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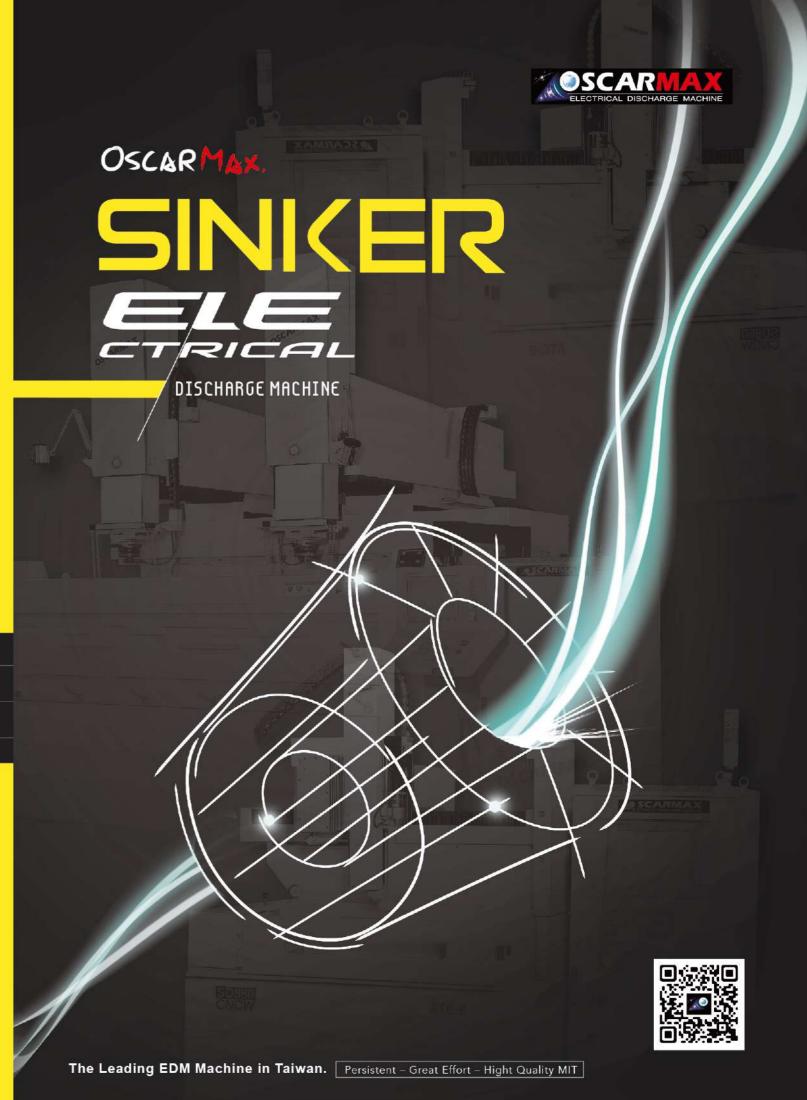
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Profile

EXTREME EFFICIENCY OUTSTANDING QUALITY

Persistent Quality and Performance | Consistent Technology and Worth |
Service and Enthusiasm Oriented | Innovations and Breakthroughs Resulting
from Endless Endeavors

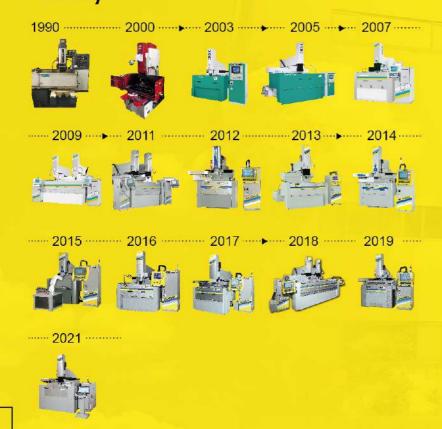
OSCARMAX has had 35 years of history since being established in 1985. Over many years, OSCAMRAX has been totally dedicated to design and manufacturing of electrical discharge machines.

Electrical discharge machines play an important role in many manufacturing processes. By applying parametric 3D design software, we aim to shorten the time of design, research, and development. In the meantime, we can overview the final product blueprint and find the ideal design therefore increase our quality of product and competitivity.

Until now, we have launched over 100 various models and combinations of machine bodies, generators, and operation system and continue enhancing our application capability. With the latest interface, by real-time monitoring of sparking conditions, we can adjust the most suitable parameters for our customers.

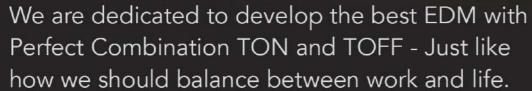
Furthermore, we have cooperated with aerospace industry to carry out the automatic production line and develop the API to connect EDM machines and automation with smart management system. In the result, we maintain the machine efficiency, increase process stability, and improve part quality. We believe that with continuous breakthrough, we are on the way to future.

