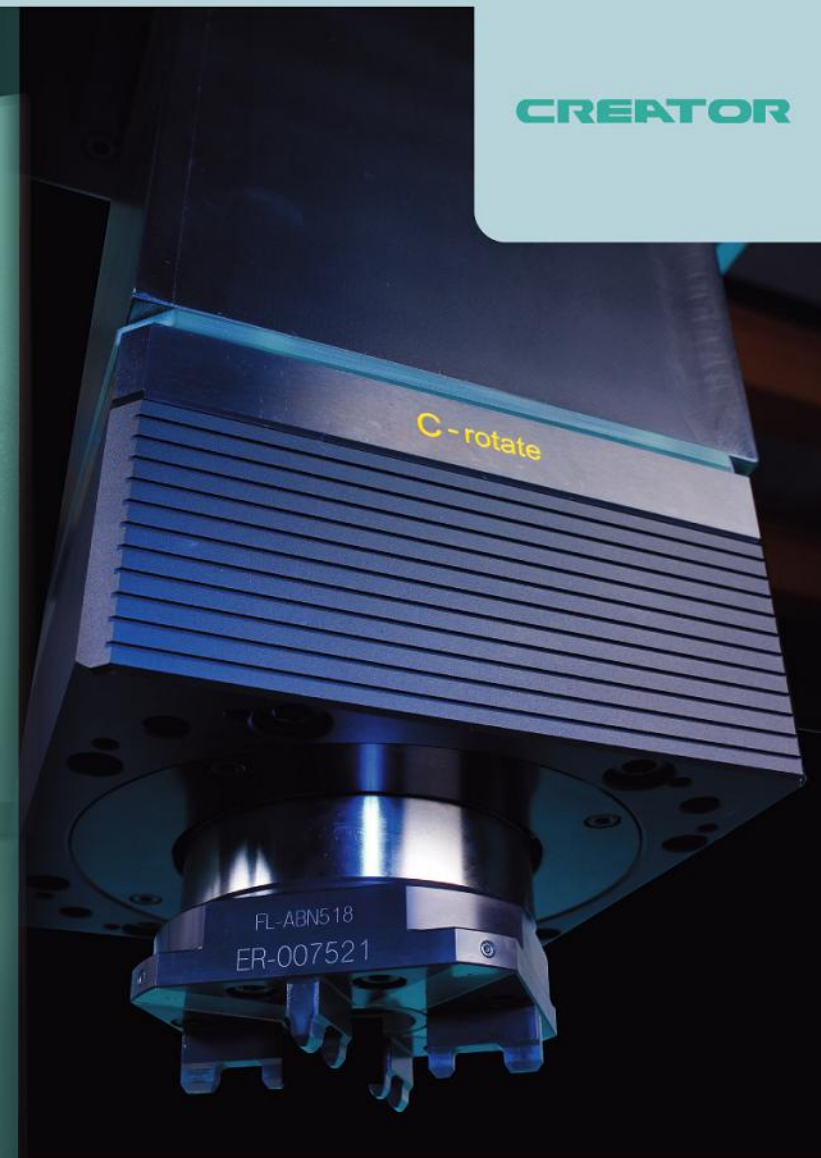
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Table travel (X axis)	mm / inch	800 / 31.6	1000 / 39.4	1200 / 47.2	1500 / 59.1	2000 / 78.7
Table travel (Y axis)	mm / inch	500 / 19.7	600 / 23.6	700 / 27.6	700 / 27.6	1000 / 39.4
Quill travel (Z1 axis)	mm / inch	400 / 15.7	450 / 17.7	450 / 17.7	500 / 19.9	550 / 21.7
Work head travel (Z2 axis)	mm / inch	-	-	-	-	-
Work table dimensions (LxW)	mm / inch	1000 x 600 / 39.4 x 23.6	1100 x 700 / 43.3 x 27.6	1400 x 900 / 55.1 x 35.4	1400 x 900 / 55.1 x 35.4	2240 x 1050 / 88.2 x 41.3
Distance between plate and table	mm / inch	850 / 450	520-970 / 20.5-38.2	560-1100 / 22-43.3	560-1100 / 22-43.3	600-1150 / 23.6-45.3
Work tank inner dimensions (WxDxH)	mm / inch	1600 x 1000 x 592 63 x 39.4 x 23.3	1900 x 1050 x 700 74.8 x 41.3 x 27.6	2150 x 1150 x 700 84.5 x 45.3 x 27.6	2150 x 1150 x 700 84.5 x 45.3 x 27.6	2900 x 1500 x 700 114.2 x 59.1 x 27.6
Max. capacity of dielectric fluid	Litre / Gallon	1150 / 900	1600	2300	2300	4200
Max. electrode weight	kg / lbs	120 / 264	400 / 880	400 / 880	400 / 880	500 / 1100
Max. workpiece weight	kg / lbs	2000 / 4400	3000	4000	4000	9000
Machine unit dimensions (WxDxH)	mm / inch	1850 x 2800 x 2750 72.8 x 110.2 x 108.3	2700 x 1900 x 2880 106.3 x 74.8 x 113.4	2500 x 2500 x 3040 98.4 x 98.4 x 119.7	2500 x 2500 x 3040 98.4 x 98.4 x 119.7	3000 x 2400 x 3150 118.1 x 94.5 x 124
Machine unit weight	kg / lbs	5400 / 11894	5000	6000	6000	13000

Specifications of Power Supply Unit CR-6C

Model		50A	75A	100A	150A※	200A※
Input voltage	3ø V	220.415 380.440	220.415 380.440	220.415 380.440	220.415 380.440	220.415 380.440
Input power	KVA	5	8	10	15	20
Working voltage (No load)	V	100	100	100	100	100
High voltage	V	150 or 270	150 or 270	150 or 270	150 or 270	150 or 270
Min. ON TIME	μS	1	1	1	1	1
Min. OFF TIME	μS	1	1	1	1	1
Max. Cutting speed	mm ³ / min	480	720	1050	1550	2000
Best surface finish	μmRa.	0.2	0.2	0.2	0.2	0.2
Min. Electrode wear rate	%	0.3	0.3	0.3	0.3	0.3
Weight	kg / lbs	165 / 363	180 / 396	205 / 452	205 / 452	205 / 452

※One extra power unit. Continuing improvement will allow the maker to modify the design or specification without notice.

CREATOR



ELECTRIC DISCHARGE MACHING

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AGENT :



CNC series EDM

TRUTH. APPLICATION. CREATION **CE**

