

# NOVICK

WIDE RANGE OF **EDM**  
MACHINES FOR YOUR NEEDS  
**Affordable Quality Machines**



YOUR SPECIALIST RETAILER

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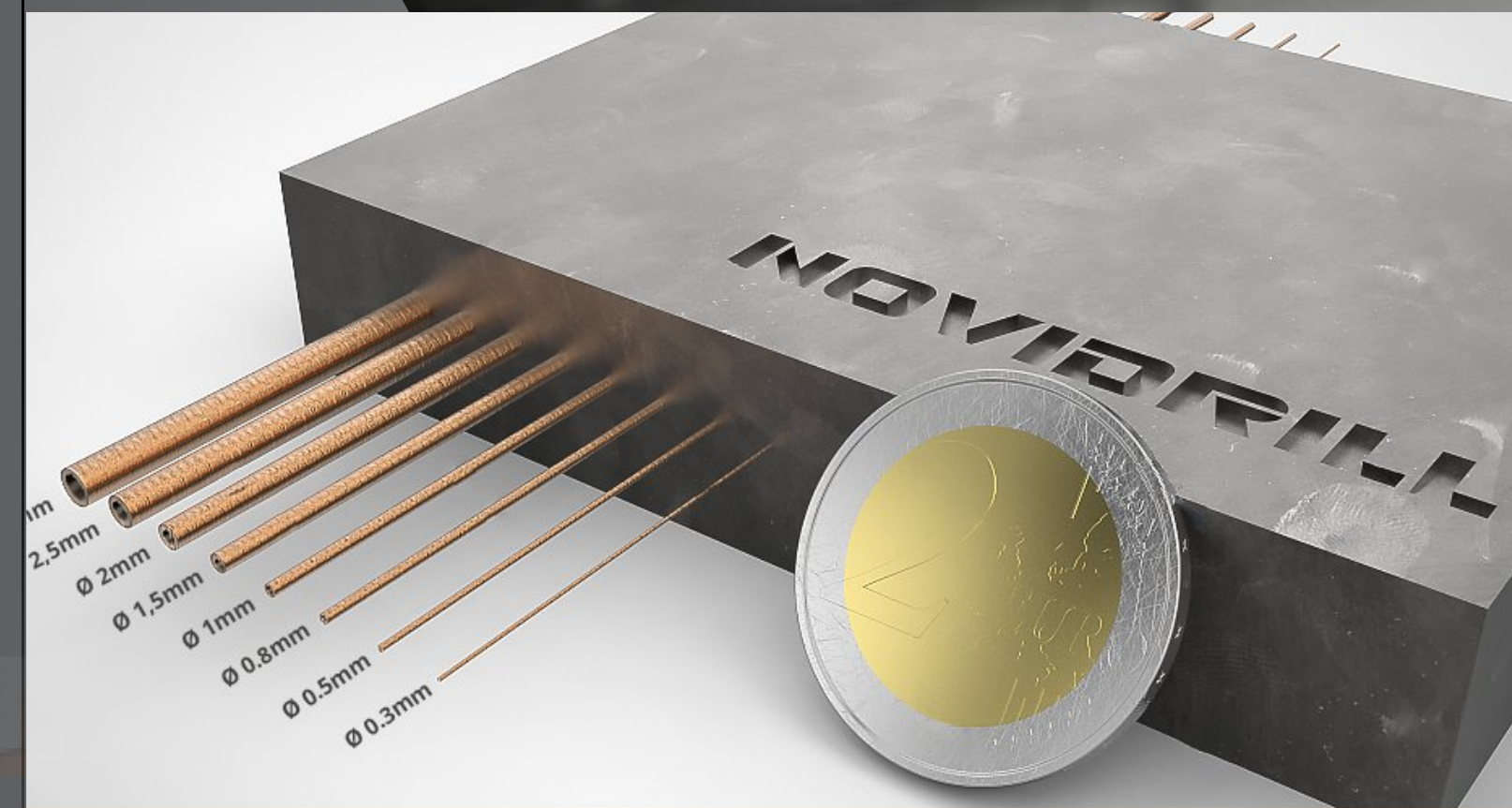
[www.novick.eu](http://www.novick.eu)



**2020**  
**NOVICK®**

BUILT FOR EUROPE

Today's most economical solution  
for producing high precision and  
high-speed holes.