History









T-ON AND T-OFF

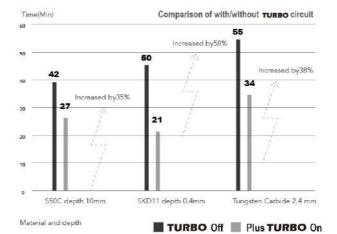
With Perfect Combination.

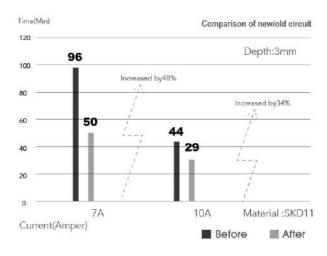






Able to prevent from short circuit increase the stability of process and reduce the wear out of the electrodes.



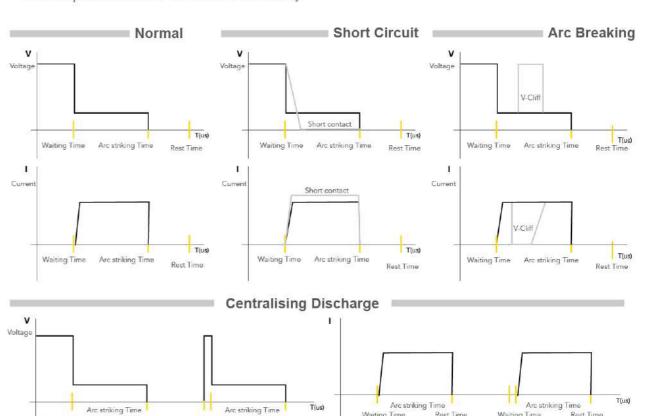






/ Massive increasing on the working efficiency

FPGA chip instant reaction to increase the efficiency.



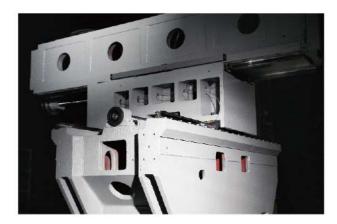




TECHNOLOGY



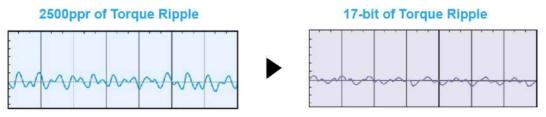
Heat treated FC25 tough cast iron with large contacting support area to enhance the machine reliability combined with precise ball screws, pre-loaded double nuts, and extra-long block linear guides. Equipped by FAGOR linear scales. Driven by HF-response servo control system. In combination with proper maintenance advised by OSCARMAX ensure high accuracy and reliability for decades.



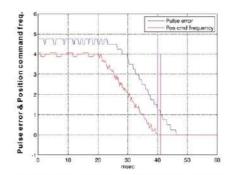
Delta control Features

Implements High Precision Positioning Control

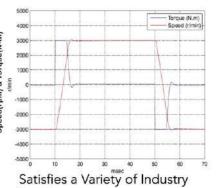
- ASDA-A3 Series servo drive supports 20-bit and 17-bit encoders. It satisfies the demand for high-precision positioning control and stable operation with lower speed.
- Applying the encoder with a higher resolution can reduce the cogging torque and improve the motor's precision.



- Outstanding performance with higher speed: Up to 550Hz frequency response and settling time is below 1ms.
- 10ms acceleration time from -3000r/min to 3000r/min when running without a load.



Example: Frame size 60mm and 400W servo motor



Satisfies a Variety of Industry Requirements

- Three control modes available: Built-in position, Speed, and Torque. (Speed and Torque mode can be controlled by internal parameters or analog voltage.)
- High-speed differential command (up to 4Mpps) for high precision positioning control.
- Three notch filters are provided to suppress the mechanical resonance efficiently and make the system operate more smoothly.
- Lead friction compensation parameter is specified for the application of circular interpolation, Z-axis motion and ball screw, and others to reduce the loading of the controller.
- For bar feeders and other equipment requiring high torque output, motor protection parameters are offered to protect the mechanical system



An encoder measures the actual machine position without the effect of any mechanical inaccuracies. Some of the potential sources of such errors in a machine tool such as lead screw pitch, certain amount of backlash and thermal behavior can be minimized using these encoders.



- Machining in 3D mode allows to spark and orbit along any angle, vector, or path.
- 2. Built-in C-axis EROWA/3R (option).
- Up to 7 axes control. 6 axes simultaneously including C-axis (helix).
- 4. IPC industrial CPU, color LCD screen.
- 5. FAGOR linear scale with 0.001mm resolution (standard).
- 6. C5 ball screw with pre-loaded double nut, P class linear guides with extra-long blocks, self-designed strong heat-treated FC25 casting. In combination with proper maintenance advised by OSCARMAX ensure high accuracy and reliability for decades.
- AC servo drive with feedback and active vibration suppression to maintain process stability and surface integrity.
- V8 Copper and graphite special circuit to increase efficiency and minimize electrode wear-out.
- TURBO (standard) & EZ SPARK (option) OSCARMAX self-developed high-speed circuits help to increase efficiency and MRR of standard (TURBO) and super hard (EZ-SPARK) materials, especially for deep ribs and roughing operations.

