

CNC EDM WIRE CUTTING MACHINE

DASIS MAKE, DASIS - CNC- EDM MODEL NO.



DASIS - CNC-EDM, EDM Wire Cutting Machine

EDM Wire Cutting Machine
With fully intelligent multi cut control cabinet
With XY axis servomotor
With high pressure water tank
With metal water retaining cover
With automatic lubrication pump

DAS Instruments and Solutions
No:8A,First Floor,Vallal Parry Street
16th Cross Street,Pallikaranal ,Chennai-600100
Email: dasinstruments@gmail.com
Phone:+918807243902, +918072441772
GST No: 33AAOFD3260B1ZW

I. Main parameters

Worktable travel/X*Y(mm)	450*550
U*V(mm)	60*60
Worktable size(mm)	810*570
Z(mm)	500
Max cutting thickness(mm)	400
Max taper	$\pm 6^\circ$ /80mm
Cutting speed(mm ² /min)	≥ 140
Precision/Accuracy(mm)	≤ 0.02
Positioning accuracy(mm)	≤ 0.02
Best surface roughness, one-cut(μm)	≤ 2.5
Best surface roughness, multi-cut(μm)	≤ 1.2
Drive mode	XY: servo motor drive, UV: stepper motor drive
Guideway type	XYUV: Precision linear motion guideway
Max load(kg)	500
Molybdenum wire diameter(mm)	0.1-0.2
Power(KW)	1.5
Max processing current(A)	10
Voltage	According to the local voltage of the customers
Dimensions, L*W*H(mm)	1600*1170*1600
Weight(kg)	1400
Packaging method	Plywood case

II. Main component

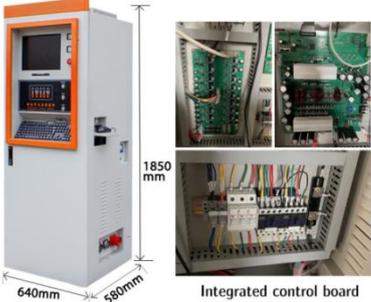
Item	Manufacturer/Place of origin
Thickened resin sand body casting	Jiangsu PR
X, Y ball screw(P3 grade)	NMC
X, Y axis linear guide	Jiangsu PR
Wire conveying linear guide	Taiwan, China
X, Y servo motor	Fujian PR
U, V stepper motor	Jiangsu PR
Wire drum motor	Jiangsu PR
DRO	Shanghai
Z axis lifting motor	Jiangsu PR
Bearings	Harbin
Electrical components	DELIXI/Schneider/Siemens

DAS Instruments and Solutions
No:8A, First Floor, Vallal Parry Street
16th Cross Street, Pallikaranal, Chennai-600100
Email: dasinstruments@gmail.com
Phone: +918807243902, +918072441772
GST No: 33AAOFD3260B1ZW

III. Configuration details

	<p>XY axis digital readout, real-time display of displacement</p>	<p>Included</p>
	<p>Z-axis motor, electrically adjusts Z-axis height</p>	<p>Included</p>
	<p>The wire drum part adopts precision linear guideway, effectively prevents unilateral looseness of the wire</p>	<p>Included</p>
	<p>A higher end limit switch that looks more aesthetically pleasing</p>	<p>Included</p>
	<p>The XY axis adopts precision ball screws from military enterprises</p>	<p>Included</p>

	<p>Precision linear guideway for XY axis with better positioning accuracy</p>	<p>Included</p>
	<p>Axial flow pump and coolant tank</p>	<p>-</p>
	<p>High pressure pump and multi-layer filtered coolant tank with better chip removal effect</p>	<p>Included</p>
	<p>Central lubricating oil pump provides lubrication for guideway and screw rods</p>	<p>-</p>
	<p>Fully automatic lubricating oil pump with timed automatic lubrication</p>	<p>Included</p>
	<p>Metal water fender prevents liquid splashing and looks more aesthetically pleasing</p>	<p>Included</p>

	<p>Automatic tightener automatically adjusts the tightness of molybdenum wire</p>	<p>Included</p>
	<p>High speed intelligent single cut control cabinet Software:X8 or AutoCut</p>	<p>-</p>
	<p>High speed vertical intelligent single cut control cabinet Software:X8 or AutoCut</p>	<p>-</p>
 <p>1850 mm 640mm 580mm Integrated control board</p>	<p>Semi-intelligent multi-cut control cabinet 1.Software: AutoCut 2.Cut multiple times to improve surface roughness($\leq 1.5\mu\text{m}$) 3.Panel equipped with parameter adjustment buttons</p>	<p>-</p>
 <p>1800mm 620mm 810mm</p>	<p>Fully-intelligent multi-cut control cabinet 1.Software: AutoCut 2.Cut multiple times to improve surface roughness($\leq 1.2\mu\text{m}$) 3.The system is equipped with expert database, no need to manually adjust parameters</p>	<p>Included</p>

IV. Control system

1. High speed intelligent control cabinet



2. Hardware

- Industrial control computer: P4 level or above
- Software: X8(Chinese/English) or AutoCut(Chinese/English/Russian/Turkish)
- 15" LCD color display
- Mouse and keyboard
- RS232 interface, USB, etc.

