

EDM MACHINE

HF SERIES



HSPK MACHINERY
SHANGHAI HAN SPARK
MIRRO-FINISHING/GRAPHITE/HARD-ALLOY/TWIN-HEAD EDM

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Official Douyin account



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HSPK 2025.3 — HF series

SHANGHAI HANSPARK MACHINERY CO., LTD.



3
Production base

20+
Marketing layout

5000+
Serving customers

18+
Exporting Country

1000+
Annual sales

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R&D and manufacturing of high-end machine tools and equipment

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CREATE HIGH-QUALITY PRODUCTS
 IN THE INDUSTRY AND CAST A
 WORLD BRAND



Shanghai Hanba CNC Mechanical and Electrical Co., Ltd. (HSPK) is a technology research and development enterprise in the field of high-end CNC machine tools in China. Driven by technological innovation as the core driving force, we deeply cultivate breakthroughs in precision machining technology, rely on our core R&D team and full cycle service system, master key core technologies such as CNC systems, discharge technology, mechanical design and manufacturing, and continuously output high-performance domestic equipment.

The company has established a full industry chain layout model of "research and development production sales service": independently developing core technologies, achieving large-scale manufacturing with three major production bases (covering a total area of 75000 square meters), equipped with a complete set of advanced machining equipment, and the entire process from component processing to complete machine assembly and testing is independently controllable.

The core products are "spark machines and slow walking wires", which have a leading market share in multiple industries, with annual sales exceeding 1000+units, and have become an important force in promoting the "domestic substitution" of high-end equipment.

In the future, Hanba CNC will continue to be based on research and development innovation, continuously iterate product technology levels, enhance the competitiveness of Chinese manufacturing in the global precision machining field, and strive to become a leading global provider of precision machining equipment solutions.



No. 6, 1st Road, Industrial Transfer Park, Mashui Town, Yangchun City, Yangjiang City, Guangdong Province
GUANGDONG HAN SPARK INTELLIGENT EQUIPMENT CO., LTD The size of the factory 33000m²

OUR PRODUCTS



EDM | SPARK MACHINE



WEDM | BRASS WIRE CUT EDM

INDEPENDENT TECHNOLOGY R&D

technology R&D ENTERPRISE

Full closed loop

Spark machine operating system



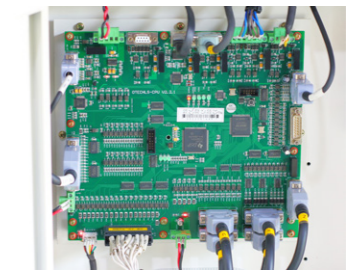
Slow wire running system



Controller | Board hardware

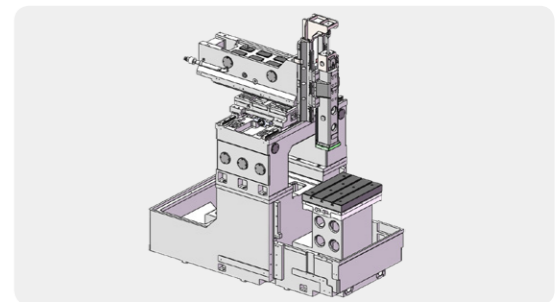


R&D of discharge technology application



Industrial chain

Mechanical design and manufacturing



MANUFACTURING WORKSHOP

PRODUCTION CAPACITY

Shanghai HSPK adopts a full closed-loop manufacturing mode and has a full set of processing and testing equipment.

The machine bed is made of high-quality bed materials and excellent design structure, and each precision part of the machine tool is processed by a professional industrial mother machine, and the key components are independently produced and tested by three-coordinate measurement.

In the assembly process, the professional team will test the accuracy of the guide rail screw, and after the assembly of the whole machine is completed, the positioning accuracy will be detected by the laser interferometer, and finally the technicians will test the EDM performance of each machine tool. Each process link has been accumulated and precipitated for decades, and is produced and processed in strict accordance with technical requirements.