- Technologies for sparking steel (SKD11, P20, NAK80, STAVAX, stainless steel), aluminum, tungsten-carbide, titanium, copper, copper alloys and nickel alloys materials using graphite, copper, and tungsten-copper electrodes.
- Automatic cycles for edge find, center find, corner find, rotation angle for easy workpiece and electrode set up.
- Remote connection (option). G-link between CMAX controller and Windows PC. Allows start/stop machine, upload program, display real-time parameters and program information, run record.
- Error message record and description for easy troubleshooting.
- 14. Electrode offset file import from CMM machine.
- CAM software output transfer to .NC file (postprocessor not included).
- 16. Remote control box with MPG for easy operation.
- 17. E-code and automatic programming.

S500 CMAX/

Sinker EDM CMAX

Column-Moving type
X:500
Y:400
Z:450

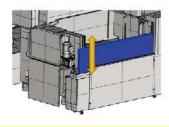
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ATC (option) 4/6/16/20 electrodes.



Automatic door (option)

Programmable oil level. Available for s500-s1060 G-link robot connection to load/unload workpiece.



DELTA AC
Delta A3 drive inside.



C-AXIS (option)
Built-in EROWA/3R C-axis.



Safety

UV fire sensor, automatic fire extinguisher, oil level float switches.



Automatic lubrication
Central #00 grease
distribution.



TURBO & EZ-SPARK

(option)
OscarMax self developed
high speed circuits.





S430S CMAX

X:400 Y:300 Z:300 Column-Moving type

S1060 CMAX

Y:600 Z:500

X:1000

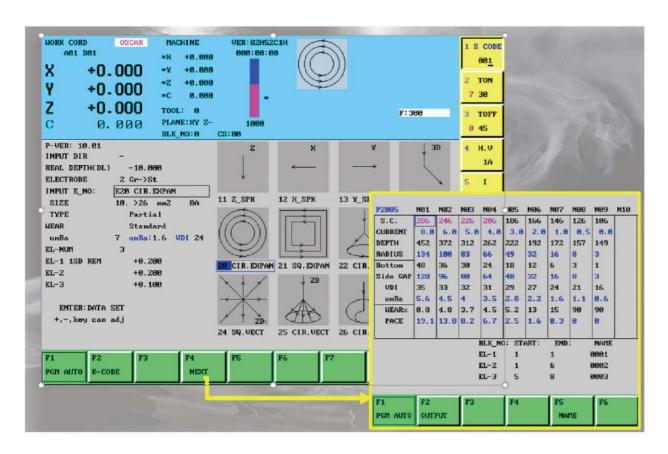
SCAR

• Please refer to page 15~16 for specifications.

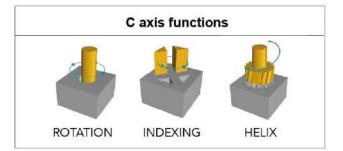
Specification of Table-Moving type. Available for CMAX and CNC series.

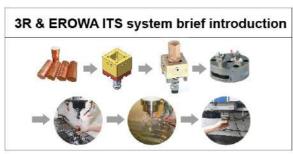
Structure Model (by size)			Table-Moving type		
				S430S	S550
		Х		400(16)	500(20)
	Table Travel	Y	mm (inch)	300(12)	400(16)
		Z		300(12)	350(14)
	Max. workpiece	ia di	mm (inch)	920×505	1100×630
	dimensions (W x D)		mm (men)	(36×20)	(44×25)
	Max. filling height of diele	ectric tank	mm (inch)	215(8.6)	260(10.4)
SPECIFICATION	Distance between chuck to table		mm (inch)	150-450	135-485
				(6-18)	(5-19)
	Max. workpiece weight		kg	550	1350
	Max. electrode weight		kg	120	220
	Table Size (W x D)		mm (inch)	650×350	800×450
				(26×14)	(32×18)
	Machine weight		kg	1200	1950
	Tank capacity		1	380	520
Filter	Filter density		μm	20	20
	Filter elements		Pcs	3	3
	Max. working curre	ent	А	60	60
Generator	Overall power consumption		KVA	6	6
	Weight		kg	320	320





- New automatic programming.
- Create EDM program within few seconds.
- Faster and easier than ever before.
- Updated technologies for stable performance.
- Conversational data input. (depth, material, orbit, frontal area, electrode size, speed/wear-out preference, final
 roughness, quantity and undersize of electrodes)
- Selection of START and END of cycle for each electrode.
- Automatically generated Roughing/Semi-finishing/Finishing process parameters.







