

DMNC & OVSO

迪蒙数控

欧索

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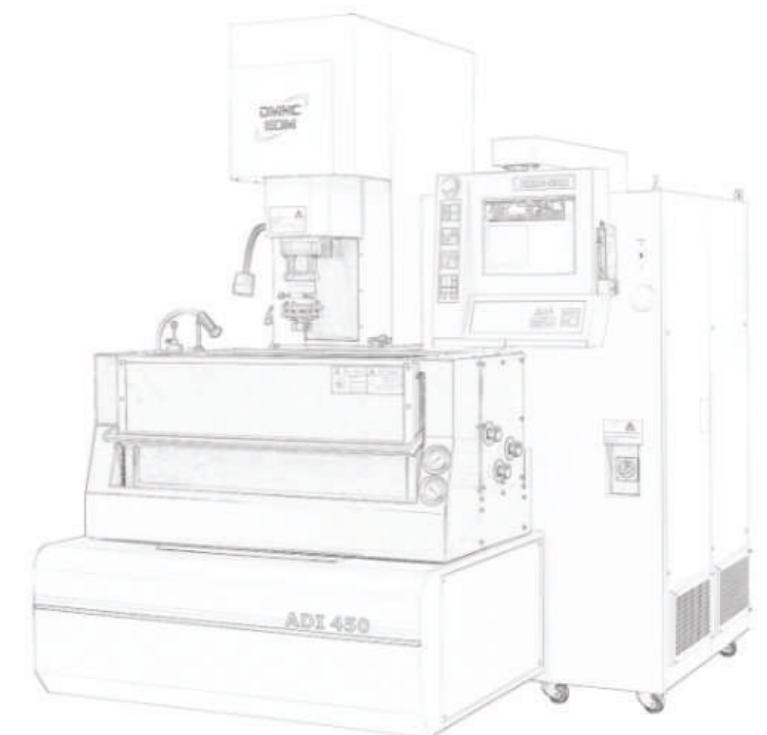


官方微博

With core technology, to assist
Chinese intelligent manufacturing

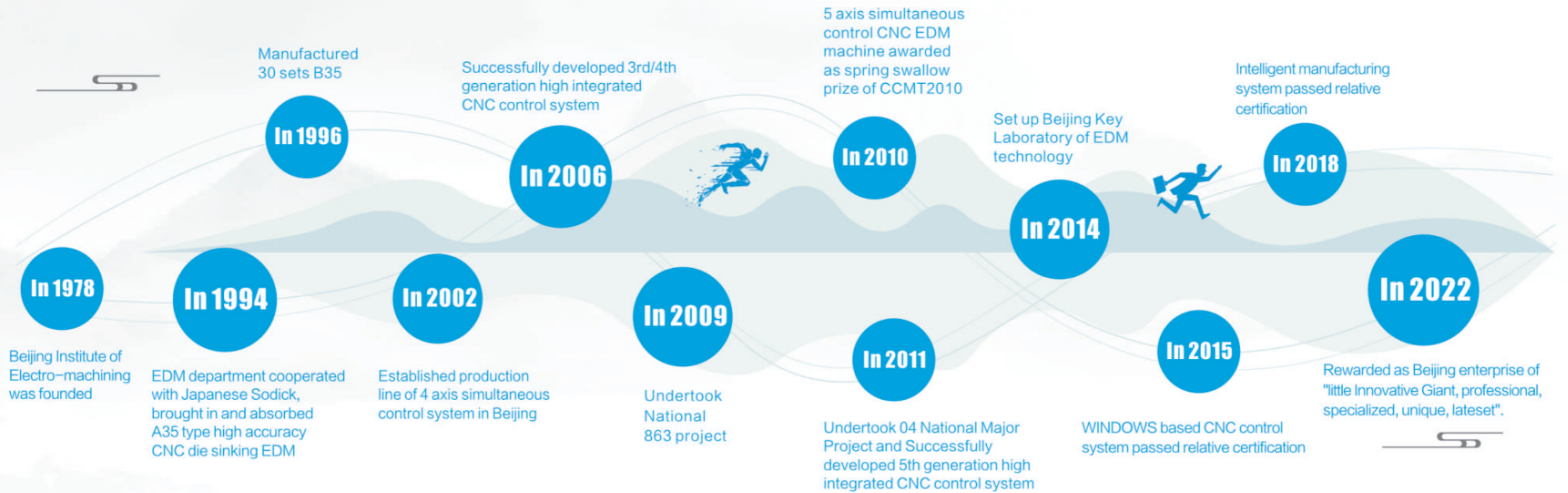
DMNC-EDM

CONCENTRATED
PROFESSIONAL
MAKE COOPERATION EASIER





DEVELOPMENT COURSE



ADI 300 HIGH PRECISION CNC DIE SINKING EDM

1. Imported super precision linear guideway SP grade
2. Grinded ball screw C2 grade.
3. More than 1 years aging treatment of casting
4. Geometric and dynamic accuracy within 5 μ m.



ADI 450 HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

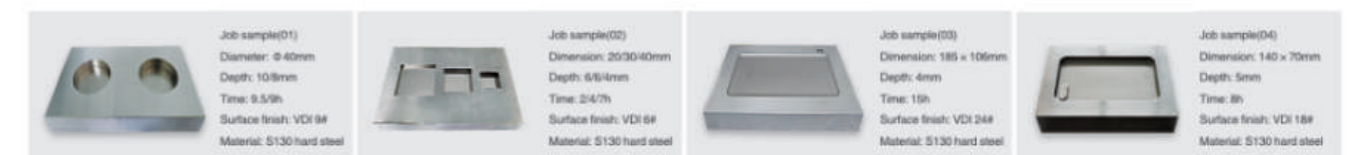
Item	Unit	ADI300	ADI450
X Axis travel	mm	300	452
Y Axis travel	mm	212	300
Z Axis travel	mm	272	272
Working table dimension	mm	600*400	600*400
Max weight of workpiece	kg	400	450
Max weight of electrode	kg	25	25
Distance from spindle end to working table	mm	530	580
Dimension of working tank on table	mm	994*604*405	1084*597*435
Highest oil level	mm	250	340
Door open type	/	manual lifting door	manual lifting door
Capacity of oil tank	L	400	600
Weight of machine	kg	2300	2800
Dimension of machine	mm	1992*2119*2240	2024*2590*2355
Max machining current	A	50	50
Best surface finish	μm	≤0.1	≤0.1
Min. electrode wear	%	≤0.1	≤0.1
Max machining speed	mm ³ /min	≥500	≥500
Control axes	/	6-axis simultaneous control	6-axis simultaneous control
Display	/	15" touch screen (TFT-LCD)	15" touch screen (TFT-LCD)

