## Independently Developed Five-axis System

BMG — making you stand out in the industry

# Assist customer in the industry to become



#include "stdatx.h"
#include "WriteTask.h"
// Execute Function G Code
int CWriteTask::ExecuteGFunc(CGFuncline*pLine) []
// Execute single segment function code
intCWriteTask::ExecuteIntCode(CTintcodeLine* pLine) [{}
int CWriteTask::ExecuteDoubleCodeLine*pLine) [{}
// Execute Function G0 and G1 Code
int CWriteTask:: ExecuteGOG1(CG0G1Line*pLine) [{}
// Execute Function G2 and G3 Code
int CWriteTask::ExecuteG2G3(CG2G3Line*pLine) []
// Execute Function G2 and G3 Code
int CWriteTask::ExecuteDesG2G3(CDesG2G3Line*pLine) [{}
int CWriteTsak::ExecuteALL() [{}



BMG MAKİNA TÜRKİYE DİSTRİBÜTÖRÜDÜR.

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Note: the content may be changed, and the right to technical update is reserved. The machine tool described here may include some options, equipment and CNC system substitutes.

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# Electron Discharge Machining

WEDM-MS WEDM-LS



# **Company Profile**

BMG

Suzhou BMG Precision Machinery Co., Ltd., located in Xiangcheng Economic Development Zone, Suzhou, Jiangsu Province, China, it is a high-tech innovative enterprise with independent R & D and production capacity in close cooperation with colleges and universities. Our company's main products are CNC Wire-Cut Electric Discharge Machines such as "WEDM-HS" and "WEDM-LS", and carries out sales and technical services at home and abroad.

We pay much attention to product quality and after-sales service.

"Quality first, Service first and Customer first" is the company's consistent guideline and enterprise development direction.

BMG people take improving China's manufacturing equipment as their own responsibility, and are committed to providing WEDM-HS and WEDM-LS with reliable quality, excellent performance and outstanding cost performance to the majority of enterprises, military units and educational institutions.

The company took the lead in launching the "Five-Axis CNC Wire-Cut Electric Discharge Machine" in China, which is equipped with 0.1 µm intelligent control system of low-speed wire cutting with high resolution, fundamentally improves the performance of mid-speed wire cutting machine tool, realizes the accuracy comparable to that of low-speed wire cutting machine tool, and brings great convenience and high stability to customers.

After more than 12 years of R & D and experience accumulation, BMG company has become a source manufacturer with truly independent intellectual property rights, complete mastery of system source code and core technology.

#### • China Office

Yuyao City	Hebei Province	Ninghai City	• Taizhou City	Wenzhou City	Xiamen City
Dongguan City	• Foshan City	Chongqing City	• Beijing	Zhengzhou City	• Wuxi City
Sichuan Province	Changzhou City	• Shanghai	• Sichuan Province	• Tianjing City	• Taiwan

#### Abroad Office

• U.S.A	• Japan	• Russia	• Mexico	North Korea	• Vietnam
• Kazakhstan	• Thailand	• Sri Lanka	• Iran	• Turkey	•

### Wire-cut Samples >>>



#### • Progressive die

machine type: BMG600(WEDM-LS) Electrode material:  $\phi$  0.25 copper wire Workpiece material: SKD11 steel

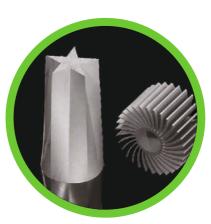
Step Accuracy: 3.6μm
Hole uniformity: 1.3μm
Surface roughness: 0.45μm



#### • Matching Components

machine type: BMG430/530/640/850/1080/1216 Electrode material:  $\phi$  0.18 molybdenum wire

Workpiece material: SKD61 steel Surface roughness: 0.35μm



#### • Special-shaped parts

machine type: BMG430/530/640/850/1080/1216

Electrode material:  $\phi$  0.18 molybdenum wire

Workpiece material: Cr12 steel Surface roughness: 0.95µm

#### AC CUT HMI

#### Experience The New Functions Of Innovative Human-Computer Interface

The intuitive and orderly interface is more convenient for users to learn and master quickly
With the newly designed "One Hand Operation" mobile control box, multi cavity programming and rapid setting of various processes can be realized.