CNC SERIES



- YZ plane.
- 2. IPC industrial CPU, color LCD screen.
- 3. FAGOR linear scale with 0.001mm resolution (standard).
- 4. C5 ball screw with pre-loaded double nut, P class linear guides with extra-long blocks, self-designed strong heat-treated FC25 casting. In combination with proper maintenance advised by OSCARMAX ensure high accuracy and reliability for decades.
- 5. V8 Copper and graphite special circuit to increase efficiency and 10. Remote control box with MPG for easy operation. minimize electrode wear-out.
- 6. TURBO (standard) & EZ SPARK (option) OSCARMAX self-developed high-speed circuits help to increase efficiency and MRR of standard (TURBO) and super hard (EZ-SPARK) materials. especially for deep ribs and roughing operations.
- 1. Machining in 2.5D mode allows to spark and orbit along XY, XZ, 7. Technologies for sparking steel (SKD11, P20, NAK80, STAVAX, stainless steel), aluminum, tungsten-carbide, titanium, copper, copper alloys and nickel alloys materials using graphite, copper, and tungsten-copper electrodes.
 - 8. Automatic cycles for edge find and center find for easy workpiece set up. Automatic positioning (100 work-points)
 - 9. DC servo drive with manual fine tuning to maintain process stability and surface integrity.

 - 11. FUZZY automatic programming.



- Create EDM program within few seconds.
- Conversational data input. Material, frontal area, shape, strategy, undersize, roughness, depth and orbit .
- Including orbit function generated directly into the program.
- Orbit radius, speed, mode and pattern generated automatically from FUZZY.
- Orbit radius displayed in a program.
- Orbit available also for X and Y direction of sparking.



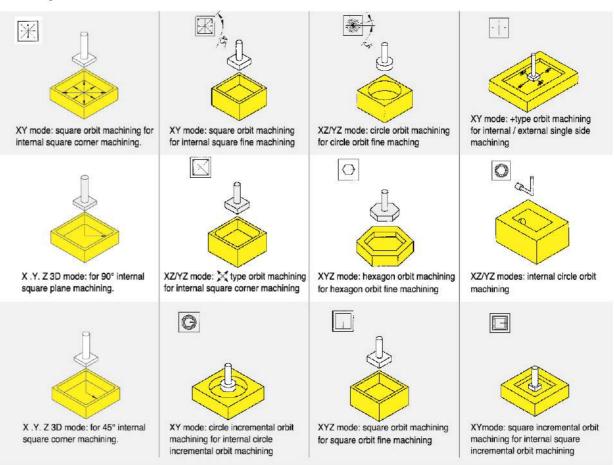
- New functions for insert, cut and clear block.
- Every work point has its own Position UP (safety height for XY) positioning) and Position DOWN (start point for sparking).
- Every work point can use different program, orbit, origin and electrode (with ATC).
- Grid work point edit function for faster data input (multi-cavities tools).





Description of CNC 2.5D mode.





Specification of Column-Moving type. Available for CMAX, CNC, and NC series.

	Structure	Column-Moving type			
	Model (by size	S500	S750		
		Х		500(20)	700(28)
	Table Travel	Υ	mm (inch)	400(16)	500(20)
		Z		450(18)	500(20)
	Max. workpie	ce	mm (inch)	1020×710	1370×850
	dimensions (W x D)			(40×28)	(54×34)
	Max. filling height of dielectric tank		mm (inch)	355(14)	355(14)
SPECIFICATION	Distance between chuck to table		mm (inch)	130-480	80-580
			mm (inch)	(5-19)	(3×23)
	Max. workpiece weight		kg	2300	3000
	Max. electrode weight		kg	200	250
	Table Size (W x D)		mm (inch)	850×450	1000×600
			,,,,,,	(34×18)	(40×24)
	Machine weight		kg	3000	4500
	Tank capacit	y	L L	850	1090
Filter	Filter density	/	μm	20	20
	Filter elements		Pcs	6	6
	Max. working cu	rrent	Α	90	90
Generator	Overall power cons	umption	KVA	10	10
	Weight		kg	350	350

NC SERIES



Structure

Column-Moving type

			3 71				
Model (by size)			S1060	S1270	S1510		
	X		1000(40)	1200(47)	1500(59)		
	Table Travel Y	mm (inch)	600(24)	700(28)	1000(39)		
	Z		500(20)	500(20)	600(24)		
	Max. workpiece	mm (inch)	1670×990	1860×1120	2070×1570		
	dimensions (W x D)	min (inch)	(66×39)	(73×44)	(81×61)		
	Max. filling height of dielectric tank	mm (inch)	460(18.4)	460(18.4)	585(23)		
SPECIFICATION	Distance between chuck to table	mm (inch)	260-760	395-895	580-1180		
SFECIFICATION	Distance between ender to table		(10-30)	(15-35)	(22-46)		
	Max. workpiece weight	kg	4500	5000	11000		
	Max. electrode weight	kg	350	400	500		
	Table Size (W x D)	mm (inch)	1250×750	1350×820	1580×1100		
	idolo oleo (H x b)		(50×30)	(52×32)	(62×43)		
	Machine weight	kg	5500	6500	12150		
	Tank capacity	1	1610	1875	3410		
Filter	Filter density	μm	20	20	20		
	Filter elements	Pcs	6	6	6		
	Max. working current	А	120	120	120		
Generator	Overall power consumption	KVA	12	12	12		
	Weight	kg	380	380	380		