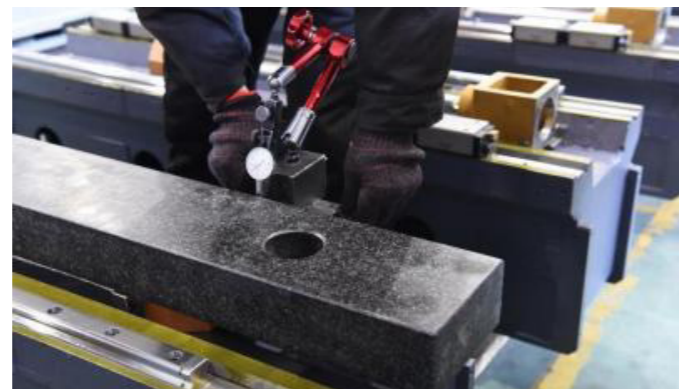
QUALITY ASSURANCE

The bed casting is made of HT300 high-grade cast iron, which has been subjected to secondary tempering stress treatment.

The castings of each part have undergone hardness inspection, graphite morphology and pearlite inspection, and the stability is ensured with reference to strict testing standards.

When the key parts are assembled, they will be scraped, and the screw guide will be assembled by a professional ingenuity team.

In the process of final assembly, the geometric accuracy of the machinery is strictly controlled, and the professional debugging team debugs the EDM performance of each machine tool, and the whole process is strictly inspected in accordance with the technical indicators to ensure the quality of each machine tool delivered to the user.



SAMPLE DISPLAY



Mirror finishing

Workpiece material: S136
Electrode Material: Copper
Electrode size: Φ60

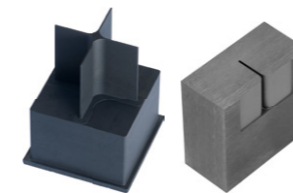
Number of electrodes	Machining depth	roughness	Processing time
2	2.5mm	Ra0.1	5h30min



Spherical / rhomboid mirror

Workpiece material: S136
Electrode Material: Copper
Electrode size: Φ30

Number of electrodes	Machining depth	roughness	Processing time
2	12mm	Ra0.1	7h



Cross position

Workpiece material: P20
Electrode Material: Graphite(-7)
Unilateral spark bits: 0.15

Number of electrodes	Machining depth	roughness	Processing time
2	20mm	Ra1.2	2h20min



Connector

Workpiece material: SKD61
Electrode Material: Copper
Electrode size: ±0.005

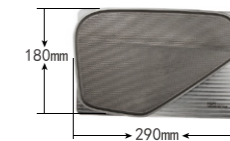
Number of electrodes	roughness	Processing time
2	Ra0.45	1h10min



Shaver housing

Workpiece material: S136
Electrode Material: Copper

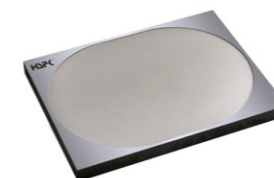
Number of electrodes	Machining depth	roughness	Processing time
2	21mm	Ra0.6	10h



Speaker nets

Workpiece material: S316
Electrode Material: Graphite POCO-3
Spark bits: 0.12

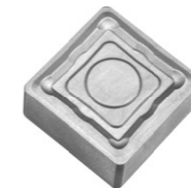
Number of electrodes	Machining depth	roughness	Processing time
2	1.3mm	Ra1.0(VDI 20)	7h(rough) / 10h(fine)



Large areas of fine lines

Workpiece material: S136
Electrode Material: Copper
Electrode size: 195×145

Number of electrodes	Machining depth	roughness	Processing time
2	0.5mm	Ra0.6	8h30min



Blade molds

Workpiece material: Tungsten -YG15
Electrode Material: Copper
Electrode size: 20x20mm