Due to continuous technical improvement, subject to change without notice

ELECTRONIC CONTROL PARAMETERS

CNC power generator	for all ADV series	CNC power generator	for all ADV series
Max machining current	50A	Number of coordinates	60
Input power	380V	Compensation system	Step error compensation, torque compensation, gap compensation
OS	Windows	Edit function	NC file edit while machining
Language	Chinese/English	Graphic display function	XY/YZ/ZX plane, machining simulation, backstage simulation, orbital profile simulation, discharging simulation and etc.
Storage for user	Standard>500MB, could be customized	Min command unit	1 μ m
Storage types	CF card, outsource memory	Max feed ratio	4m/min
Input method	Touch screen, USB, LAN	Max jump speed	5m/min
Input	USB, LAN	General power	9KW
Display	15 inch LCD	Orbital types	Free shaking, quadrant shaking, lock shaking, 3D shaking
Control axis	4 axis simultaneous control	Machining edit software	Expert system LN, auxiliary tool, procon
Max machining efficiency	≥500mm ³ /min		
Min. wear of electrode	≤0.1%		
Ra best surface finish	≤0.1 μ m		

Due to continuous technical improvement, it may be subject to change without prior notice



ADI 800 HIGH PRECISION CNC DIE SINKING EDM

1. Imported super precision linear guideway SP grade
2. Grinded ball screw C2 grade.
3. More than 1 years aging treatment of casting
4. Geometric and dynamic accuracy within 5 μ m.



TECHNICAL PARAMETERS

Item	Unit	ADI500	ADI600	ADI800	ADI1200	ADI1400	ADI1800
X Axis travel	mm	500	600	800	1200	1400	1800
Y Axis travel	mm	400	500	500	600	700	800
Z Axis travel	mm	300	350	400	450	500	600
Working table dimension	mm	800*500	900*600	1100*600	1250*800	1600*900	2000*1000
Max weight of workpiece	kg	800	1200	2500	3000	5000	7000
Max weight of electrode	kg	80	100	100	120	150	150
Distance from spindle end to working table	mm	700	700	900	500-900	550-1050	750-1350
Dimension of working tank on table	mm	1370*860*515	1640*960*515	1800*1100*570	2100*1250*600	2250*1300*650	3500*1800*650
Highest oil level	mm	370	380	400	400	450	450
Door open type	/	manual lifting door	manual lifting door	manual lifting door	manual lifting door	manual lifting door	manual lifting door
Capacity of oil tank	L	800	1100	1500	2000	2200	4900
Weight of machine	kg	3500	4000	4500	6500	8500	12000
Dimension of machine	mm	2540*2487*2460	2700*2900*2400	2915*3360*2700	3230*3340*2800	3800*3700*3500	5200*4840*3800
Max machining current	A	50	50	50	50	50	50
Best surface finish	μm	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
Min. electrode wear	%	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
Max machining speed	mm/min	≥500	≥500	≥500	≥500	≥500	≥500
Control axes	/	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control
Display	/	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)

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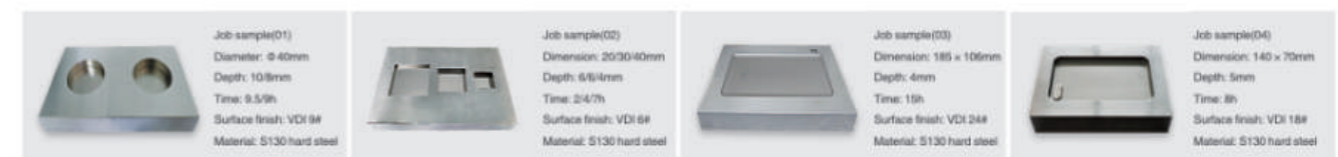
ADI 1800 Twin-head HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

Item	Unit	ADI1200 (twin-head)	ADI1400 (twin-head)	ADI1800 (twin-head)	ADI2100 (twin-head)	ADI2500 (twin-head)
X Axis travel	mm	800	1000	1200	1500	1800
Y Axis travel	mm	600	700	800	800	1000
Z Axis travel	mm	450	500	600	600	600
Working table dimension	mm	1500*800	1600*900	2000*1000	2500*1200	2800*1300
Max weight of workpiece	kg	4000	5000	7000	8000	9000
Max weight of electrode	kg	150	150	150	150	150
Distance from spindle end to working table	mm	450-900	550-1050	750-1350	750-1350	750-1350
Dimension of working tank on table	mm	2100*1250*600	2250*1300*650	3500*1800*650	3500*1800*750	3500*1800*800
Highest oil level	mm	400	450	450	550	550
Door open type	/	manual lifting door	manual lifting door	manual lifting door	manual lifting door	manual lifting door
Capacity of oil tank	L	2000	2200	4900	4900	4900
Weight of machine	kg	8700	9900	13600	16400	18400
Dimension of machine	mm	4000*3150*2700	4500*3700*3300	5200*4840*3800	5580*5300*3980	5700*5500*3970
Max machining current	A	100	100	100	100	100
Best surface finish	μm	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
Min. electrode wear	%	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
Max machining speed	mm/min	≥1000	≥1000	≥1000	≥1000	≥1000
Control axes	/	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control	6-axis simultaneous control
Display	/	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)

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40S+ HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