Precise drilling starting from **0.3mm diameter**

**NOVIDRILL** **PRO Series**  
**III THIRD GENERATION** **PRO+ Series**

CNC HIGH SPEED EDM DRILLING MACHINES

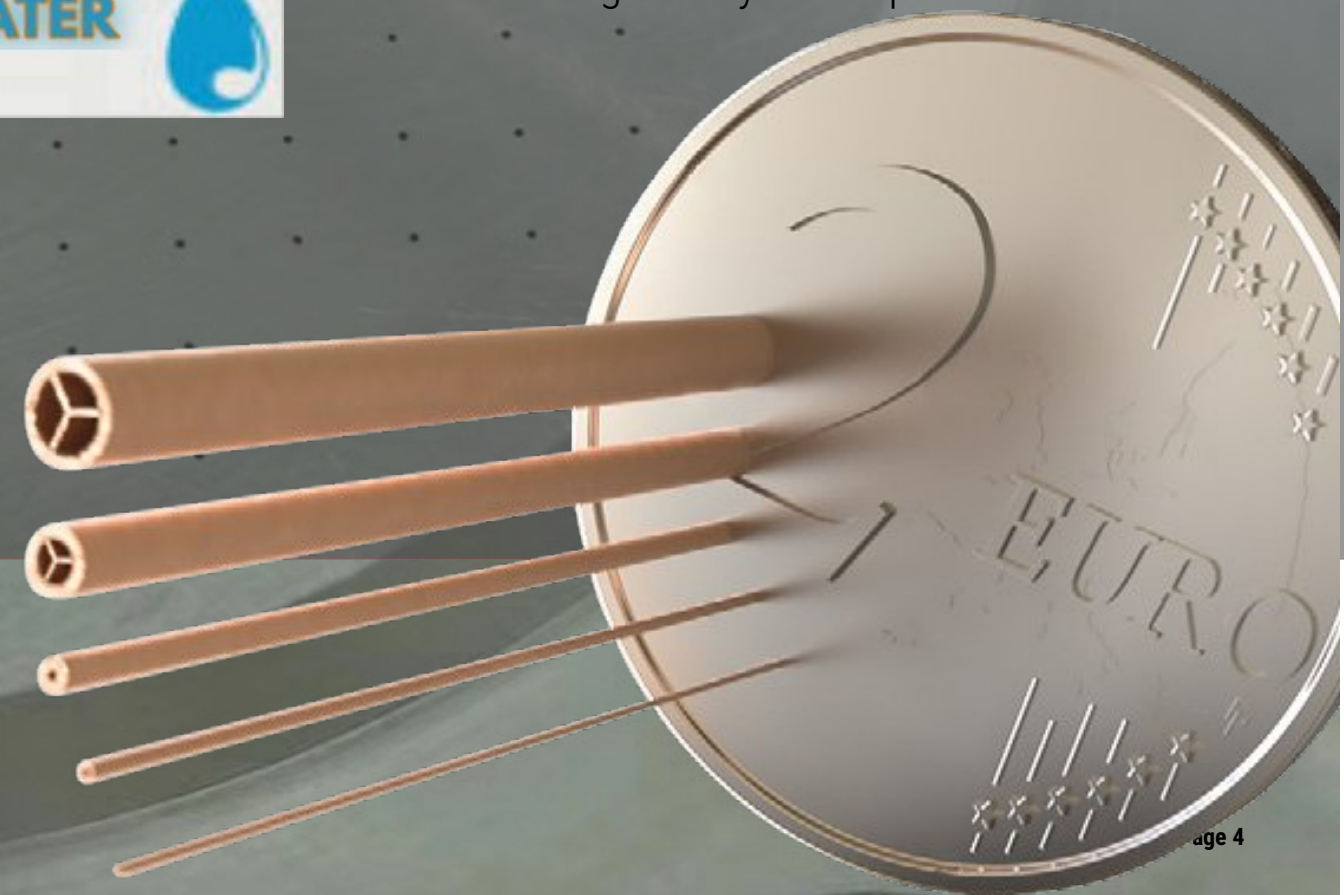
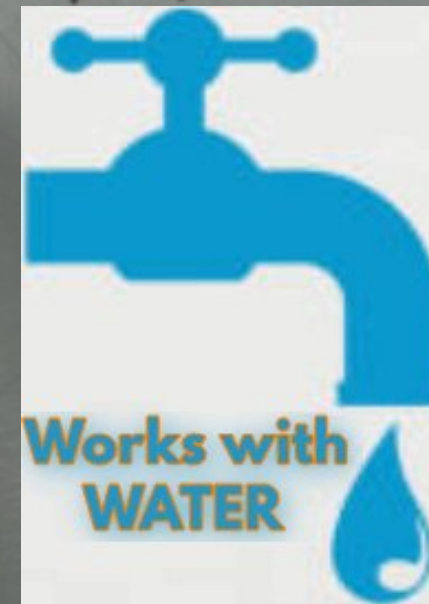
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## NOVIDRILL-III-PRO-400/500