Number of electrodes	Machining depth	roughness	Processing time
2	1.0mm	Ra0.6	2h45min



Cross position

Workpiece material: beryllium copper
Electrode Material: graphite
Unilateral spark gap: 0.15
Electrode size: 40x20x1mm

Number of electrodes	Machining depth	roughness	Processing time
3	40mm	Ra0.63	5h30min



Central petal

Workpiece material: Tungsten steel
Electrode material: Purple copper
Unilateral spark gap: 0.1mm
Electrode size: 25*25mm

Number of electrodes	roughness	Processing time
3	Ra0.22	5h30min

INTELLIGENT POSITIONING SYSTEM

NEW

Hand control box



Preparation before processing → Preparation after processing

- Added zeroing and centering functions, as well as machining offset functions
- Added coordinate system and workpiece number switching and one-key positioning function


It is more convenient to operate and enhances the user experience

Feature introduction


This mode simplifies and integrates the operation steps of the "preparation stage" and "processing stage", with the core concept of "intelligence driving productivity", creating a guided thinking intelligent operating system, greatly reducing the non-production time of the equipment, improving the production time of the equipment, and reducing the manual proficiency and experience value.

Feature

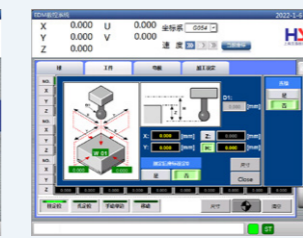
This function opens up the data relationship between "ball", "workpiece", "electrode", "parameter library", "multitask" and "ATC", and the system automatically calculates the processing position, automatically generates discharge parameters, greatly simplifies the operation steps, and avoids the probability of manual error.



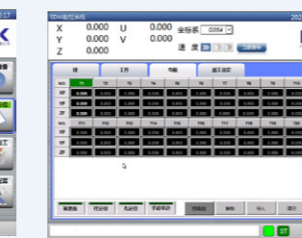
Ball positioning



Workpiece positioning



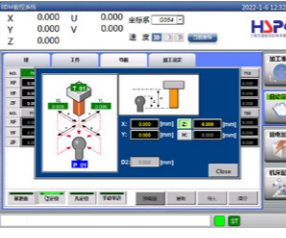
Workpiece and column positioning



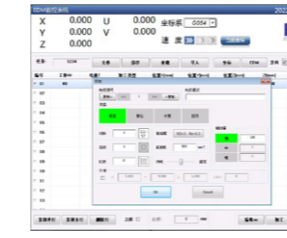
Electrode positioning

CNC power supply unit

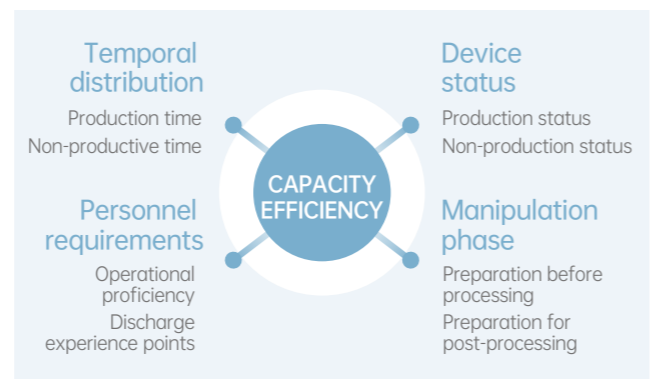
Operating system	Windows 7
Language	Multi-Chinese switching
Controls the number of axes	Three-axis linkage (up to 5 axes)
CNC Directives	Standard ISO G code
How it is displayed	15-inch LED
Input method	Touch screen / keypad
Transmission mode	USB / LAN
Storage	64G / SSD
Drive type	AC servo drive
Status lights	Red, yellow, green
Optimal finish	Ra 0.2
Maximum processing current	50A (choose 100A)
Maximum processing efficiency	500mm ³ /min
Minimal electrode wear	≤0.1%
Minimum drive unit	0.001
Maximum knife lifting speed	10m/min
Input power	AC380V 50-60Hz
total input power	13KVA(choose 22KVA)
API Data Service	FTP、HTTP、Web