Item	Unit	40S+
X Axis travel	mm	400
Y Axis travel	mm	300
Z Axis travel	mm	320
Working table dimension	mm	700*400
Max weight of workpiece	kg	400
Max weight of electrode	kg	25
Distance from spindle end to working table	mm	585
Dimension of working tank on table	mm	1200*680*440
Highest oil level	mm	290
Door open type	/	manual lifting door
Capacity of oil tank	L	590
Weight of machine	kg	2600
Dimension of machine	mm	2560*2300*2306
Max machining current	A	50
Best surface finish	μm	≤0.2
Min. electrode wear	%	≤0.1
Max machining speed	mm ³ /min	≥500
Control axes	/	three-axis simultaneous control
Display	/	15" touch screen(TFT-LCD)

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60S+ HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

Item	Unit	60S+	80S+
X Axis travel	mm	600	800
Y Axis travel	mm	400	500
Z Axis travel	mm	350	400
Working table dimension	mm	900*600	1100*600
Max weight of workpiece	kg	1200	2500
Max weight of electrode	kg	100	100
Distance from spindle end to working table	mm	700	900
Dimension of working tank on table	mm	1640*960*515	1800*1100*570
Highest oil level	mm	380	400
Door open type	/	manual lifting door	manual lifting door
Capacity of oil tank	L	1100	1500
Weight of machine	kg	4000	5000
Dimension of machine	mm	2700*2900*2400	2915*3360*2700
Max machining current	A	50	50
Best surface finish	μm	≤0.2	≤0.2
Min. electrode wear	%	≤0.1	≤0.1
Max machining speed	mm ³ /min	≥500	≥500
Control axes	/	three-axis simultaneous control	three-axis simultaneous control
Display	/	15" touch screen(TFT-LCD)	15" touch screen(TFT-LCD)

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120S+ HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

Item	Unit	120S+
Working table dimension	mm	1500 × 800
X/Y/Z Axis travel	mm	Single head 800 × 600 × 450
Dimension of working tank on table	mm	2100 × 1250 × 600
Max distance between spindle nose to table	mm	900
Max weight of electrode	kg	150
Max weight of workpiece	kg	4000
Positioning accuracy	μm	X/Y/Z Full travel: 15 / 15 / 11
Single direction repositioning accuracy	μm	X/Y/Z Full travel: 7 / 7 / 5
Weight of machine	kg	8400
Dimension of machine	mm	4000 × 3150 × 2900
Rated power	kw	12.5 / Single head
Input voltage	v	380
Generator	/	CNC controller
Max machining current	A	50
Best surface finish	μm	Ra ≤ 0.2
Min. electrode wear	%	≤ 0.1
Max machining speed	mm ³ /min	≥ 1000
Interpolation Method	/	Straight, arc, helix
Accuracy compensation	/	Step error compensation and backlash compensation for each axis
Min drive	μm	1
Display	/	15" touch screen
Remote	/	Standard jog (multi-grade selections) MFR0-3

Due to continuous technical improvement, subject to change without notice

140S+ HIGH PRECISION CNC DIE SINKING EDM



TECHNICAL PARAMETERS

Item	Unit	140S+
Working table dimension	mm	1600 × 900
X/Y/Z Axis travel	mm	Single head 900 × 700 × 500
Dimension of working tank on table	mm	2350 × 1300 × 650
Max distance between spindle nose to table	mm	1150
Max weight of electrode	kg	150
Max weight of workpiece	kg	5500
Positioning accuracy	μm	X/Y/Z Full travel: 15 / 15 / 11
Single direction repositioning accuracy	μm	X/Y/Z Full travel: 7 / 7 / 5
Weight of machine	kg	10500
Dimension of machine	mm	4500 × 3700 × 3500
Rated power	kw	12.5 / Single head
Input voltage	v	380
Generator	/	CNC controller
Max machining current	A	50
Best surface finish	μm	Ra ≤ 0.2
Min. electrode wear	%	≤ 0.1
Max machining speed	mm ³ /min	≥ 1000
Interpolation Method	/	Straight, arc, helix
Accuracy compensation	/	Step error compensation and backlash compensation for each axis
Min drive	μm	1
Display	/	15" touch screen
Remote	/	Standard jog (multi-grade selections) MFR0-3

Due to continuous technical improvement, subject to change without notice

HS600 HIGH PRECISION CNC SMALL HOLE DRILLING EDM

Features:

- 6-axis control, 5-axis simultaneous control
- Capable of making dustpan-shaped hole
- ATC available
- AGC available
- Breakout detection
- Wear compensation