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	Tr		•	П	ire

Column-Moving type

Model (by size)			S1880	S2210	S2610	S3010	
		Χ		1800(71)	2200(87)	2600(102)	3000(118)
	Table Travel	Υ	mm (inch)	800(31)	1000(39)	1000(39)	1000(39)
		Z		600(24)	600(24)	600(24)	600(24)
	Max. workpiece		mm (inch)	2420×1220	2710×1580	3290×1690	3915×1580
	dimensions (W x D))		(95×48)	(106×62)	(129×66)	(154×62)
	Max. filling height of dielec	tric tank	mm (inch)	505(19.8)	605(23.8)	585(23)	605(23.8)
SPECIFICATION	Distance between chuck t	o tabla	mm (inch)	305-905	575-1175	560-1160	560-1160
Distance	Distance between chuck t	istance between chuck to table		(12-35)	(22-46)	(22-45)	(22-45)
	Max. workpiece weig	Max. workpiece weight		7000	9500	10000	16000
	Max. electrode weight		kg	500	500	500	500
	Table Size (W x D)		mm (inch)	1850×1000	2250×1100	2700×1100	3100×1100
				(73×39)	(89×43)	(106×43)	(122×43)
	Machine weight		kg	9000	13500	16500	19500
	Tank capacity		1	2715	4035	5400	5580
Filter	Filter density		μm	20	20	20	20
Filter elements			Pcs	8	8	8	8
Max. working cur		nt	А	120	120	120	120
Generator	Overall power consump	otion	KVA	12	12	12	12
	Weight		kg	380	380	380	380

SYSTEM FEATURES

- 1. Machining in 2D mode allows to spark in X, Y and Z direction. COC-280 for orbit function available (option).
- 2. IPC industrial CPU, color LCD screen.
- 3. FAGOR linear scale with 0.005mm resolution (standard).
- 4. C5 ball screw with pre-loaded double nut, P class linear guides with extra-long blocks (only for moving column type), self-designed strong heat-treated FC25 casting. In combination with proper maintenance advised by OSCARMAX ensure high accuracy and reliability for decades.
- 5. V8 Copper and graphite special circuit to increase efficiency and minimize electrode wear-out.
- 6. TURBO (option) & EZ SPARK (option) OSCARMAX self-developed high-speed circuits help to increase efficiency and

- MRR of standard (TURBO) and super hard (EZ-SPARK) materials. especially for deep ribs and roughing operations.
- 7. Technologies for sparking steel (SKD11, P20, NAK80, STAVAX, stainless steel), aluminum, tungsten-carbide, titanium, copper, copper alloys and nickel alloys materials using graphite, copper and tungsten-copper electrodes.
- 8. Automatic cycles for edge find and center find for easy workpiece set up. Automatic positioning (100 work-points) .
- 9. DC servo drive with manual fine tuning to maintain process stability and surface integrity.
- 10. Remote control box with MPG for easy operation.
- 11. FUZZY automatic programming.

S550 NC

Table-Moving type

X:500 Y:400

Z:200+300

S750 NC

X:700

Y:500 Z:500

Column-Moving type

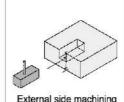




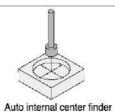


• Please refer to page 15~16 for specifications.

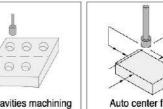
Description of NC series auto edge finding, Positioning, side spark functions.

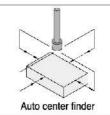


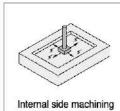
External side machining



Multi cavities machining







SCARMAX ELECTRICAL DISCHARGE MACHINE

ZNC / SYSTEM FEATURES

- X and Y slideways with manual handwheels for positioning, servo driven Z axis. COC-280 for orbit function available (option).
- 2. IPC industrial CPU, color LCD screen.
- 3. FAGOR linear scale with 0.005mm resolution (standard).
- C7 ball screw with precisely scraped slideways, self-designed strong heat-treated FC25 casting. In combination with proper maintenance advised by OSCARMAX ensure high accuracy and reliability for decades.
- V8 Copper and graphite special circuit to increase efficiency and minimize electrode wear-out.
- TURBO (option) & EZ SPARK (option) OSCARMAX
 self-developed high-speed circuits help to increase efficiency

- and MRR of standard (TURBO) and super hard (EZ-SPARK) materials, especially for deep ribs and roughing operations.
- Technologies for sparking steel (SKD11, P20, NAK80, STAVAX, stainless steel), aluminum, tungsten-carbide, titanium, copper, copper alloys and nickel alloys materials using graphite, copper, and tungsten-copper electrodes.
- 8. Memory for multiple coordinates (100 work-points).
- DC servo drive with manual fine tuning to maintain process stability and surface integrity.
- 10. Remote control box for easy operation.
- 11. FUZZY automatic programming.



S430S ZNC

X:400 Y:300 Z:180+250

S550 ZNC



S755 ZNC



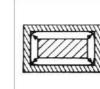
Option: COC-280 Orbit-cut. Available for NC and ZNC series.