#### 1. File managemen

Manage multi format processing files, can check and correct the selected files to be processed, such as code, compensation, etc. Preset the select processing intelligent auxiliary items, make optimal processing for special angle clearing, graphic rotation, mirror image, etc. The simple program setting without programming makes the processing more convenient. One click compensation update function makes the matching accuracy easier to control. Support a variety of code formats, integrate the simplicity of WEDM-HS, the practicality of WEDM-MS and the intelligence of WEDM-LS, the selection of programming master workers will be more handy.

#### 2. Prepare machining program

Simulate the code files being processed or to be processed, check and verificate to make preparations before processing. Check program limits and related process parameters. It supports the rapid conversion of code into graphics to check the offset interference and the physical contour of the model. It can also be run in a single segment to check the code and the corresponding program segment data.

#### 3. Execution and detection

A variety of automatic reference search methods allow users to complete the correction more quickly and efficiently. The high intelligent AR function makes the WEDM-MS and WEDM-LS convenient and efficient at the same time. Preset vertical point, automatic vertical alignment, one key reset, etc.





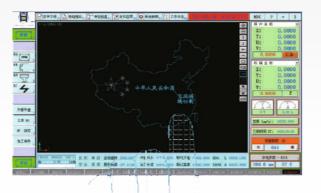


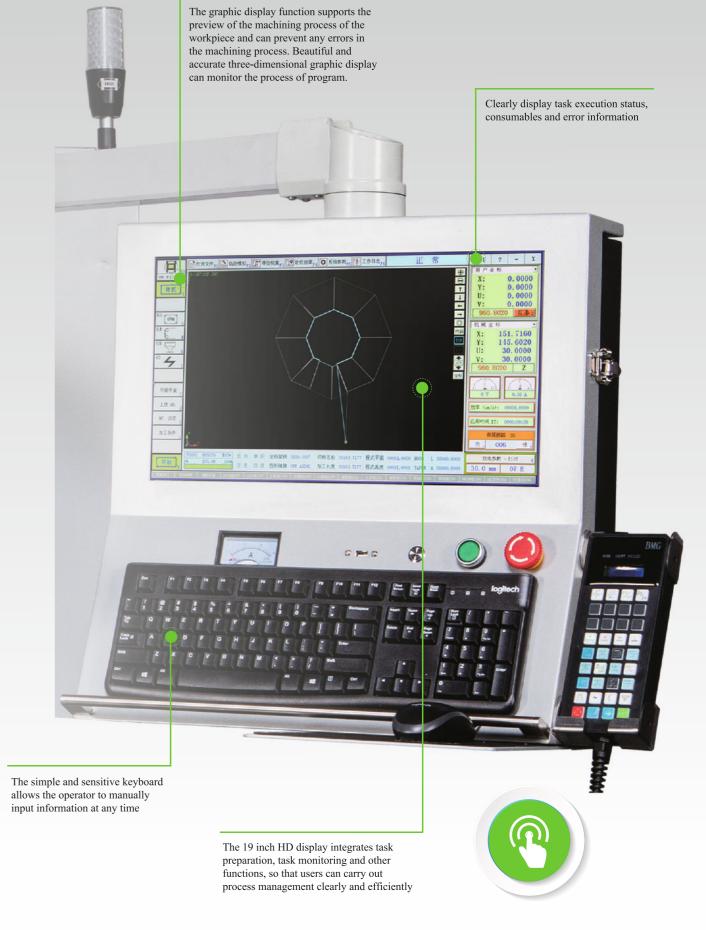
#### 4. Manual mode

Enter the main function execution setting interface of the machine tool. Implement the management settings of user parameters, mechanical parameters and other related functions. Allows you to set and perform operations related to Chinese and English windows and axis shifting speed. Set the necessary parameters and coordinate display mode of taper machining. It is allowed to set and execute the settings of relevant mechanical pitch compensation parameters, elevant test data tables can be modified, entered and used. Set the mechanical travel and set the type selection of

#### 5. Management and return to zero function

Manage the consumption of EDM wire, deionized resin and filter. Allows users to set preferences and adjust user personalization. It allows to set and calibrate machine functions, perform work axis reset and return to mechanical origin. Displays the current system settings and allows multiple system updates.