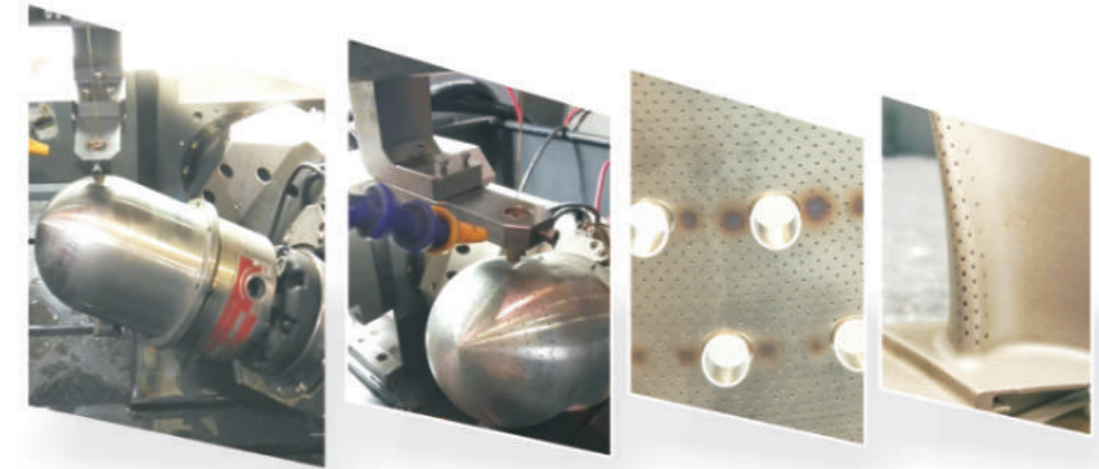


TECHNICAL PARAMETERS

Item	Unit	HS600
Working table dimension	mm	900 × 500
X Axis travel	mm	600
Y Axis travel	mm	400
Z Axis travel	mm	350
B/C Axis travel	*	-110~+110/360
W Axis travel	mm	400
X/Y/Z/W Axis Positioning accuracy	mm	0.006/0.006/0.006/0.02
X/Y/Z/W Axis direction repositioning accuracy	mm	0.004/0.004/0.004/0.01
B/C Axis Positioning accuracy	*	0.02/0.015
B/C Axis direction repositioning accuracy	*	0.005/0.005
Max weight of workpiece	kg	500
Rated power	kw	9
Input voltage	V	380(China)
Max machining current	A	50
Hole range	mm	φ0.2~φ3.0
X/Y/Z/W Axis Resolution	mm	0.001
B/C Axis Resolution	mm	0.001
Control axes	/	6-axis control, 5-axis simultaneous motion
Working fluid	/	Deionized water
Interpolation Method	/	Straight, arc, helix
Accuracy compensation	/	Step error compensation and backlash compensation for each axis
Display	/	15" touch screen
Remote	/	Standard jog (multi-grade selections) MFR0-3

Due to continuous technical improvement, subject to change without notice

HS1200 HIGH PRECISION CNC SMALL HOLE DRILLING EDM



TECHNICAL PARAMETERS

Item	Unit	HS1200
Working table dimension	mm	φ400
X Axis travel	mm	1200
Y Axis travel	mm	600
Z Axis travel	mm	400
B/C Axis travel	*	±100/360
W Axis travel	mm	300
X/Y/Z/W Axis Positioning accuracy	mm	≤0.013
X/Y/Z/W Axis direction repositioning accuracy	mm	≤0.006
B/C Axis Positioning accuracy	*	≤30/≤30
B/C Axis direction repositioning accuracy	*	≤10/≤10
Max weight of workpiece	kg	200
Rated power	kw	9
Input voltage	V	380(China)
Max machining current	A	50
Hole range	mm	φ0.2~φ3.3
X/Y/Z/W Axis Resolution	mm	0.001
B/C Axis Resolution	mm	0.001
Control axes	/	7-axis control, 5-axis simultaneous motion
Working fluid	/	Deionized water
Interpolation Method	/	Straight, arc, helix
Accuracy compensation	/	Step error compensation and backlash compensation for each axis
Display	/	17" touch screen
Remote	/	Standard jog (multi-grade selections) MFR0-3

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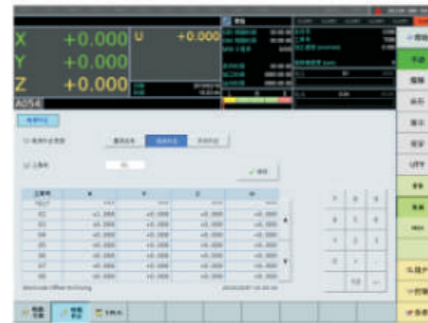
INTELLIGENT MANUFACTURING

Function Introduction of Latest Control System

- 1 Brand-new CNC EDM control system embedded on Windows 7, multiple axis simultaneous control (up to 6 axis simultaneous control).
- 2 Export system with powerful machining technology database, automatic generate processing technology according to different profile and different material. Electrode and material combination: cooper/steel, graphite/steel, copper/aluminum alloy, graphite/aluminum alloy, silver tungsten/steel, copper tungsten/steel, silver tungsten/hard alloy, copper tungsten/hard alloy, copper/zinc alloy, graphite/zinc alloy, copper/cooper alloy
- 3 Special sparking circuits: hard alloy circuit, high speed graphite circuit, mirror surface finish circuit, super high accuracy circuit, pear surface circuit (optional) and etc.
- 4 Orbital capacity: free shaking, quadrant, certain axis lock shaking, and etc.