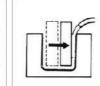


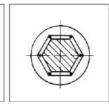
Features	 This device is used to connect with OSCARMAX EDM ZNC & NC series to carry out the features of ORBIT function. It can be combined with EROWA or 3R quick chuck system. 				
Max. load	15kg	Vertical accuracy	±0.005mm		
Dimension	200×200×220mm	Horizon accuracy	±0.005mm		
Weight	13kg	Repeat accuracy	0.01mm		
XY travel	Ø10mm	Suitable model	NC,ZNC		

Function













Internal square corner machining

Internal side spark machining

Orbit machining for better surface

ng for Hexagonal corner machining

Thread taping machining

g Different size machining by same electrode

Specification of box-way Table-Moving type. Available for NC and ZNC series.

ble for NC and ZNC series.

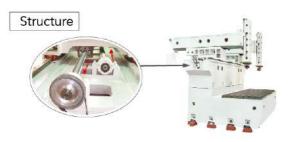
Structure Table-Moving type

Structure				Table-Moving type			
Model (by size)			S430S	S550	S755		
	Х		400(16)	500(20)	700(28)		
Table Travel	Υ	mm (inch)	300(12)	400(16)	550(22)		
	Z		180(7)	200(8)	250(10)		
Second spindle tra	avel	mm (inch)	250(10)	300(12)	300(12)		
Max. workpiece	е	mm (inch)	945×510	1100×630	1630×950		
dimensions (W x	D)	mm (mar)		(44×25)	(40×28)		
Max. filling height of diel	lectric tank	mm (inch)	215(8.6)	260(10.4)	385(14)		
Distance between chuc	k to table	able mm (inch)	20-450	100-600	190-740		
3 13 20 20 20 20 20 20 20 20 20 20 20 20 20			(0.8-17)	(4-23)	(5-19)		
Max. workpiece weight		kg	550	1350	2000		
Max. electrode weight		kg	120	220	250		
Table Size (W v D)		mm (inch)	650×350	800×450	1100×600		
10010 0120 (11 A 1	Table Size (VI N D)		(26×14)	(32×18)	(34×18)		
Machine weigh	t	kg	1200	1950	3100		
Tank capacity	ē.	1	380	520	1120		
Filter density		μm	20	20	20		
Filter elements		Pcs	3	3	4		
Max. working curr	rent	Α	60	60	90		
Overall power consu	mption	KVA	6	6	10		
Weight		kg	320	320	350		
	Table Travel Second spindle tra Max. workpiece dimensions (W x Max. filling height of diel Distance between chuch Max. workpiece we Max. electrode we Table Size (W x l Machine weight Tank capacity Filter density Filter elements Max. working curr Overall power consul	Second spindle travel Max. workpiece dimensions (W x D) Max. filling height of dielectric tank Distance between chuck to table Max. workpiece weight Max. electrode weight Table Size (W x D) Machine weight Tank capacity Filter density Filter elements Max. working current Overall power consumption	Table Travel X Table Travel Y mm (inch) Z Second spindle travel Max. workpiece dimensions (W x D) Max. filling height of dielectric tank Distance between chuck to table Max. workpiece weight Max. workpiece weight kg Table Size (W x D) Machine weight kg Tank capacity Filter density Filter elements Pcs Max. working current A Overall power consumption X mm (inch) mm (inch) kg mm (inch)	S430S X 400(16) 300(12) 2 180(7) 180(7) 180(7) 250(10) 250(10) (37×20) (37×20) (37×20) (0.8-17) (0.8-1	Second spindle travel X Y mm (inch) 300(12) 400(16) 500(20) Second spindle travel mm (inch) 250(10) 300(12) Max. workpiece mm (inch) 945×510 1100×630 Gimensions (W x D) mm (inch) 215(8.6) 260(10.4) Distance between chuck to table mm (inch) 20-450 100-600 Max. workpiece weight kg 550 1350 Max. workpiece weight kg 120 220 Table Size (W x D) mm (inch) (26×14) (32×18) Machine weight kg 1200 1950 Tank capacity I 380 520 Filter density µm 20 20 Filter elements Pcs 3 3 Max. working current A 60 60 Overall power consumption KVA 6 6		



S2210-2H





S1510-2H





Structure

Specification of Twin-Head Column-Moving type. Available for CMAX, CNC, and NC series.