Five-Axis CNC Wire-Cut Electric Discharge Machine



#### Features of BW series products

#### 1. BMG-cut programming software



Corner clearing assist: after opening the corner clearing function in the main interface, you can select and set relevant corner clearing settings, and you can machining samples to deepen your understanding;

Coding auxiliary: compare and modify the code value brought in from the main interface to control the identification and application of the software, such as M00 pause; Auxiliary function: turn on and set the corresponding auxiliary function

a. Cut-in line arc transition: After opening and setting, add arc transition at the cut-in lead to correct the cut-in smoothness;

b. Inner hole avoidance arc segment: After opening and setting, add arc transition at the cut-in trajectory to correct the smoothness of the trajectory;

#### 2. BMG WEDM-LS five-axis control system V1.3

The best calculation accuracy is 0.01 µm



# 3. Five-axis high-strength and high-precision mechanical transmission

 $X\ Y\ U\ V\ Z$  five-axes adopts high-strength ultra-precision linear guide; C3 grinding grade ball screw;

Semi-closed loop and fully-closed loop control system, professional laser detection and compensation, to achieve ultra-high step accuracy; Realize high-precision taper machining;

#### 4. Processing database

Through years of actual machining data and R & D current and voltage sampling, discharge high-frequency EDM achieves ultra-high stability and consistency. It has low requirements for professional operators and solved the persistent problem of poor consistency of processed products. The database realizes man-machine dialogue. Qualified products can be processed after entering processing requirements.





#### 5. WEDM-LS type high-strength workbench

The BMG WEDM-MS workbench adopts the same casting process as the WEDM-LS, with high-strength and high-precision support, which is convenient for clamping and easy operation.

#### 6. Wire conveying parts

The wire conveying adopts the same level of linear guides as XYUVZ, high rigidity, and high-grade photoelectric switches are used for reversing and limit position. The real non-contact reversing ensures the smooth reversing of the wire drum and improves the cutting stability of the machine tool.

#### 7. The machine tool

It adopts resin sand casting, WEDM-LS structure process, and secondary tempering treatment. After more than six months of natural aging treatment, the accuracy of the equipment is guaranteed for long-term use.

#### 8. Ball guide screw and linear guide

Adopt Taiwan Shangyin, Taiwan Yintai, Japan THK linear guide and ball guide screw to ensure the accuracy of the machine tool for more than 10 years.

#### 9. Mobile manual control box

It adopts imported electronic original switch, and is made of film. It has many functions such as XY coordinate display, axis shifting data conversion, function switching, high-frequency switch of water pump and so on. It is very convenient to use, waterproof, oil-proof and anti-fouling, long service life and low failure rate.

#### 10. Water retaining cover

The water retaining cover adopts the folding and push-pull method, which is easy to use, without water leakage and water seepage, and keeps the working environment on site clean

#### 11. Environmental protection water tank

The whole machine adopts 0.007mm double filter,  $\phi$ 340×300, no sewage discharge, regular replacement to protect the environment and solve the environmental protection problems of enterprises.

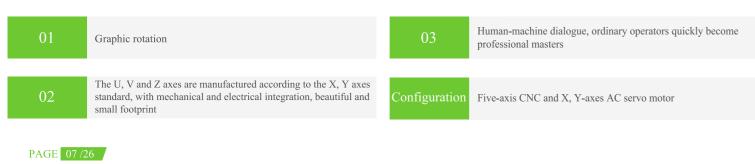
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Product model BMG430W/±6°



### High-performance standard model >>>



### Main technical parameters >>>

Model	BMG430W
Maximum workpiece size (Workbench Size) (mm)	800×525 (620×420)
Worktable travel (W*L) (mm)	400 × 300
Maximum cutting thickness (mm)	300
Maximum load (kg)	300
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	30×30
Standard cutting taper (°/mm)	± 6° /100
Diameter of molybdenum wire (mm)	0. 1- 0. 2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	$\leq \pm \ 0.\ 003$
Repeat positioning accuracy (mm)	$\leq \pm \ 0.\ 002$
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm²/min)	100 ~ 220
Dimension(L*W*H) (mm)	1818× 1550× 1870
Weight (kg)	≈ 1800
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm²/min

02 Efficient

After tens of thousands of actual processing, an "intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model BMG530W/±10°