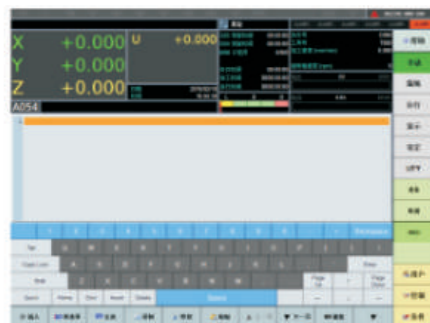
Information



Automation



Expert 1



Edit interface



LAN



Data management



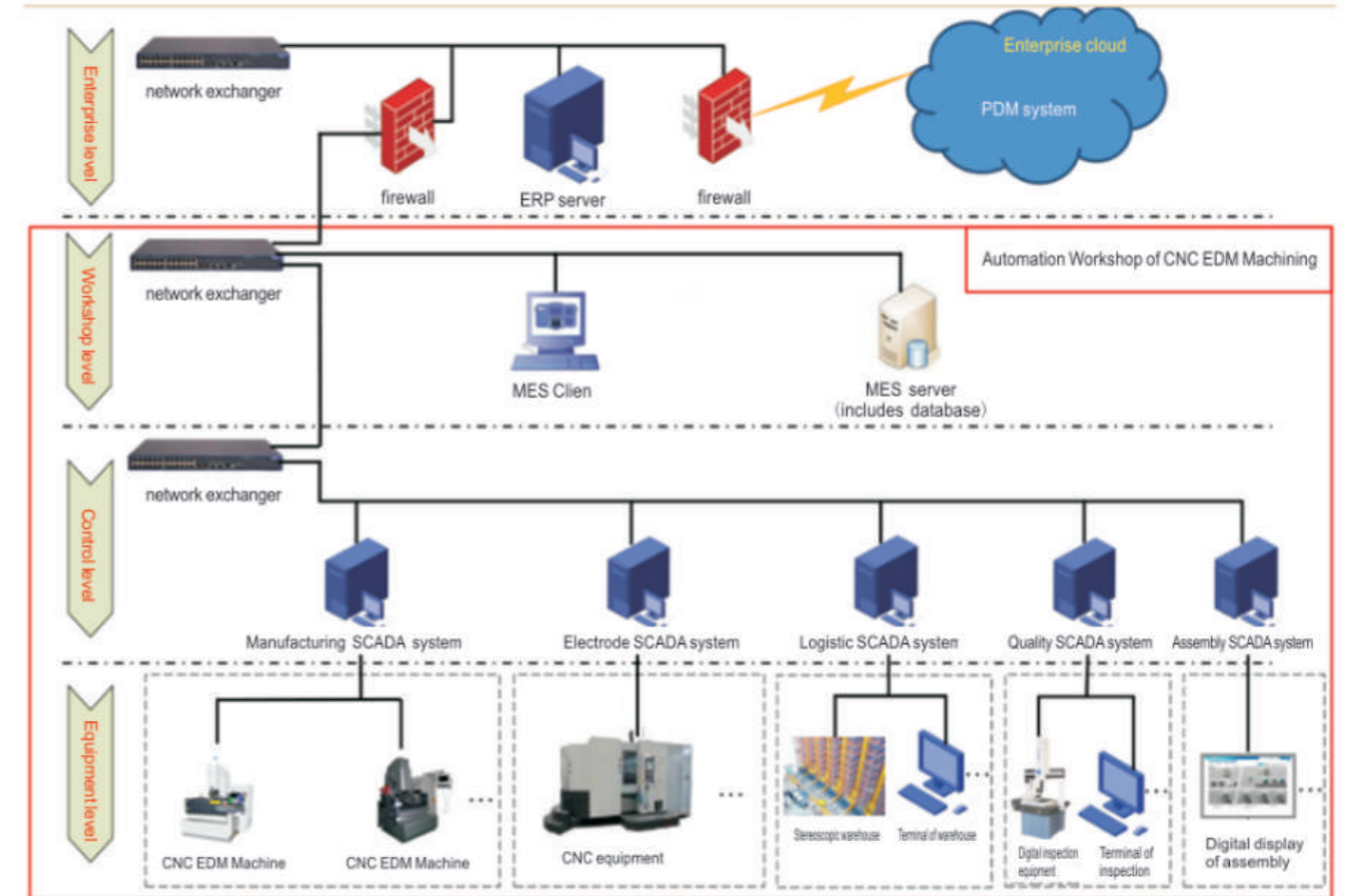
Machining interface



Initialization interface



Positioning interface



QUALITY ASSURANCE



认证



Quality is the partner of success ,implement is guaranty of quality

Passed national army certificate GJB 9001C-2007

Passed ISO9001-2016

Listed by All-China Federation of Industry and Commerce as high-tech enterprise for both military industry and civil industry.

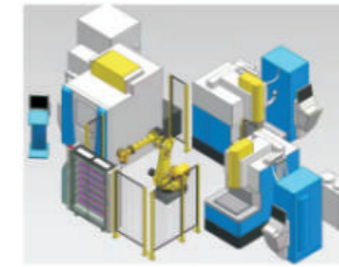
Quality of products is decided by high-quality measuring equipment

We have best laboratory in EDM industry in China, investment more than USD2 million.

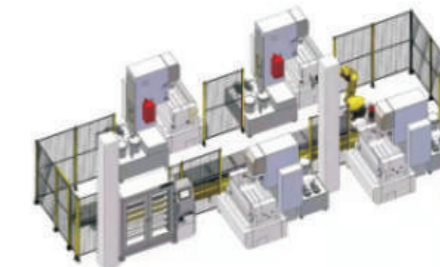
Name	Image	Description
Logic analyzer Agilent		For tracking logical analysis of real-time running system, it measures timing sequence accurately
EMC (electromagnetic compatibility compatibility Analyzer) Agilent		For describing the performance of a device or system to function in an electromagnetic environment
Microscope Mitutoyo		Check dimension and surface quality of small parts

Name	Image	Description
Bridge type CMM HEXAGON		Measure geometric accuracy of complex parts
PCB measuring instrument		To check deflection of PCBs rapidly
Laser interferometer RENISHAW		To check mechanical accuracy of machine

OPTIONAL ACCESSORIES



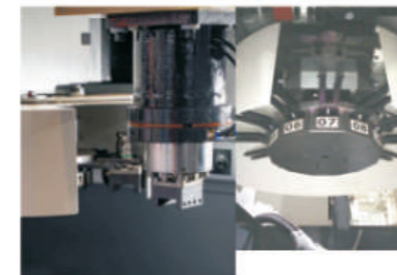
Flexible production line with 3 machines



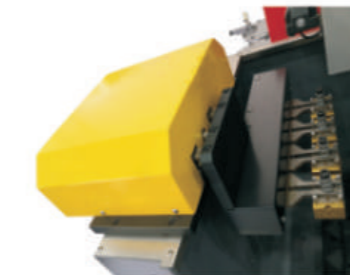
Flexible production line with multiple machines



Automatic production with single machine



Disc type ATC



4-pieces ATC



External ATC



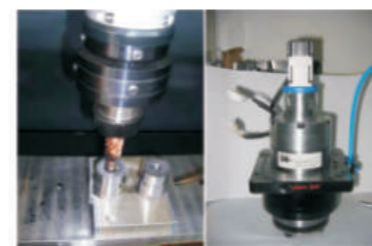
Robot electrode changer



Electrode storage station with robot



Rotation table



U@ axis- System 3R



Pneumatic chuck+clamping



Filter with 5µm



High-performance odorless EDM oil



Voltage stabilizer



Magnetic table

APPLICATION EXAMPLES



High temperature nickel based alloy turbine $Ra \leq 0.2 \mu m$



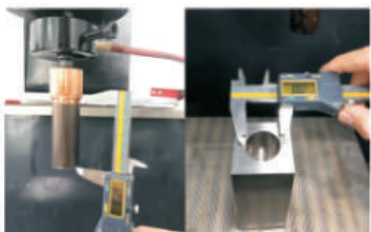
Silicon carbide ceramic part



5-axis simultaneous job



Engine blade mold



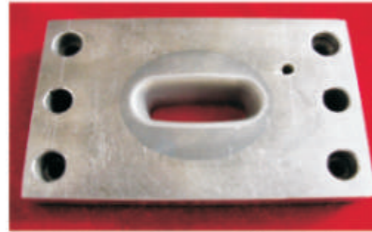
Deep hole mirror finish



Large area machining $Ra \leq 0.4 \mu m$



Accurate aerospace bearing



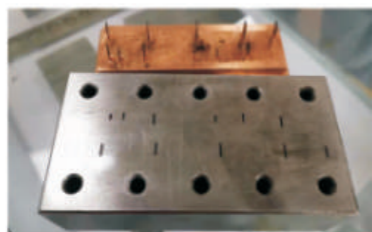
Hard alloy battery mold $Ra \leq 0.4 \mu m$