3. Software

- Graphics files in DXF, DAT, DFT, DWG, DWS, DWT and other formats can be imported.
- Automatically touch the edge and find the center
- The processing of taper workpieces adopts four-axis linkage control technology; three-dimensional design of the processing trajectory; compensation for the radius of the guide wheel, the diameter of the electrode wire, the unilateral discharge gap and the elliptic error of the large taper to eliminate the theoretical error of taper processing.
- This software optimizes the processing of ultra-thick workpieces to make the processing stable and reliable.
- Support graphics-driven automatic programming, users do not need to touch the code, only need to set the processing technology for the processing graphics, and then the processing can be carried out.
- XYUV 4-axis can be set to commute, and the drive motor can be set to five-phase ten-beat, three-phase six-beat, pulse drive and other modes.
- Real-time monitoring of the X, Y, U, V four-axis machining status of the WEDM machine tool.
- Processing preview, real-time display of processing progress; zoom in and zoom out to view graphics, from the main view, left view, top view.
- Observe the processing situation from multiple angles such as view.
- With user-maintainable process database function, making multiple processing simple and reliable.
- The processing of taper workpieces adopts four-axis linkage control technology, which can facilitate the processing of upper and lower special-shaped surfaces to make complex.
- The processing of miscellaneous taper graphics becomes simple and accurate.

With automatic alarm function, automatic alarm when processing is completed or failure,

the alarm time can be set.

- Support the angle-clearing delay processing, and delay the processing at the corners of the processing track to improve the deviation caused by the bending of the electrode wire.
- Support the backlash compensation function, which can compensate the screw backlash error of the machine tool to improve the accuracy of the machine tool.
- Support grating compensation: it can compensate the positioning error of the machine tool in real time.
- When the power is cut off, the processing state is automatically saved, the processing is restored after the power is turned on, and the short-circuit automatically retreats and other fault handling.

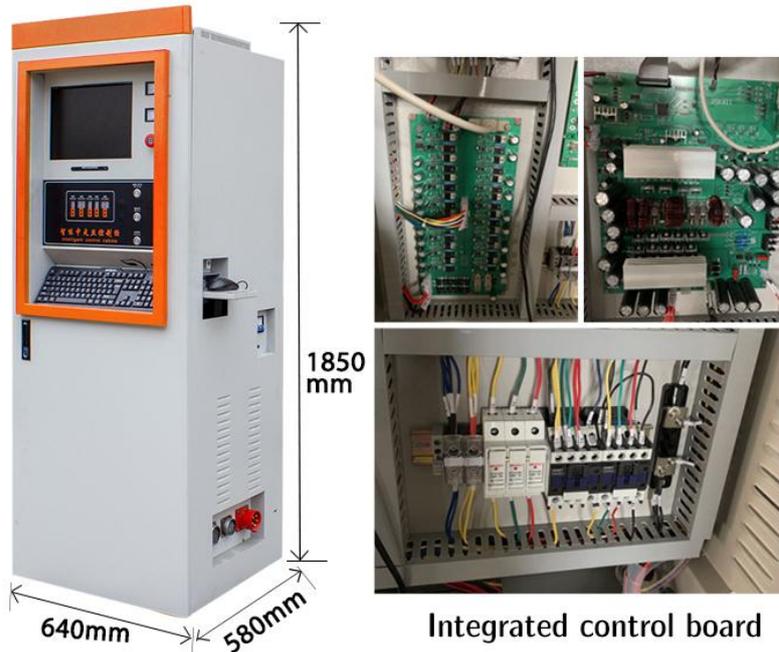
4. Optional control cabinet

- Single cut vertical control cabinet



DAS Instruments and Solutions
No:8A,First Floor,Vallal Parry Street
16th Cross Street,Pallikaranai ,Chennai-600100
Email: dasinstruments@gmail.com
Phone:+918807243902, +918072441772
GST No: 33AAOFD326081ZW

- Semi-intelligent multi-cut control cabinet



- Fully-intelligent multi-cut control cabinet

Equipped with intelligent database. Corresponding parameters can be selected according to different workpiece thicknesses instead of manual setting.

Software: AutoCut(Chinese/English/Russian/Turkish)



V. Main features

- The bed is a base formed of high-strength resin sand casting and is a load-bearing part of the machine. The high-temperature annealing treatment has a large dead weight in the same type of machine, ensuring the permanent and constant mechanical accuracy.
- Military grade P3 ball screw, with low friction loss, high transmission efficiency,
- power saving, high precision, high axial rigidity, and reversibility of transmission.
- The wire drum part adopts precision linear guideway. Effectively prevent unilateral looseness wire. In this way, the machining accuracy and finishing of the machine can be guaranteed for a long time. The machine remains stable for a long time.
- Using CNC digital control wire feeding method, improve the surface finish of the workpiece.
- With broken wire protection function, it stops automatically when the wire breaks, effectively protecting the machine.
- With unidirectional discharge function, effectively control the cutting lines on the surface of the workpiece.
- Independent research and development integrated high-speed control cabinet, beautiful appearance, good and reasonable internal structure, good heat dissipation effect.

DAS Instruments and Solutions
No:8A,First Floor,Vallal Parry Street
16th Cross Street,Pallikaranai ,Chennai-600100
Email: dasinstruments@gmail.com
Phone:+918807243902, +918072441772
GST No: 33AAOFD3260B1ZW

VI. Accessories

Item	Quantity
Machine	1
Control cabinet	1
Monitor	1
Mouse and keyboard	1
Software host/CPU	1
Water tank	1
Water pump and power cable	1
Coolant supply pipe	1
Power cable	1
Tight wire wheel	1
Hand crank	1
Fixture	2
Molybdenum wire vertical correction device	1
Leveling pad/Pedestal	4
A spool of molybdenum wire	1
A jar of coolant	1

★Option prices are calculated separately

With the continuous updating and upgrading of products, there may be slight deviations in the appearance and specifications of different batches of products, which does not affect the use of the machine. Please refer to the actual product received.