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EDM MACHINE

HF SERIES





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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 HANSPARK MACHINERY CO., LTD.(HSPK) is a technology-driven enterprise specializing in the research and development, manufacturing, and sales of high-end equipment. The company is dedicated to breakthroughs in precision machining technology, leveraging its exceptional R&D team and comprehensive service system to master core manufacturing technologies. The main products include spark machines and slow wire-cutting machines, with continuous advancements in technological innovation across multiple fields. The company's R&D projects encompass numerical control systems, discharge technology, controller development, and mechanical design and manufacturing. HSPK is committed to providing customers with high-performance domestic equipment, promoting the substitution of imported products, and enhancing the competitiveness of Chinese manufacturing in the global market.

Currently, the company operates two production bases, covering a total area of 63,000 square meters. With leading technological capabilities and unique product advantages, HSPK has become a leading enterprise in the development and manufacturing of high-end CNC machine tools in China.

Looking forward to the future, HSPK will continue to uphold the concept of innovation-driven, continuously improve the level of products and technologies, provide modern processing solutions, and work with industry partners to create a more brilliant tomorrow.

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



Spark machine
operating system



Slow wire running
system



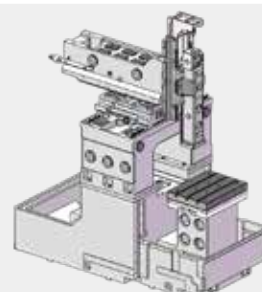
Controller | Board
hardware



R&D of discharge
technology application



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: $\Phi 60$

Number of electrodes	Machining depth	roughness	Processing time
2	2.5mm	Ra0.1	6h30min



Spherical / rhomboid mirror

Workpiece material: S136
Electrode Material: Copper
Electrode size: $\Phi 30$

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



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



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



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)

INTELLIGENT POSITIONING SYSTEM

Preparation before processing

NEW
Hand control
box

It is more convenient to operate and enhances the user experience



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

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

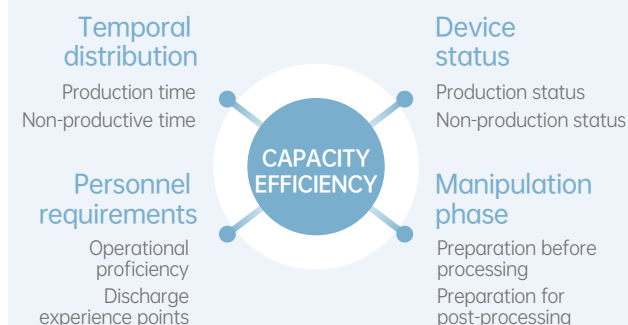
Operating system	Windows 7
Language	Multi-Chinese switchino
Controls the number of axes	Three-axis linkage (up to 5 axes)
CNC Directives	Standard ISO G code
How it is displayed	15-inch LED
Input method	Touch screen / keypad
Transmission mode	USB / LAN
Storage	64G / SSD
Drive type	AC servo drive
Status 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

Preparation after processing

AUTOMATIC PROCESSING



Person + Machine = **AUTO 2.0**

Function introduction

AUTO is an automatic processing mode that can be used by inexperienced personnel, users only need to select "Electrode Material", "Electrode Type", "Shake Type", "Electrode Size", "Coarseness", enter "Spark Gap", "Machining Position", "Machining Depth", and the system automatically generates 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

