



## SKU : 180563

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
- C3 class ballscrew transmission on XYUV axis
- Easily programmable CNC control with integrated CAD/CAM software
- Real-time system diagnostics, high process reliability
- Time-saving programming during the machining process

## TECHNICAL SPECS

### WORKING AREA

Table dimensions	800 mm x 500 mm
Workpiece, length x width x thickness (max.)	1150 mm
Workpiece weight (max.)	600 kg
Travel X-axis	500 mm
Travel Y-axis	400 mm
Travel U / V-axis	±35 mm
Travel Z-axis	300 mm
Rapid feed X-/ Y-axis	12 m/min
Cutting angle (with guide)	± 12° / 80 mm
Cutting capacity (max.)	300 mm <sup>2</sup> /min
Generator	10 A

### CNC CONTROL

Display size / type	15" / LED
Controlled axis	4
Input increment (min.)	0.001 mm

### DIELECTRIC SYSTEM

Dielectric, tank capacity	100 l
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### FEED

Rapid feed X / Y axis	1000 mm/min
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### ACCURACIES

Positioning accuracy X- / Y-axis	≤0.01 mm
Positioning accuracy U/V axis	≤0.025 mm
Repeatability X- / Y-axis	≤0.005 mm
Repeatability U / V axis	≤0.01 mm
Best surface roughness	0.8 µm Ra

### DRIVE CAPACITY

Motor rating X / Y axis	0.75 kW
Motor rating U / V axis	0.2 kW
Motor rating Z-axis	0.2 kW
Total power consumption	2.3 kVA
Supply voltage	380 (±10%) / 50 or 60Hz V

### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	2.2 m x 2.04 m x 2.17 m
Weight	2800 kg



## PRODUCT DETAILS

- The NeoSpark T Electric Discharge Machine delivers excellent cutting performance, is very cost-effective, and operating costs are extremely low
- The cast-iron machine frame features a modern C-frame with T-base, precision-machined surfaces and has undergone multiple thermal stress-relief processes
- Rigid linear guides and precision preloaded ballscrews on all axes ensure permanent mechanical precision
- The IPC-based 4-axis control system is fine-tuned to manufacturing process requirements, plus, it is user-oriented and reliable
- The two-directional wire guide system is the heart of the machine, featuring perfect wire feed even with workpieces with large tapers or heights
- Easy maintenance due to central lubrication system
- Handheld control for quick machine setup

### NeoSpark T 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
- Electronic manual control unit
- Aluminium cutting function
- USB port
- Ethernet port
- Standard wire guides
- Dielectric tank with pump
- Work lamp
- Leveling plates and jacks
- Central lubrication
- Operating tools
- Operator instructions



## KNUTH on YouTube

### Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?  
Please feel free to contact us!**