Simultaneous 4-axis machining job



Carbide extrusion die



Copper narrow ribs machining



Super fine finish of shell mold



Titanium turbine disc with double caps, $Ra \leq 0.2 \mu m$



Tungsten titanium aluminum alloy part



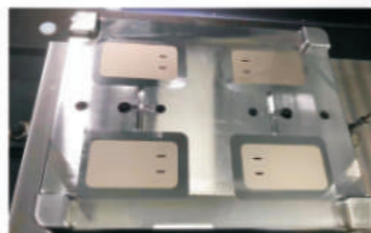
Helical gear sparking



IC encapsulation moulds



Beryllium copper machining



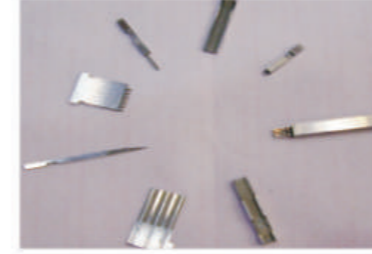
HUAWEI charger mold



Hemisphere mold



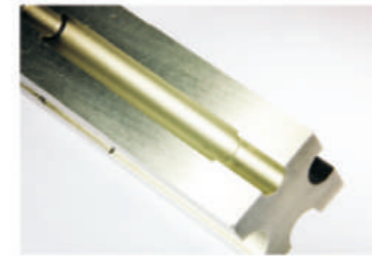
Graphite tiny hole machining



Insert mold



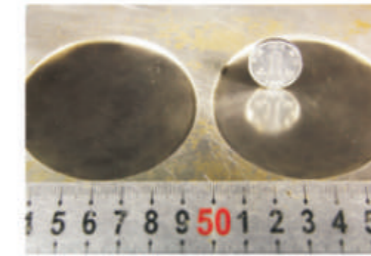
mirror finish machining



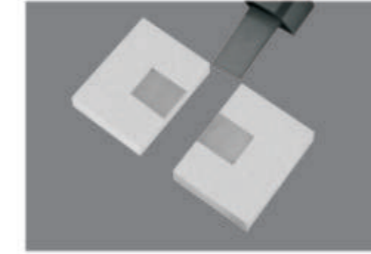
Pen mold



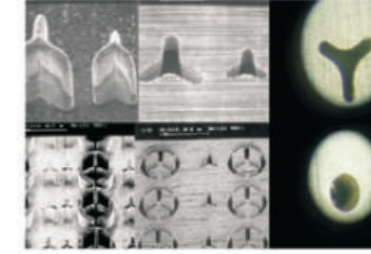
Teeth brush mold



$\Phi 60mm$ mirror finish $Ra \leq 0.18 \mu m$



Graphite narrow rib machining



Spinneret plate mold



Toy mirror finish machining



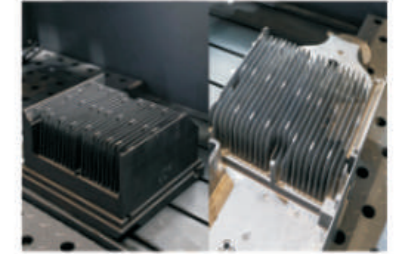
Mold of Piano key



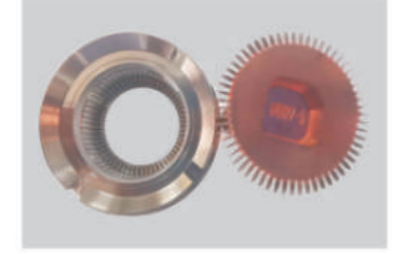
Eyeglasses frame mold



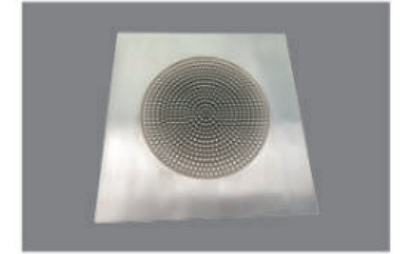
LED lights mold



Die-casting mold with deep ribs



Bottle cap mold



Speaker mold



Zipper mold



Mold of eyeglasses

REQUIREMENTS FOR INSTALLATION/OPERATING ENVIRONMENT

★ Electric engineering

Before install the machine, please confirm general power consumption (KVA), load of main machine and control system together. For instance, when general power input is less than 11KVA, choose 50A air switch; when power consumption is 11–22KVA, use 100A air switch. Choose D type trip. Each machine should have its own leakage protection switch, leakage current $\geq 30\text{mA}$. Use 3 phase 5 wires, $380\text{V} \pm 10\%/50\text{Hz}$, when power supply is not stable, stabilizer is necessary. Earth resistance $\leq 10\Omega$, if it's too big, there will be interference.

★ Vibration

Vibration affects machining performance and life of machine, keep machine away from vibration source. Separated foundation is needed when it's necessary.

★ Foundation

In order to make sure accuracy and life of machine, please prepare foundation of drawing we provide. Machine should be kept in the area without corrosive gas, conductive powder and other unexpected harm.

★ Temperature

Best temperature for the machine is $20 \pm 2^\circ\text{C}$, using environment temperature $10\text{--}35^\circ\text{C}$, humidity $\leq 80\%$. Temperature in room would affect accuracy, so it's better to keep constant temperature. Attention: don't keep machine at position of direct sunshine, wind or warm air conditioning.