Model (by size)			S1510-2H	S2210-2H	S2610-2H	S3010-2H	
		X DM/SM		430/860(17/34)	775/1550(31/61)	1075/2150(42/85)	1275/2550(50/100
	Table Travel	Υ	mm (inch)	1000(39)	1000(39)	1000(39)	1000(39)
		Z		600(24)	600(24)	600(24)	600(24)
	Max. wor	kpiece	mm (inch)	2070×1570	2890×1590	3290×1690	3830×1590
	dimensions	(W x D)	mm (man)	(81×61)	(113×62)	(129×66)	(150×62)
	Max. filling height o	of dielectric tank	mm (inch)	585(23)	585(23)	585(23)	585(23)
SPECIFICATION Distance between chuck to	chuck to table	r II	560-1160	575-1175	560-1160	560-1160	
	Distance between street to table		mm (inch)	(22-45)	(22-46)	(22-45)	(22-45)
	Max. workpiece weight		kg	11000	10000	10000	19000
	Max. electrode weight		kg	500	500	500	500
	Table Size (W x D)		mm (inch)	1580×1100	2250×1100	2700×1100	3100×1100
				(62×43)	(89×43)	(106×43)	(122×43)
	Machine	weight	kg	16200	15000	18000	21000
	Tank cap	pacity	I	3410	4655	5400	5910
Filter	Filter de	ensity	μm	20	20	20	20
l.	Filter ele	Filter elements		12	12	12	12
	Max. workin	g current	Α	120	120	120	120
Generator	Overall power of	consumption	KVA	12	12	12	12
	Weight		kg	380	380	380	380

TWIN HEAD / FEATURES









- Independent ball screw for each X axis, pre-stretching precise nuts for both side to upgrade the machine reliability.
- Simultaneously spark large mold on two different area to shorter the product.
- 3. Two molds spark on same machine.
- fire sensor ensure the safety production.

1 | 2 | 3 | 4

- 5. Conversational operating interface.
- Electromechanical department SOP procedure.
- Twin-head machines are available for CMAX, CNC and NC control system.
- Laser compensation. Level up the accuracy.
- 9. Column-moving product line.

5 6 7 8 9



















- 10. Satisfied customers
- Twin-head machine product line.
- Work tank assembling.
- 13. Well organised warehouse, able to provide spares for service support.

10



FC25 tough cast iron with quenched treatment MEEHANITE certificated casting to ensure the high rigidity and greater accuracy, heat treated work bench surface above HRC65.



Tool Box & Basic Tools



Filter

Auto Fire Extinguisher 🌆

Grease Gun



FAGOR Linear scale



Drill Chuck





P class linear guide ways (CMAX & CNC standard)



C5 class Double Nuts Ballscrews (CMAX & CNC standard)





Stainless Oil Level Sensor



Adjustable Electrode Holder



/ Optional

EROWA C Axis



3R C axis



Automatic Chuck



Manual





Permanent Magnetic Table



Oil Mist Collector | CNC Rotary Table |





Automatic Oil Feeder



ROBOT-180 Tool Changer



3R/EROWA-wheel type ATC 16/20



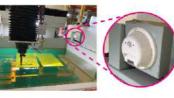
3R/EROWA-linear type ATC 4/5/6



Measuring Probe



Ultraviolet Fire Sensor



Electrode Holder 75 & 100 type



STANDARD ACCESSORIES



Item	CMAX	CNC	NC	ZNC
X · Y · Z axis Double Nuts Ballscrews	√	√	Column-Moving	9 <u></u> 9
X · Y axis Ballscrews		-	_	J
X 、 Y 、 Z Linear Guides	√	J	Column-Moving	s s
X · Y · Z axis Linear Scale 1µm	J	J		
X 、 Y 、 Z axis Linear Scale 5µm			J	J
X · Y · Z axis Servo Motor	J	J	J	Z axis
15 LCD Monitor	√ √	J	J	J
Auto Fire Extinguisher	J	J	J	\checkmark
Fire Sensor	Ultrav	iolet	J	J
Stainless Oil Level Sensor	√	J	J	J
Halogen Work Lamp	J	J	J	J
Clamping Plate	V	V	J	1
Leveling Pad	V	J	1	√
Flushing Nozzle	V	J	J	√
Adjustable Electrode Holder	√	J	J	J
Filter	√	J	J	J
Drill Chuck	J	J	J	J
Tool Box & Basic Tools	1	J	J	√
Remote Controller	J	J	J	J
M.P.G	1	J	1	3.
Signal Tower Light	J	J	J	J
Groundfos Pump	√	J	J	J

OPTIONAL ACCESSORIES

Item	CMAX	CNC	NC	ZNC
3R/EROWA - wheel type ATC 16/20			2_2	
3R/EROWA - linear type ATC 4/5/6				_
3R/EROWA - C axis		_	-	 5
3R/EROWA - Manual Chuck				
3R/EROWA - Automatic Chuck				_
COC - 200 Orbit-Cut system(Non-connection)	3-	_		
COC - 280 Orbit-Cut system (Connection)	_	-		
Oil Mist Collector				
CNC Rotary Table		==	=	
Automatic Oil Feeder				
ROBOT - 180 Tool Changer		_	_	_
Dielectric Cooler				
Permanent Magnetic Table				
Measuring Probe				- 8
Infrared Fire Sensor				
Electrode Holder 75 & 100 type				
EZ spark for Harden Workpiece				
Turbo High Speed Circuit				

√:Standard □: available —:unavailable



Concrete Instances

/Custom design, Automatic product line

Combination of the most precise mechanical work and laser calibration system results in the highest accuracy.