#### High-performance standard model >>>

01	Graphic rotation	03	Human-machine dialogue, ordinary operators quickly become professional masters
02	The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and small footprint	04	Five-axis CNC, realizing the function of "one-key reclaiming"

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### Main technical parameters >>>

Model	BMG530W
Maximum workpiece size (Workbench Size) (mm)	775×525 (690×490)
Worktable travel (W*L) (mm)	500×350
Maximum cutting thickness (mm)	300
Maximum load (kg)	500
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	±10°/100
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.003
Repeat positioning accuracy (mm)	≤±0.002
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm²/min)	100 ~ 220
Dimension(L*W*H) (mm)	1781×1593×2028
Weight (kg)	≈1900
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

02 Efficient

Nanosecond anti-electrolysis After tens of thousands of high-peak pulse power actual processing, an "intelligent database" has speed can reach 200mm²/min been developed, which only

"intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model BMG530BW/±10°



#### High-performance standard model >>>

01	Fully automatic AR parallel compensation, can be leveled without hitting the meter

without hitting the meter

The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and

Human-machine dialogue, ordinary operators quickly become professional masters

e X, Y axes eautiful and

Five-axis CNC, realizing the function of "one-key reclaiming"

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small footprint

#### Main technical parameters >>>

Model	BMG530BW
Maximum workpiece size (Workbench Size) (mm)	870×620 (750×500)
Worktable travel (W*L) (mm)	500×350
Maximum cutting thickness (mm)	300
Maximum load (kg)	600
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	±10°/100
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.003
Repeat positioning accuracy (mm)	≤±0.002
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm²/min)	100 ~ 220
Dimension(L*W*H) (mm)	1781×1660×2030
Weight (kg)	≈2050
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm²/min

02 Efficient

After tens of thousands of actual processing, an "intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model BMG640W/±10°



Handy Efficient Intelligent Economical



floor area only 3.2 m<sup>2</sup>

### High-performance standard model >>>

Graphic rotation The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and small footprint

Human-machine dialogue, ordinary operators quickly become professional masters

Five-axis CNC, realizing the function of "one-key reclaiming"

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### Main technical parameters >>>

Model	BMG640W
Maximum workpiece size (Workbench Size) (mm)	880×580 (800×540)
Worktable travel (W*L) (mm)	600×400
Maximum cutting thickness (mm)	300
Maximum load (kg)	800
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	±10°/100
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.003
Repeat positioning accuracy (mm)	≤±0.002
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm <sup>2</sup> /min)	100 ~ 220
Dimension(L*W*H) (mm)	1905×1715×2030
Weight (kg)	≈2200
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

> 02 Efficient 01 Handy

Nanosecond anti-electrolysis After tens of thousands of high-peak pulse power actual processing, an supply, the actual processing "intelligent database" has speed can reach 200mm<sup>2</sup>/min been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model  $BMG640BW/\pm10^{\circ}$  (Handy (Efficient) (Intelligent) (Economical)



#### High-performance standard model >>>

Fully automatic AR parallel compensation, can be leveled without hitting the meter

The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and small footprint

Human-machine dialogue, ordinary operators quickly become professional masters

Five-axis CNC, realizing the function of "one-key reclaiming"

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### Main technical parameters >>>

Model	BMG640BW
Maximum workpiece size (Workbench Size) (mm)	1000×720 (880×560)
Worktable travel (W*L) (mm)	600×400
Maximum cutting thickness (mm)	300
Maximum load (kg)	900
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	$\pm 10^{\circ}/100$
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.003
Repeat positioning accuracy (mm)	≤±0.002
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm²/min)	100 ~ 220
Dimension(L*W*H) (mm)	1920×1750×2100
Weight (kg)	≈2500
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm<sup>2</sup>/min

02 Efficient

After tens of thousands of actual processing, an "intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model BMG850BW/±10°



floor area only 4.5 m<sup>2</sup>

### High-performance standard model >>>

Fully automatic AR parallel compensation, can be leveled Human-machine dialogue, ordinary operators quickly become without hitting the meter professional masters The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and Five-axis CNC, realizing the function of "one-key reclaiming" small footprint

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#### Main technical parameters >>>

