



Wire EDM Machines

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.)	1.100 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 ² /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

ACCURACIES

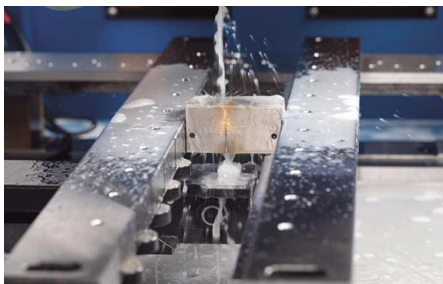
Positioning accuracy X- / Y-axis	0.0004 in
Positioning accuracy U/V axis	0,0008 in
Repeatability X- / Y-axis	0.0002 in
Repeatability U / V axis	0,0004 in
Best surface roughness	0,8 µm Ra

DRIVE CAPACITY

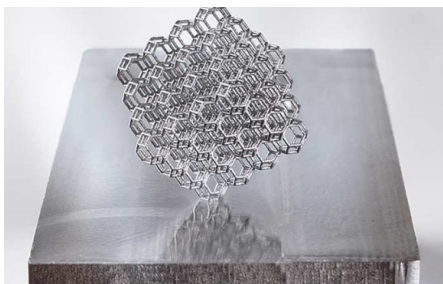
Motor rating X / Y axis	0,2 Hp
Motor rating U / V axis	0,03 Hp
Motor rating Z-axis	0,03 Hp
Total power consumption	4,5 kVA

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	81 in x 63 in x 73 in
Weight	4.400 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

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
 Operating manual