Electrode and Reference Surface



AUTO·EDM



The preparation phase before processing not only generates long non-productive times, but also relies on the proficiency of the personnel due to the number of operation steps

AUTOMATIC PROCESSING



Person + Machine = **AUTO 2.0**

Function introduction

AUTO is an automatic machining mode that can be used by inexperienced personnel. Users only need to select "electrode material," "electrode type," "oscillation type," "electrode size," and "roughness," then input "spark gap," "machining position," and "machining depth." The system will automatically generate matching discharge parameters.

Features

The new AUTO has developed an expert library based on different electrode types, combined with parameter strategies that are conducive to high-quality machining, such as "industry field", "discharge parameters", "system settings" and "processing experience", and the parameter library has rich EDM conditions and a variety of processing tendency options.







AUTO Procedure

1. Select a type

- Electrode material
- Electrode type
- Electrode size

2. Accessibility

- Shake mode
- Knife lifting method
- Cavity depth
- Preference Selection

3. Processing requirements

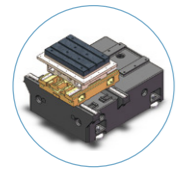
- Enter the spark bit
- Select the roughness
- Shake compensation

4. Enter the location

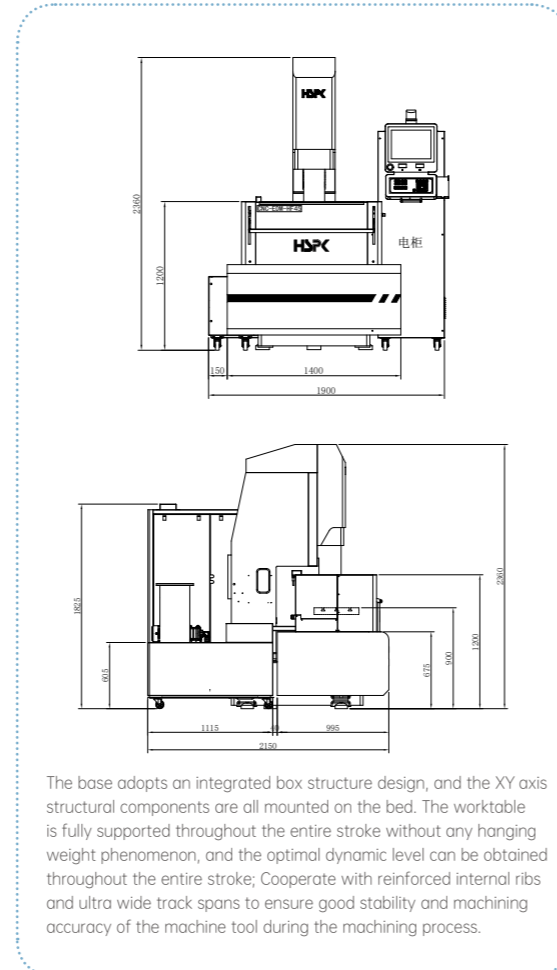
- Machining position
- Machining depth

HF45

EDM machine



Main spindle core cooling system



Note: The spindle is equipped with a core cooling system (air-cooled device) as standard