Model	BMG850BW
Maximum workpiece size (Workbench Size) (mm)	1305×765 (1000×700)
Worktable travel (W*L) (mm)	800×500
Maximum cutting thickness (mm)	400
Maximum load (kg)	1500
Z-axis travel (mm)	400 (CNC)
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	±10°/100
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.005
Repeat positioning accuracy (mm)	≤±0.003
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm <sup>2</sup> /min)	100 ~ 220
Dimension(L*W*H) (mm)	2190×2100×2780
Weight (kg)	≈3260
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm<sup>2</sup>/min

02 Efficient

After tens of thousands of actual processing, an "intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price



Product model BMG1080BW/±10°



 $\frac{\text{floor area}}{\text{only 7.1 m}^2}$ 

### High-performance standard model >>>

Fully automatic AR parallel compensation, can be leveled without hitting the meter

Human-machine dialogue, ordinary operators quickly become professional masters

The U, V and Z axes are manufactured according to the X, Y axes standard, with mechanical and electrical integration, beautiful and small footprint

Five-axis CNC, realizing the function of "one-key reclaiming"

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### Main technical parameters >>>

Model	BMG1080BW
Maximum workpiece size (Workbench Size) (mm)	1745×1170 (1330×1040)
Worktable travel (W*L) (mm)	1000×800
Maximum cutting thickness (mm)	500
Maximum load (kg)	5000
Z-axis travel (mm)	500 (CNC)
Travel of U, V Axes (mm)	70×70
Standard cutting taper (°/mm)	±10°/100
Diameter of molybdenum wire (mm)	0.1-0.2
Multi-knife cutting accuracy (mm) (15×15 Equilateral Hexagon, Cr12, S=40)	≤±0.005
Repeat positioning accuracy (mm)	≤±0.005
Optimum surface roughness(µm)	Ra≤0.8 (Optional 0.4)
Processing speed (mm <sup>2</sup> /min)	100 ~ 220
Dimension(L*W*H) (mm)	2962×2400×2495
Weight (kg)	≈6050
Electrical power consumption (KVA)	3
Work tank capacity (L)	120

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

01 Handy

02 Efficient

Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm<sup>2</sup>/min After tens of thousands of actual processing, an "intelligent database" has been developed, which only needs to input the processing requirements

03 Intelligent

Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price

Model and paramete	ers of W-se	ries			
Model		BMG1210W	BMG1612W	BMG2012W	BMG2516W
Workbench Size	(mm)	1650×1050	2200×1200	2400×1200	3100×1500
Worktable travel (W*L)	(mm)	1200×1000	1600×1200	2000×1200	2500×1600
Maximum cutting thickness	(mm)	500/800/1000	500/800/1000	500/800/1000	500/800/1000
Maximum load	(kg)	6000	8000	9000	10000
Z-axis second travel	(mm)	300	300	300	300
Travel of U, V Axes	(mm)	35×35	35×35	35×35	35×35
Standard cutting taper	(°/mm)	±3°/100	±3°/100	±3°/100	±3°/100
Diameter of molybdenum wire	(mm)	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
Multi-knife cutting accuracy (15×15 Equilateral Hexagon, Cr12, S=40	(mm)	≤±0.005	≤±0.005	≤±0.005	≤±0.005
Repeat positioning accuracy	(mm)	≤±0.003	≤±0.003		≤±0.003
Optimum surface roughness	(µm)	Ra≤0.8 (Optional 0.4)	Ra≤0.8 (Optional 0.4)	Ra≤0.8 (Optional 0.4)	Ra≤0.8 (Optional 0.4)
Processing speed	(mm <sup>2</sup> /min )	100 ~ 220	100 ~ 220	100 ~ 220	100 ~ 220
Dimension(L*W*H)	(mm)	2600×2900×2200	3300×3200×2200	3800×3200×2200	4600×4200×2200
Electrical power consumption	(KVA)	3	3	5	5
Work tank capacity	(L)	120	120	120	120

