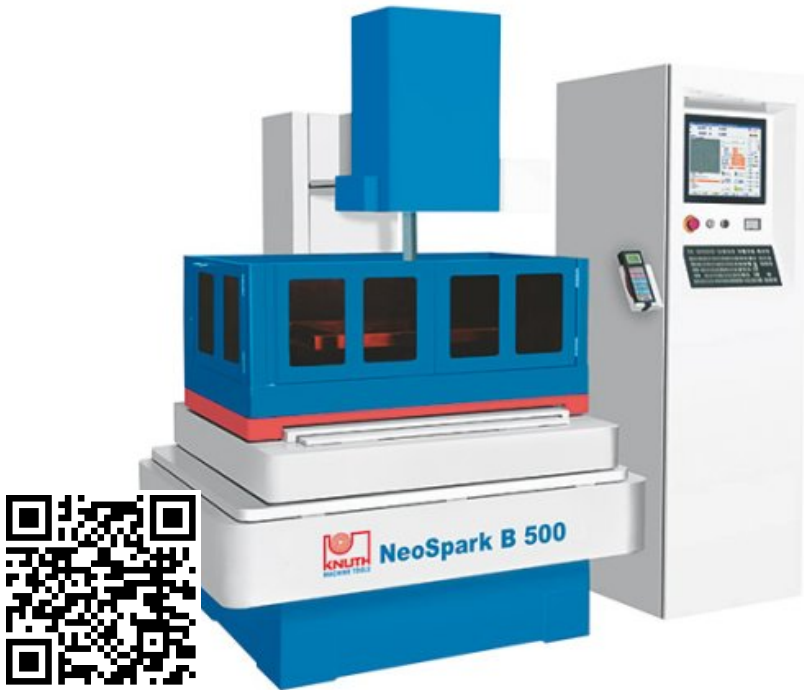




# Wire Cut EDM NeoSpark B 300



## SKU : 180566

The machines of the NeoSpark CNC series are among the most precise wire EDM machines with reciprocal wire guidance on the market. They offer excellent performance when machining electrically conductive materials in mold and tool making. The NeoSpark series is a popular choice for companies that specialize in additive manufacturing and want to separate the finished part from its base plate with high precision. High speed wire cutting guarantees deformation-free and burr-free cutting of even the most delicate 3-D printed metal structures with the best surface quality.

- Electrical discharge machining with highest cost-efficiency
- Easily programmable CNC control
- Real-time system diagnostics, high process reliability
- Time-saving programming during the machining process

## TECHNICAL SPECS

### WORKING AREA

Table dimensions	24 in x 17 in
Workpiece, length x width x thickness (max.)	37 in
Workpiece weight (max.)	1100 lbs
Travel X-axis	16 in
Travel Y-axis	12 in
Travel U / V-axis	2,8 / 2,8 in
Travel Z-axis	10 in
Cutting angle (with guide)	± 10° / 80 mm
Cutting capacity (max.)	0.46 in <sup>2</sup> /min
Generator	10 A

### CNC CONTROL

Display size / type	15" / LED
Controlled axis	4
Input increment (min.)	0.00004 in

### DIELECTRIC SYSTEM

Dielectric, tank capacity	32 gal
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### FEED

Rapid feed X / Y axis	39 in/min
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### ACCURACIES

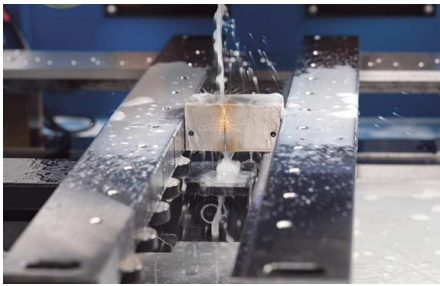
Positioning accuracy X- / Y-axis	0,0004 in
Positioning accuracy U/V axis	0.0008 in
Repeatability X- / Y-axis	0,0002 in
Repeatability U / V axis	0.0004 in
Best surface roughness	0.8 µm Ra

### DRIVE CAPACITY

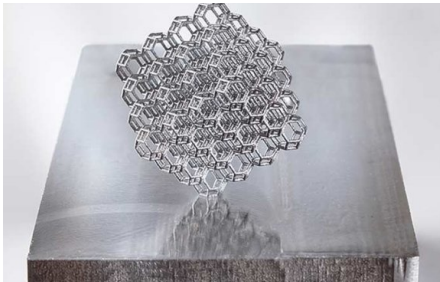
Motor rating X / Y axis	0.2 Hp
Motor rating U / V axis	0.03 Hp
Motor rating Z-axis	0.03 Hp
Total power consumption	4.5 kVA

### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	81 in x 63 in x 73 in
Weight	4400 lbs



*The NeoSpark allows production of delicate contours with superior surface quality*



*The structures are constructed in layers and cut from the base plate*



*In additive production (3D-Printing) the produced complex parts are attached to a metal plate, where the metal plate subsequently will have to be separated from the component (Neospark 500 B Continental Engineering Services)*



*Dielectric tank with double filtration system*



*Stainless steel waterproof keyboard*

## PRODUCT DETAILS

- The NeoSpark CNC Electric Discharge Machine delivers excellent cutting performance and operating cost is extremely low
- The cast-iron machine frame features a modern C-frame with T-base, multiple reinforcing ribs, precision-machined surfaces and thermal stress-relief
- Rigid linear guides and precision preloaded ballscrews on all axes ensure permanent mechanical precision
- The IPC-based control system with servo drives is fine-tuned to the manufacturing process requirements and it is user-oriented and reliable
- 2-step filtration system in the dielectric tank ensures uninterrupted operation and high machining quality

### High-Speed Wire EDM – Cutting Technology for 3D Metal Printing

- Compared to mechanical divisions, there is virtually no pressure on the component
- Delicate structures can be machined without the risk of deformation or microcracking in the cut surface
- Perfect balance between cutting accuracy and high cutting speed
- Significantly more cost-efficient than conventional wire EDM
- Long wire life ensures high productivity and minimal downtimes

### NeoSpark cutting function for aluminum

- Due to its chemical properties, aluminum can generate very hard oxide particles at high temperatures, which may adhere to the molybdenum wire during machining. This results in a contact between wire and workpiece and increases the risk of a wire break. This option improves the aluminum cutting process and results in a significantly longer wire life.

## STANDARD EQUIPMENT

- IPC-based control system
- Erosion wire 0.007"
- Dielectric 22 lb
- Warning beacon
- AC power stabilizer
- Preparation for aluminum cutting
- Electronic hand-wheel
- Generator
- USB port
- Ethernet
- Standard wire guides
- Dielectric tank with pump
- Work lamp
- Leveling plates and jacks
- Central lubrication
- Operating tools
- Operator instructions