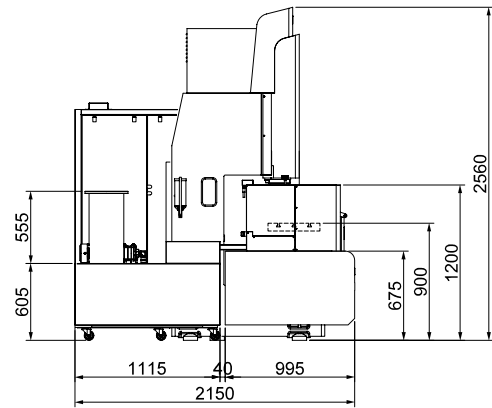
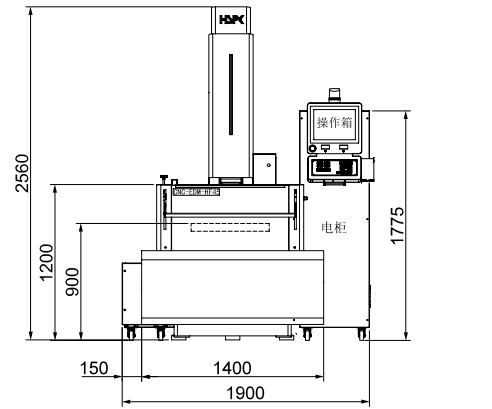
- Enter the spark bit
- Select the roughness
- Shake compensation

4. Enter the location

- Machining position
- Machining depth

HF45

EDM machine



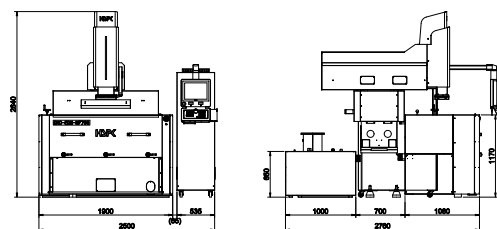
EQUIPMENT PARAMETERS

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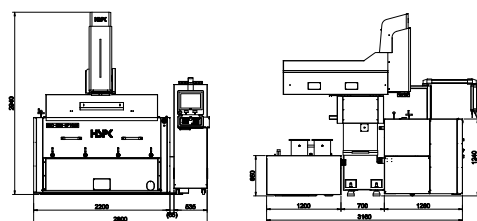
Model	unit	HF45
X/Y/Z Travel	mm	450×300×300
Worktable size	mm	600×400
Distance between electrode plate and worktable	mm	290~590
Max.electrode weight	Kg	50
Max.workpiece weight	Kg	800
Table-to-ground height	mm	900
Working tank size	mm	900×620×400
Oil tank capacity	L	450
Machine dimension	mm	1900×2150×2360
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

HF750/ HF1060/ HF1470A

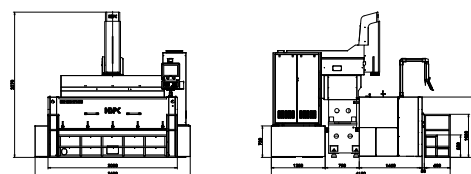
EDM machine



HF750



HF1060



HF1470A

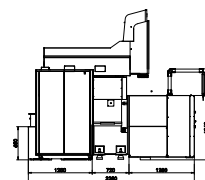
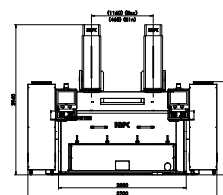
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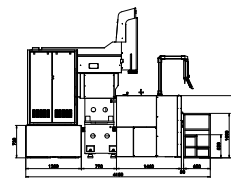
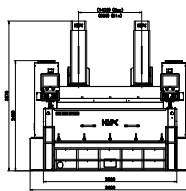
Model	unit	HF750	HF1060	HF1470A
X/Y/Z Travel	mm	700×500×300	1000×600×400	1400×700×500
Worktable size	mm	900×600	1250×800	1500×900
Distance between electrode plate and worktable	mm	500~800	500~900	600~1100
Max.electrode weight	Kg	80	80	150
Max.workpiece weight	Kg	3000	4000	8000
Table-to-ground height	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

HF1260/ HF1470/ HF1880

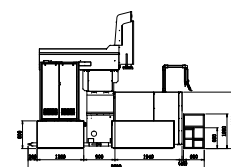
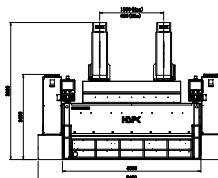
Double-head EDM machine