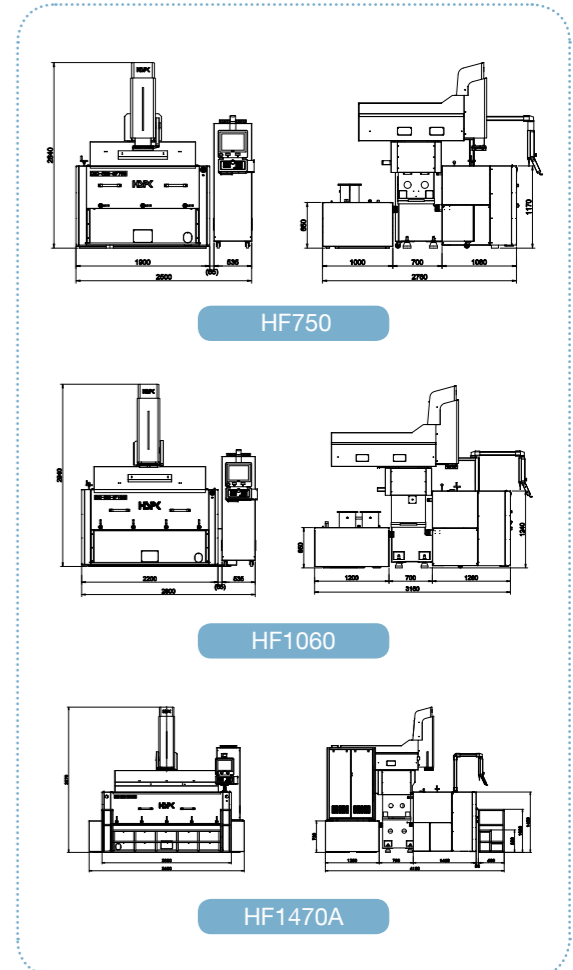
EQUIPMENT PARAMETERS

Model	unit	HF45
X/Y/Z Travel	mm	450×300×300
Worktable size	mm	600×400
Distance between electrode plate and worktable	mm	290~590
Max.electrode weight	Kg	50
Max.workpiece weight	Kg	800
Table-to-ground height	mm	900
Working tank size	mm	900×620×400
Oil tank capacity	L	450
Machine dimension	mm	1900×2150×2360
Machine weight	Kg	2500
Lubrication method	--	Automatic
Maximum height of liquid level	mm	240
Liquid tank opening and closing method	--	Up/down manual
Level control mode	--	Manual
Filtration accuracy	um	5