For more than four decades, Keysight Laser Calibration System have set the standard for laser-based metrology systems used to calibrate and verify machine tool accuracy. A powerful system that:

- Measures machine tool positioning accuracy.
- Provides compensation data used to correct machine positioning error.
- Aids in diagnosing geometry problems Documents machine performance in international standards.

	5530 Detector accuracy	other system Detector accuracy
Material Temperature (0∼40°C)	±0.1°C	±0.1°C
Air temperature (0~40°C)	±0.1°C	±0.2°C
Air pressure	±0.008 psi	±0.0145 psi
Air humidity	59/	29.4

	System accuracy	System accuracy
Air temperature (0∼40°C)	±0.1ppm	±0.1ppm
Air pressure	±0.165ppm	±0.299ppm
Air humidity	±0.0625ppm	±0.075ppm
Laser Accuracy	±0.02ppm	±0.05ppm
Total performance	±0.3475ppm	±0.524ppm



Keysight 5530 Laser

Equipped by 5290K/K - Angular

accuracy of rotary axes.

Position Measurement, ensure the

Interferometer

Custom made tool system with 3R manual chuck &3R-Delphin tool system, diameter 400mm that centering position and straightness control in 0.015mm accuracy.



Petrochemical industry EDM application.



Custom-made machine: Generator with 4-independent spark channels and 360-degree work tank.



Robot ATC tools system ROBOT-180 equip 84 tools.



Aerospace EDM processing with 5 axes simultaneously automatic product line.



Z axis upgrade to 1200mm servo travel.



Extra tank for large long pipe.



Robot system ROBOT-180 link with 2 sets of S860CMAX for automatic product line.

Machining

 Super hard alloy application



application

Aerospace components





Forging tools





Die & mold spotting





Automobile mold application















 Precise components & Molds application

Petrochemical industrial

application









• Ribs machining application













C axis machining application















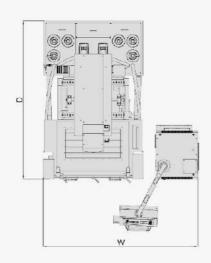


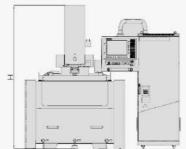


Column-Moving type

/ fit for CMAX, CNC and NC series

Туре	W(mm/inch)	D(mm/inch)	H(mm/inch)
S500	2426(95.5)	2357(92.8)	2519(99.2)
S750	2750(108.3)	2842(111.9)	2668(105)
S1060	3149(124)	3233(127.3)	3072(121)
S1270	3351(132)	3576(140.8)	3152(124.1)
S1510	3720(146.5)	4454(175.4)	3700(145.7)
S1880	3950(155.5)	3944(155.3)	3324(130.9)
S2210	4420(174)	4512(177.6)	3709(146)
S2610	4940(194.5)	4652(183.1)	3689(145.2)
S3010	5493(216.3)	4652(183.1)	3689(145.2)

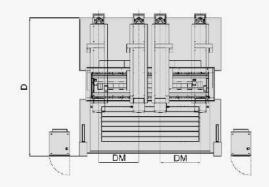


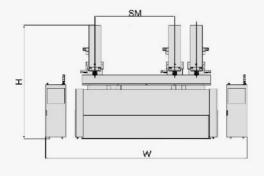


Twin Head Column-Moving type

/ fit for CMAX, CNC and NC series

Туре	W(mm/inch)	D(mm/inch)	H(mm/inch)	SM(mm/inch)	DM(mm/inch)
S1510-2H	3720(146.5)	3720(146.5)	3720(146.5)	860(34)	430(17)
S2210-2H	5490(216.1)	5490(216.1)	5490(216.1)	1550(61)	775(31)
S2610-2H	5890(231.9)	5890(231.9)	5890(231.9)	2150(54)	1075(42)
S3010-2H	6430(253.1)	6430(253.1)	6430(253.1)	2550(100)	1275(50)

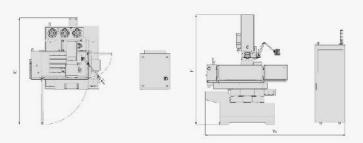




Box Way/Linear guide ways Table-moving type

/ fit for all series

Туре	W(mm/inch)	D(mm/inch)	H(mm/inch)	
S430S	3124(123)	2306(90.8)	2428(95.6)	

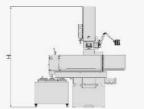


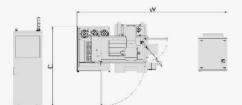
[oil tank combine]

Box Way/Linear guide ways Table-moving type

/ fit for all series

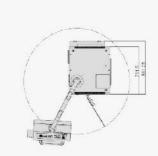
Type	W(mm/inch)	D(mm/inch)	H(mm/inch)	
S550	3805(149.8)	2003(78.86)	2578(101.5)	
S755	4110(162)	3866(152)	2355(93)	

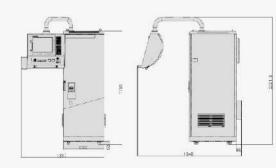




Generator

/Cantilever type
fit with column moving type





Generator

/Standard type

Robot Hand / ROBOT-180 Tool Changer

