

## Fast Speed Wire Edm Cutting Machine DK77 Series CNC For Metal Parts

Our Product Introduction

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### Basic Information

- Place of Origin: China
- Brand Name: Luyoung
- Certification: CE
- Model Number: DK77F
- Minimum Order Quantity: 1
- Price: USD6000-8000
- Packaging Details: Fumigation-free plywood
- Delivery Time: 45 working days
- Payment Terms: L/C, T/T
- Supply Ability: 100sets



### Product Specification

- Workbench Size(mm): 950x650
- Worktable Travel(mm): 500x630
- Surface Roughness Of Machining( $\mu\text{m}$ ):  $Ra \leq 2.5$
- $Ra \leq 2.5$ : 160mm 2/min
- Maximum Cutting Taper:  $+_6$  Degree
- Max. Load(kg): 600kg
- Max. Cutting Thickness(mm): 600
- Power: 2.5KW
- Dimension(L\*W\*H)mm: 1720x1680x1700mm
- Highlight: fast speed wire edm cutting machine, wire edm cutting machine DK77, cnc wire edm



### More Images



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Technical parameters										
Model	DK775	DK775L	DK775F	DK775H	DK775P	DK775S	DK775T	DK775U	DK775V	DK775W
Table size (mm)	500x500	600x600	800x800	1000x1000	1200x1200	1500x1500	1800x1800	2000x2000	2500x2500	3000x3000
Worktable travel (mm)	500x500	600x600	800x800	1000x1000	1200x1200	1500x1500	1800x1800	2000x2000	2500x2500	3000x3000
Maximum cutting thickness (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting speed (mm/min)	160	160	160	160	160	160	160	160	160	160
Maximum cutting taper (°)	±6	±6	±6	±6	±6	±6	±6	±6	±6	±6
Maximum cutting width (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting depth (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting length (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting area (mm²)	250000	360000	640000	1000000	1440000	2250000	3240000	4000000	6250000	9000000
Maximum cutting volume (mm³)	125000000	216000000	512000000	1000000000	1728000000	3375000000	5832000000	8000000000	15625000000	27000000000
Maximum cutting weight (kg)	1250	2160	5120	10000	17280	33750	58320	80000	156250	270000
Maximum cutting length (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting width (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting depth (mm)	500	600	800	1000	1200	1500	1800	2000	2500	3000
Maximum cutting area (mm²)	250000	360000	640000	1000000	1440000	2250000	3240000	4000000	6250000	9000000
Maximum cutting volume (mm³)	125000000	216000000	512000000	1000000000	1728000000	3375000000	5832000000	8000000000	15625000000	27000000000
Maximum cutting weight (kg)	1250	2160	5120	10000	17280	33750	58320	80000	156250	270000

## Product Description

DK77 series CNC fast speed edm cutting machine for metal parts



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#### Technical parameters

Model	DK7735	DK7745	DK7745F	DK7750	DK7750F	DK7763
Table size (mm)	730 × 500	830 × 600	930 × 550	950 × 650	1150 × 650	1150 × 760
Table stroke (mm)	350 × 450	450 × 550	450 × 650	500 × 630	500 × 800	630 × 800
Maximum processing thickness (mm)	400	400	400	600	600	600
Machining taper (mm)	± 6°					
Maximum cutting speed (mm <sup>2</sup> /min)	≥ 100					
Optimum surface roughness (μm)	≤ 2.5					
Electrode wire diameter (mm)	0.10–0.20					
Electrode wire speed (m/s)	11.5					
Precision	GB7926–2005					
Power supply	50Hz/380V					
Maximum workpiece weight (kg)	300	450	450	700	700	1000
Host weight (kg)	1300	1500	1600	2000	2200	2800
Mainframe Dimensions (mm)	1240 × 1170	1600 × 1240	1600 × 1240	1720 × 1680	1720 × 1680	2100 × 1940
	× 1400	× 1400	× 1400	× 1700	× 1700	× 1780

Model	DK7763F	DK7780	DK7780F	DK77100	DK77100F	DK77120
Table size (mm)	1350 × 760	1350 × 985	1600 × 985	1640 × 1150	1900 × 1150	2000 × 1300
Table stroke (mm)	630 × 1000	800 × 1000	800 × 1200	1000 × 1200	1000 × 1400	1200 × 1600
Maximum processing thickness (mm)	600	800	800	800	800	1000
Machining taper (mm)	± 6°					
Maximum cutting speed (mm <sup>2</sup> /min)	≥ 100					
Optimum surface roughness (μm)	≤ 2.5					
Electrode wire diameter (mm)	0.10–0.20					
Electrode wire speed (m/s)	11.5					
Precision	GB7926–2005					
Power supply	50Hz/380V					
Maximum workpiece weight (kg)	1000	1500	1500	2500	2500	4000
Host weight (kg)	3000	4000	4500	5200	5800	8000
Mainframe Dimensions (mm)	2100 × 2000	2600 × 2400	2600 × 2500	3000 × 2800	3000 × 3000	3200 × 3000
	× 1780	× 2000	× 2000	× 2500	× 2500	× 2600

The Fast Wire Electrical Discharge Machining (WEDM) machine, also known as a High-Speed Wire Electrical Discharge Machine (WEDM-HS), is an efficient metal cutting device. It operates by using a rapidly reciprocating electrode wire (usually made of molybdenum wire) with speeds ranging from 8 to 10 meters per second. The wire can be reused, leading to high cutting speeds. Its accuracy typically falls between 0.05 to 0.08 millimeters.

During operation, the wire is negatively charged, while the workpiece is positively charged. When the distance between them is less than the discharge gap, a pulse power supply generates an electric spark, creating high temperatures that melt or vaporize the workpiece's surface. The wire's movement and the impact of the working fluid remove the metal, forming a groove. Since the molybdenum wire's melting point is much higher than the workpiece material and it moves away from the high-temperature area, the wire's wear is significantly less than the workpiece, ensuring precise cutting.

Fast wire EDMs are widely used in mold manufacturing, processing of difficult-to-machine materials, and for complex part

fabrication. Especially suitable for rapid processing of large-thickness molds or components, regular maintenance and replacement of consumables like guide wheels and guides, as well as quality control of the molybdenum wire and cutting fluid, are essential to maintain high cutting quality.

In China, the development of fast wire EDM machines started in the 1960s, with the invention by Engineer Zhang Weiliang. Later, they were commercialized in factories in cities like Suzhou. Over time, through technological advancements such as the application of single-board computers, innovations in working media, and the introduction of composite working fluids, the efficiency and surface finish of cutting have been significantly improved. Modern fast wire EDM machines not only boast improved design aesthetics but also enhanced functionality and environmental performance.

If you need more detailed information about fast wire EDM machines or are looking for specific models, it's recommended to consult professional wire EDM machine manufacturers, like Jiang Lin Numerical Control Machine Tool Co., Ltd., who can provide comprehensive support from equipment supply to after-sales service.



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