★ Discharging liquid

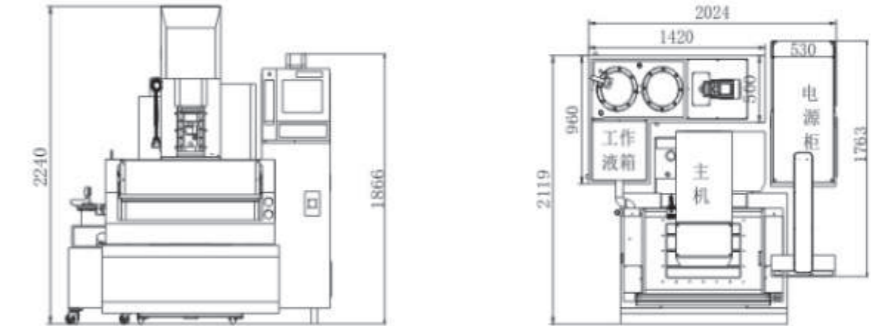
Discharging liquid has great effect on machining performance, please use EDM oil according to our recommendation

★ Attention:

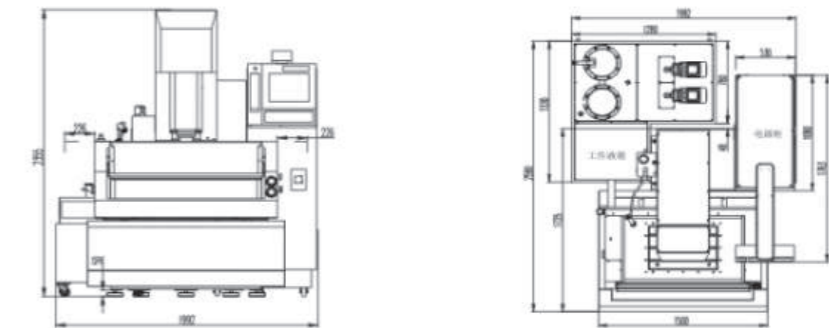
If anything above against law or regulations, please follow the law and regulations.

FLOOR SPACE

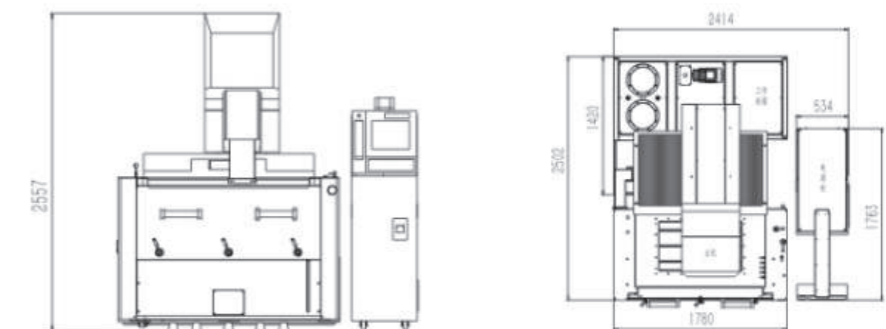
ADI300



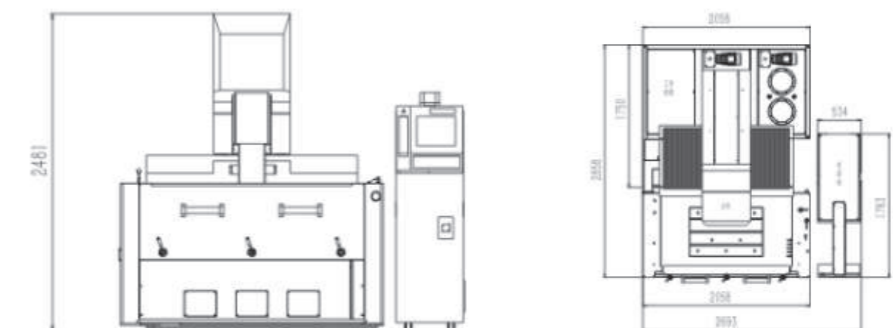
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ADI500

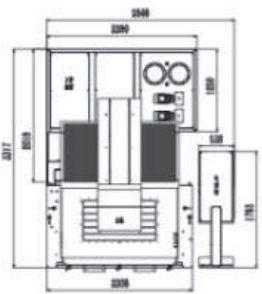
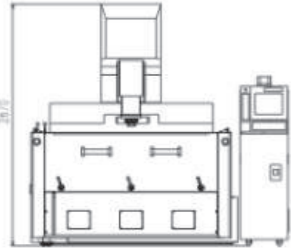


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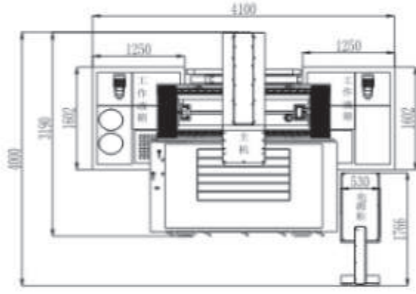
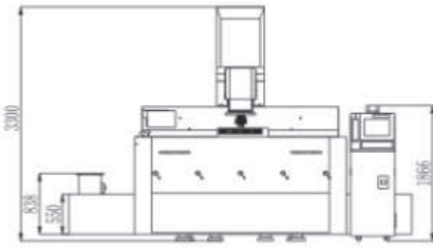