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HF750/ HF1060/ HF1470A

EDM machine



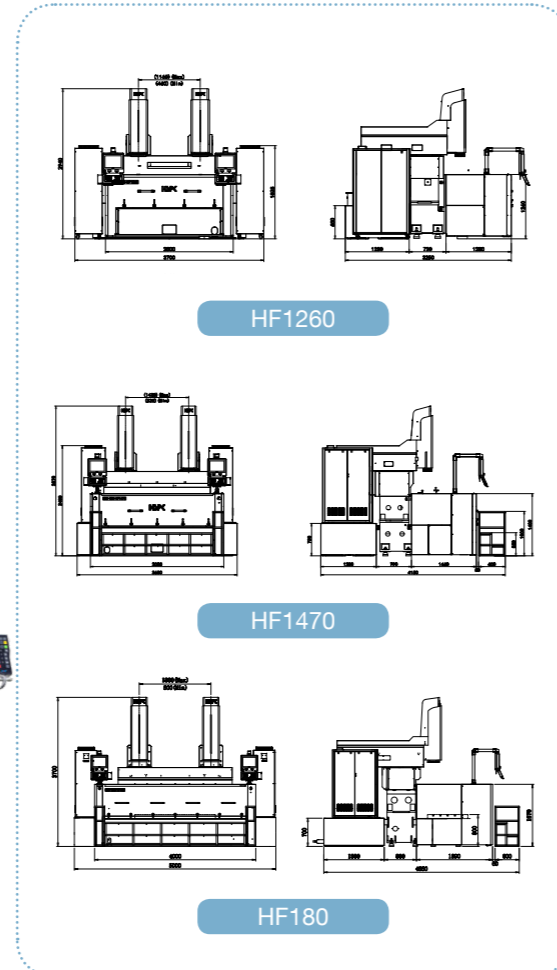
EQUIPMENT PARAMETERS

Model	unit	HF750	HF1060	HF1470A
X/Y/Z Travel	mm	700×500×300	1000×600×400	1400×700×500
Worktable size	mm	900×600	1250×800	1500×900
Distance between electrode plate and worktable	mm	500~800	500~900	600~1100
Max.electrode weight	Kg	80	80	150
Max.workpiece weight	Kg	3000	4000	8000
Table-to-ground height	mm	670	700	790
Working tank size	mm	1500×900×550	1800×1100×600	2500×1300×700
Oil tank capacity	L	1000 (Full of oil)	1400 (Full of oil)	2700(Comes standard with full oil) 1300(Optional flushing)
Machine dimension	mm	2500×2760×2640	2800×3160×2940	3600×4150×3420
Machine weight	Kg	4200	5500	8000
Lubrication method	--	Automatic	Automatic	Automatic
Maximum height of liquid level	mm	400	450	550
Liquid tank opening and closing method	--	Up/down manual	Up/down manual	Up/down manual
Level control mode	--	Manual	Manual	Manual
Filtration accuracy	um	5	5	5

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HF1260/ HF1470/ HF180

Double-head EDM machine



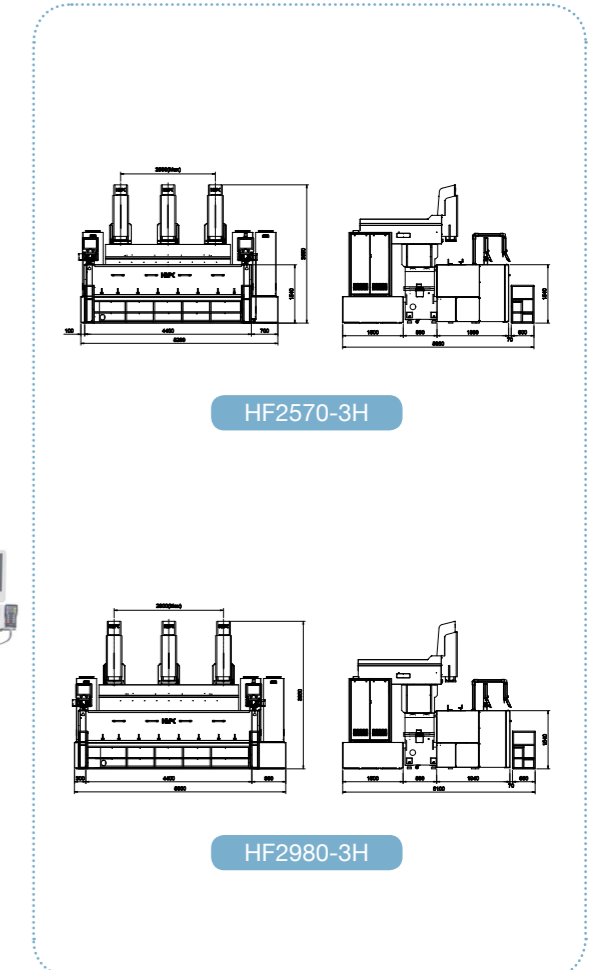
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EQUIPMENT PARAMETERS

Model	unit	HF1260	HF1470	HF180
X/Y/Z Travel	mm	700/700x600x400	850/850x700x500	1000/1000x700x500
Worktable size	mm	1250x800	1500x900	2000x1000
Distance between electrode plate and worktable	mm	500~900	600~1100	800~1300
Max.electrode weight	Kg	80	150	200
Max.workpiece weight	Kg	6000	8000	10000
Table-to-ground height	mm	700	790	790
Working tank size	mm	2000x1100x600	2500x1300x700	3500x1750x850
Oil tank capacity	L	1500	2700(Full of oil)	4200(Comes standard with full oil) 1800(Optional flushing)
Machine dimension	mm	3700x3250x2940	3600x4150x3420	5000x4850x3700(Full of oil) 4200x4650x3700(Flush the oil)
Machine weight	Kg	7000	9000	14000
Lubrication method	--	Automatic	Automatic	Automatic
Maximum height of liquid level	mm	450	550	650
Liquid tank opening and closing method	--	Up/down manual	Up/down manual	Up/down manual
Level control mode	--	Manual	Manual	Manual
Filtration accuracy	um	5	5	5