HF1260



HF1470



HF180

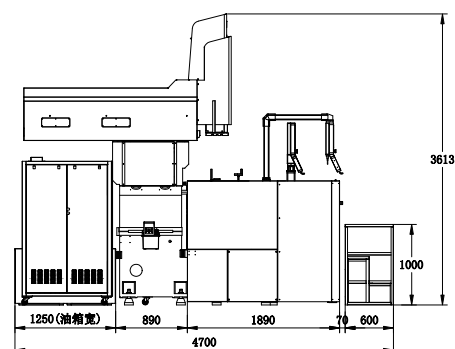
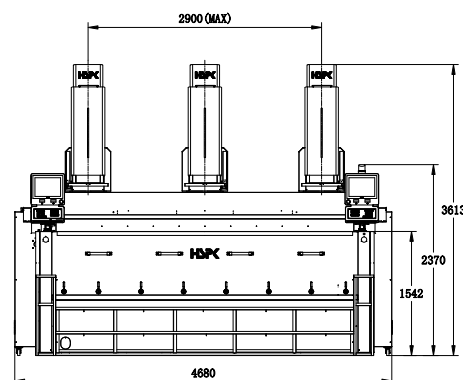
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Model	unit	HF1260	HF1470	HF180
X/Y/Z Travel	mm	700/700x600x400	850/850x700x500	1000/1000x700x500
Worktable size	mm	1250x800	1500x900	2000x1000
Distance between electrode plate and worktable	mm	500~900	600~1100	750~1250
Max.electrode weight	Kg	150	150	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(Comes standard with full oil) 1300(Optional flushing)	6000(Comes standard with full oil) 1800(Optional flushing)
Machine dimension	mm	3700x3250x2940	3600x4150x3420	5400x4900x3700(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

HF2970-3H

3-head EDM machine



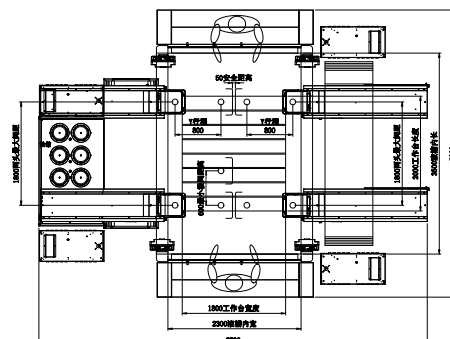
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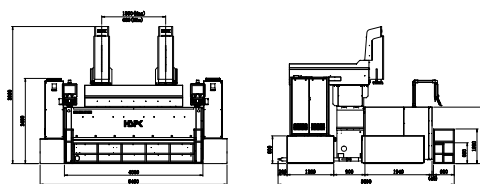
Model	unit	HF2970-3H
X1 / Y1 / Z1 Travel	mm	1700×700×500
X2 / Y2 / Z2 Travel	mm	1700×700×500
X3 / Y3 / Z3 Travel	mm	1700×700×500
Worktable size	mm	2700×1000
Distance between electrode plate and worktable	mm	800~1300
Max.electrode weight	Kg	200
Max.workpiece weight	Kg	15000
Table-to-ground height	mm	790
Working tank size	mm	3900×1750×850
Oil tank capacity	L	1800(Flush the oil)
Machine dimension	mm	4700×4700×3600
Machine weight	Kg	17000
Lubrication method	--	Automatic
Maximum height of liquid level	mm	650
Liquid tank opening and closing method	--	Up/down manual
Level control mode	--	Manual
Filtration accuracy	um	5