FLOOR SPACE

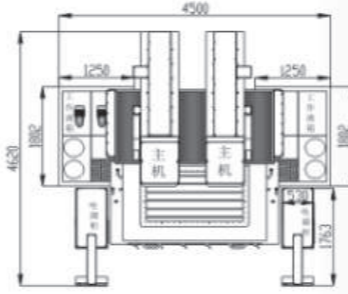
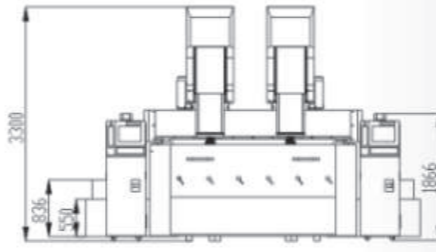
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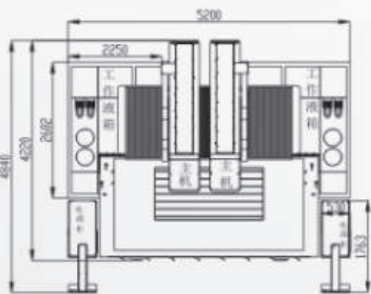
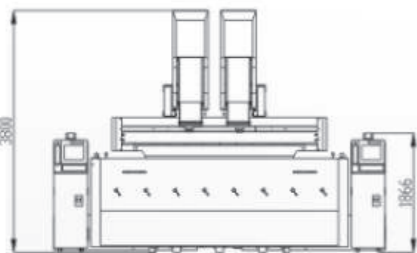
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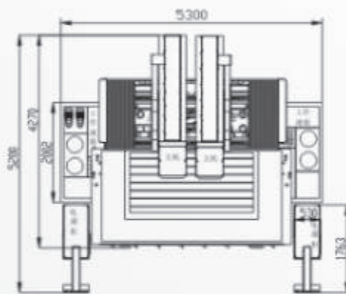
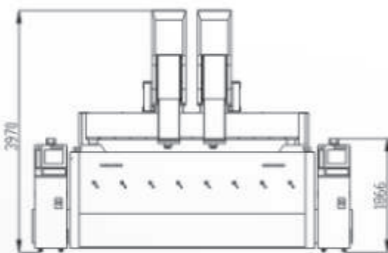
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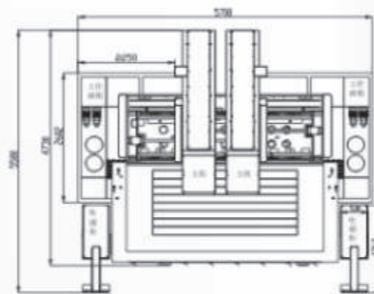
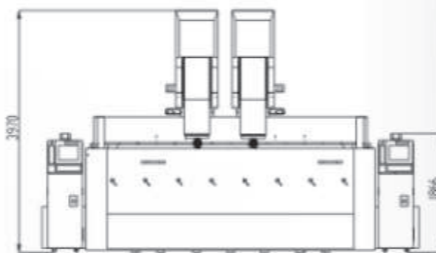
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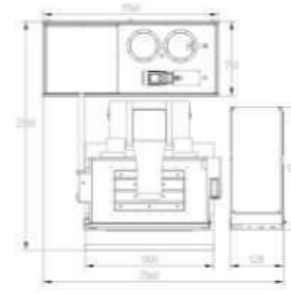
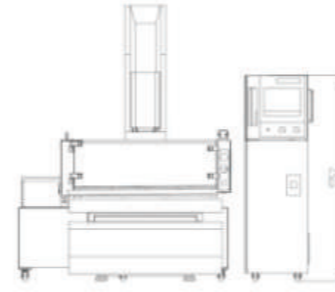
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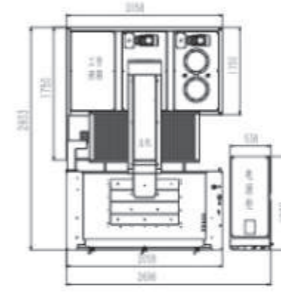
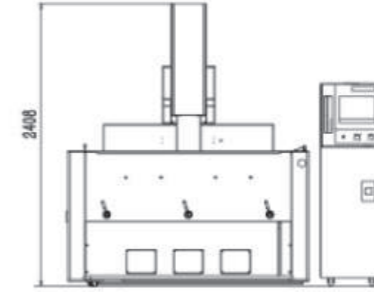
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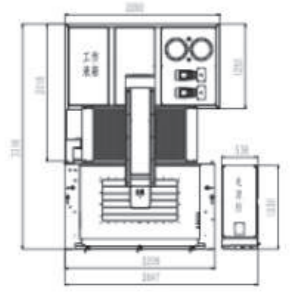
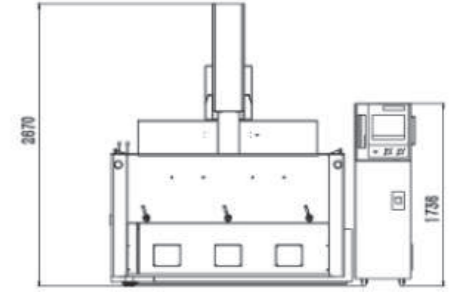
40S+



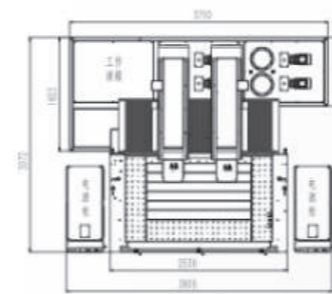
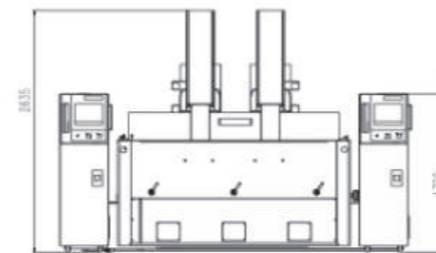
60S+



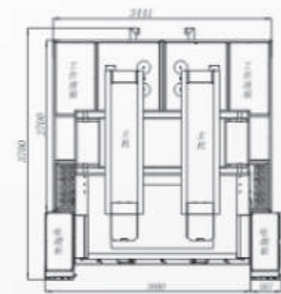
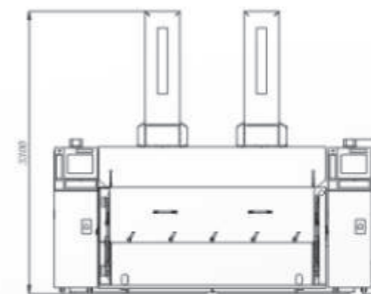
80S+



120S+



140S+



ADI1200双头