HF2570-3H/ HF2980-3H

3-head EDM machine



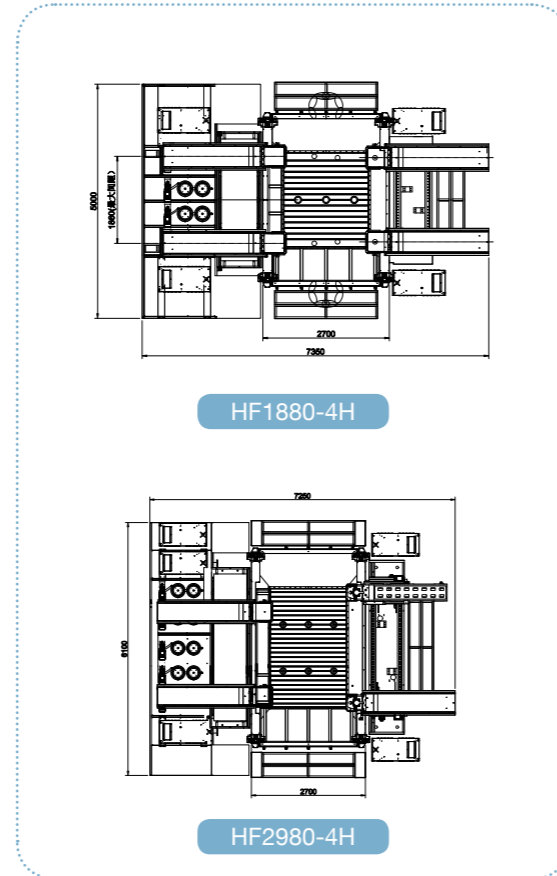
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EQUIPMENT PARAMETERS

主机	单位	HF2570-3H	HF2980-3H
X1 / Y1 / Z1 Travel	mm	1300x700x500	1700x800x600
X2 / Y2 / Z2 Travel	mm	1300x700x500	1700x800x600
X3 / Y3 / Z3 Travel	mm	1300x700x500	1700x800x600
Worktable size	mm	2500x1000	2800x1000
Distance between electrode plate and worktable	mm	850-1350	900-1500
Max.electrode weight	Kg	200	200
Max.workpiece weight	Kg	13000	15000
Table-to-ground height	mm	790	790
Working tank size	mm	3900x1750x850	4300x1800x850
Oil tank capacity	L	4400(Full of oil) 2300(Flush the oil)	5000(Full of oil) 2300(Flush the oil)
Machine dimension	mm	5200x5050x3650(Full of oil) 4750x4950x3650(Flush the oil)	5600x5100x3950(Full of oil) 4800x5000x3950(Flush the oil)
Machine weight	Kg	17000	19000
Lubrication method	--	Automatic	Automatic
Liquid tank opening and closing method	--	Up/down manual	Up/down manual
Level control mode	--	Manual	Manual