HF1880-4H / HF2980-4H

4-head EDM machine



HF1880-4H



HF2980-4H

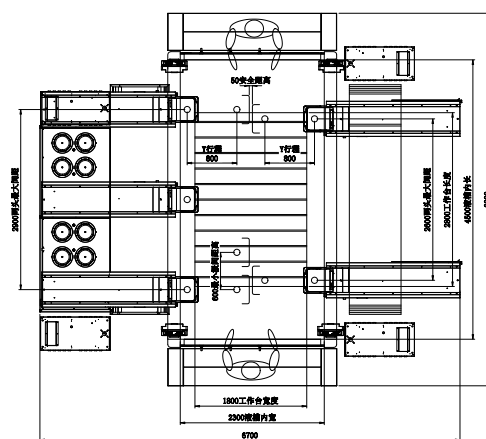
EQUIPMENT PARAMETERS

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Model	unit	HF1880-4H	HF2980-4H
X1 / Y1 / Z1 Travel	mm	1200x800x600	1700/1700x800x600
X2 / Y2 / Z2 Travel	mm	1200x800x600	1700/1700x800x600
X3 / Y3 / Z3 Travel	mm	1200x800x600	1700/1700x800x600
X4 / Y4 / Z4 Travel	mm	1200x800x600	1700/1700x800x600
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	3500x2300x850	4500x2300x850
Oil tank capacity	L	1800(Flush the oil)	2000(Flush the oil)
Machine dimension	mm	6700x5000x4000	6700x6000x4000
Machine weight	Kg	20000	25000
Lubrication method	--	Automatic	Automatic
Maximum height of liquid level	mm	600	600
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



EQUIPMENT PARAMETERS

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Model	unit	HF2980-5H
X1 / Y1 / Z1 Travel	mm	1700×800×600
X2 / Y2 / Z2 Travel	mm	1700×800×600
X3 / Y3 / Z3 Travel	mm	1700×800×600
X4 / Y4 / Z4 Travel	mm	1500×800×600
X5 / Y5 / Z5 Travel	mm	1500×800×600
Worktable size	mm	2800×1800
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	4500×2300×850
Oil tank capacity	L	2200(Flush the oil)
Machine dimension	mm	6700×6000×4000
Machine weight	Kg	27000
Lubrication method	--	Automatic
Maximum height of liquid level	mm	600
Liquid tank opening and closing method	--	Up/down manual
Level control mode	--	manual
Filtration accuracy	um	5

OPTIONAL CONFIGURATION



Voltage regulators



EDM fluids



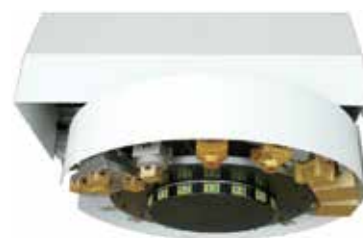
Oil cooler



Pneumatic chuck



Panel A/C for electric cabinet



ATC(12T/24T)



Turntable



C-axis



ATC(4T)

MACHINING SOLUTIONS



■ EDM&CCR unit

■ EDMAutomation unit

■ Flexible fully automated production line

Household appliance
Electrical appliances

Haier

青岛海尔

Hisense

青岛海信

Midea

美的集团

TCL

TCL 集团

Galanzz 格兰仕

格兰仕

Car

Parts and components



比亚迪



长城汽车
长城汽车



长春一汽



特斯拉



岱美股份



肇民科技



春秋电子



宁波华翔



宁波天龙电子股份有限公司

宁波天龙

Plastic
Mold



华威
HWTECH
常州华威

Hi-Tech Moulds

海泰科



方正精工
FANGZHENG TOOL
宁波方正



银宝山新
银宝山新



旭升股份

IKD 爱柯迪

爱柯迪



永茂泰



铭利达



广东鸿图

Die casting
Mold



晋拓股份

+GF+

乔治费歇尔



渝江
YUJIANG
渝江压铸



型腔模具



中电科技
中电科技集团重庆光电有限公司



春兴精工

FINGU

凡谷
武汉凡谷

TATFOOK

大富科技



东山精密

Electron
Correspondence



长风电子



上声电子



艾礼富



东昂科技

Electric
Tool



巨星科技



格力博



佳世达



锋龙股份



中瑞股份

hardware
material



真兰仪表



铁锚玻璃



福耀玻璃



信義玻璃

Equip
Medical
Educate



东方电气
东方电气



哈电集团
哈尔滨汽轮机



康泰医学



百多安医疗



朱氏药业