Model and paramet	ters of Brass	s Wire EDM Series	
Model		BMG850	BMG1370
Maximum workpiece size	(mm)	1100×800×300	1500×900×300
Maximum workpiece weight	kg	1200	2000
Travel of U, V Axes	(mm)	800×500	1300×700
Z-axis travel	(mm)	300	300
Travel of U, V Axes	(mm)	100×100	100×100
Maximum cutting taper	(°/mm)	±20°/80	$\pm 20^{\circ}/80$
Electrode wire diameter	(mm)	$0.1 \sim 0.30$	0.1 ~ 0.3
Max weight of electrode wire	kg	5	5
Weight (kg)	kg	5600	6860
Control device	(µm)	BMG WEDM-LS five-axis control system V1.3	BMG WEDM-LS five-axis control system V1.3
Max processing speed		Above 200 mm <sup>2</sup> /min (φ0.3 Copper wire, SKD11, 60 mm thick)	Above 200 mm <sup>2</sup> /min (φ0.3 Copper wire, SKD11, 60 mm thick)
Optimum machining accuracy		±2μm (SKD11, 20 mm thick)	±2μm (SKD11, 20mm thick)
Optimum surface roughness		Ra 0.4µm (Tungsten steel, 20 mm thick)	Ra 0.4μm (Tungsten steel, 20 mm thick)

Five-Axis CNC Wire-Cut Electric Discharge Machine



# Low-speed Wire-cut Electrical Discharge Machining

Product model BMG400



Handy / Efficient / Intelligent / Option
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### Main technical parameters >>>

	750×600×250 400 400×300 260 100×100
Travel of U, V Axes (mm)  Z-axis travel (mm)  Travel of U, V Axes (mm)  Maximum cutting taper (°/mm)  Electrode wire diameter (mm)  Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	400×300 260
Z-axis travel (mm)  Travel of U, V Axes (mm)  Maximum cutting taper (°/mm)  Electrode wire diameter (mm)  Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	260
Travel of U, V Axes (mm)  Maximum cutting taper (°/mm)  Electrode wire diameter (mm)  Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	
Maximum cutting taper (°/mm)  Electrode wire diameter (mm)  Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	100×100
Electrode wire diameter (mm)  Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	
Max weight of electrode wire (kg)  Weight (kg)  Control device  BMG WEDN	±20/80
Weight (kg)  Control device BMG WEDN	$0.1 \sim 0.3$
Control device BMG WEDN	15
	3100
M 200 2/	I-LS five-axis control system V1.3
Max processing speed Above 300 mm <sup>2</sup> /m	
Optimum machining accuracy	in (φ0.3 Copper wire, SKD11, 60 mm thick)
Optimum surface roughness Ra 0.2µm (Tungsten stee	in (φ0.3 Copper wire, SKD11, 60 mm thick) -2 μm (SKD11, 20 mm thick)

### Main features of this machine >>>

01 Handy	Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed

02 Efficient	Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm²/min
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nts can be
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Five-Axis CNC Wire-Cut Electric Discharge Machine



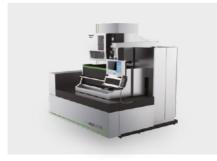
# Low-speed Wire-cut Electrical Discharge Machining Product model BMG600



High-performance standard model >>>







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### Main technical parameters >>>

Model	BMG600
Maximum workpiece size (mm)	1080×740×250
Maximum workpiece weight (kg)	800
Travel of U, V Axes (mm)	600×400
Z-axis travel (mm)	300
Travel of U, V Axes (mm)	100×100
Maximum cutting taper (°/mm)	±20 °/80
Electrode wire diameter (mm)	$0.1 \sim 0.3$
Max weight of electrode wire (kg)	15
Weight (kg)	4060
Control device	BMG WEDM-LS five-axis control system V1.3
Max processing speed	Above 300 mm²/min (φ0.3 Copper wire, SKD11, 60 mm thick)
Optimum machining accuracy	±2 μm (SKD11, 20 mm thick)
Optimum surface roughness	Ra 0.2μm (Tungsten steel, 20 mm thick) (with refinement power supply)

#### Main features of this machine >>>

Easy to learn and operate, apprentices can quickly become master technicians, with five-axis CNC system core technology, which is completely self-developed
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02 Effi	cient	Nanosecond anti-electrolysis high-peak pulse power supply, the actual processing speed can reach 200mm²/min
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After tens of thousands of actual processing, an "intelligent database" has been developed, which only input the processing requirements
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Using flat plate high-thrust linear motor, high-precision imported optical ruler, the accuracy requirements can be maintained longer, no need to replace the guide screw, bearing, etc. of the machine tool at a high price