HF1880-4H / HF2980-4H

4-head EDM machine



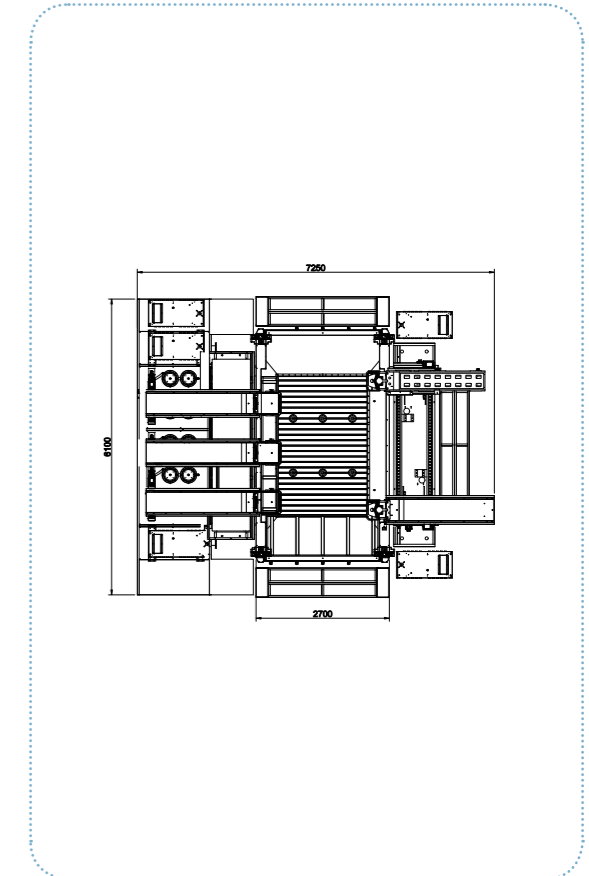
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EQUIPMENT PARAMETERS

Model	unit	HF1880-4H	HF2980-4H
X1 / Y1 / Z1 Travel	mm	1200x800x600	1700x800x600
X2 / Y2 / Z2 Travel	mm	1200x800x600	1700x800x600
X3 / Y3 / Z3 Travel	mm	1000x800x600	1500x800x600
X4 / Y4 / Z4 Travel	mm	1000x800x600	1500x800x600
Worktable size	mm	2000x1800	2800x1800
Distance between electrode plate and worktable	mm	900~1500	900~1500
Max.electrode weight	Kg	200	200
Max.workpiece weight	Kg	15000	20000
Table-to-ground height	mm	790	790
Working tank size	mm	3500x2300x800	4500x2300x800
Oil tank capacity	L	4800(Comes standard with full oil) 2800(Optional flushing)	6000(Comes standard with full oil) 3400(Optional flushing)
Machine dimension	mm	7350x5050x3950(Full of oil) 7150x5050x3950(Flush the oil)	7250x6100x3950(Full of oil) 7150x6100x3950(Flush the oil)
Machine weight	Kg	20000	25000
Lubrication method	--	Automatic	Automatic
Liquid tank opening and closing method	--	Up/down manual	Up/down manual
Level control mode	--	manual	manual
Filtration accuracy	um	5	5

HF2980-5H

5-head EDM machine



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EQUIPMENT PARAMETERS

Model	unit	HF2980-5H
X1 / Y1 / Z1 Travel	mm	1700x800x600
X2 / Y2 / Z2 Travel	mm	1700x800x600
X3 / Y3 / Z3 Travel	mm	1700x800x600
X4 / Y4 / Z4 Travel	mm	1500x800x600
X5 / Y5 / Z5 Travel	mm	1500x800x600
Worktable size	mm	2800x1800
Distance between electrode plate and worktable	mm	900~1500
Max.electrode weight	Kg	200
Max.workpiece weight	Kg	20000
Table-to-ground height	mm	790
Working tank size	mm	4500x2300x800
Oil tank capacity	L	6400(Comes standard with full oil) 3400(Optional flushing)
Machine dimension	mm	7250x6100x3950(Full of oil) 7150x6100x3950(Flush the oil)
Machine weight	Kg	27000
Lubrication method	--	Automatic
Liquid tank opening and closing method	--	Up/down manual
Level control mode	--	manual
Filtration accuracy	um	5

OPTIONAL CONFIGURATION



MACHINING SOLUTIONS



Household appliance
Electrical appliances



Car
Parts and components



Plastic
Mold



Die casting
Mold



Electron
Correspondence



Electric
Tool



hardware
material



Equip
Medical
Educate