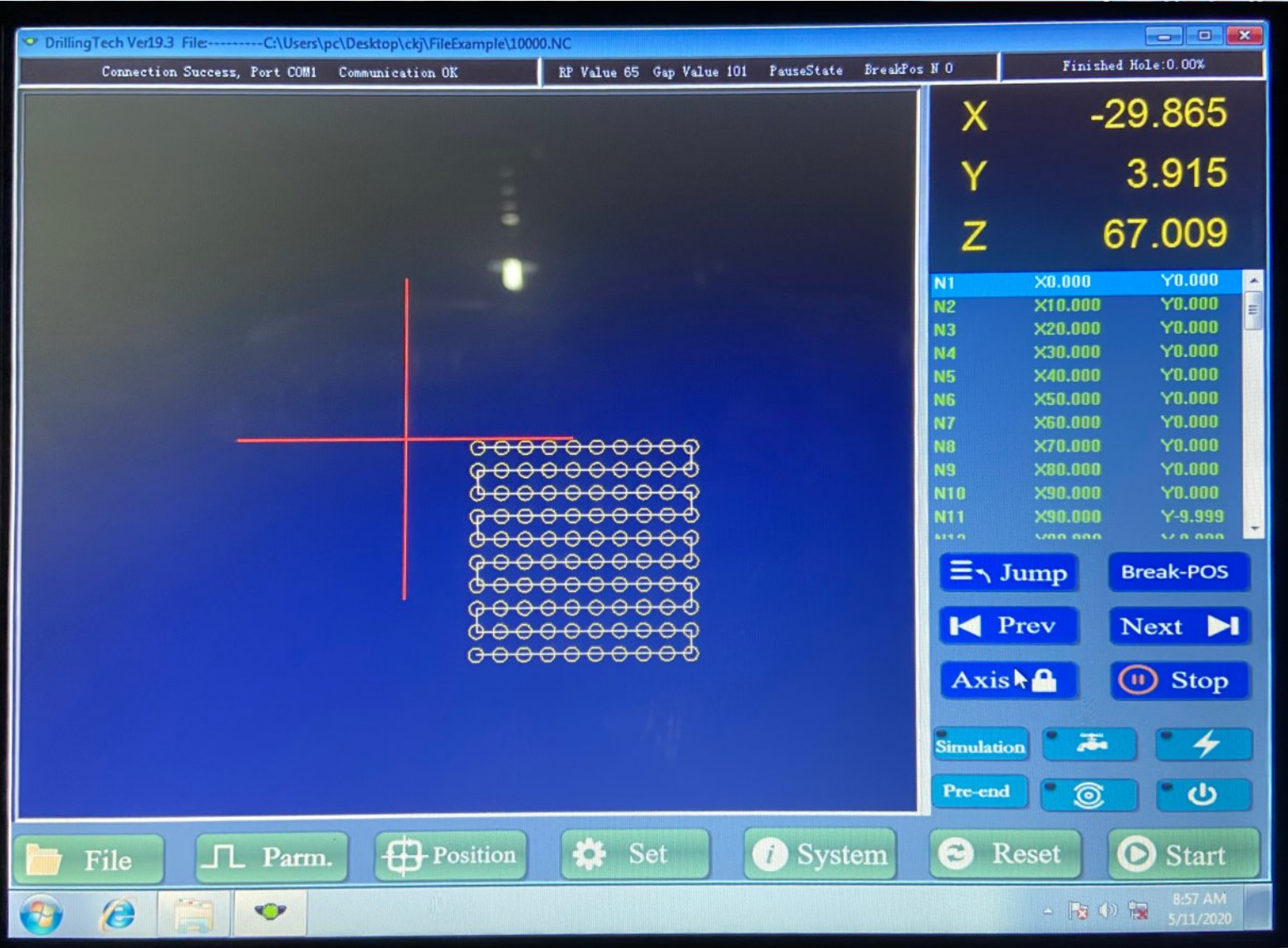
III  
THIRD  
GENERATION3 AXIS  
NOVIDRILL PRO+4 AXIS  
NOVIDRILL PRO+HIGH SPEED EDM CNC  
DRILLING MACHINENOVICK TRUSTED BY INDUSTRIAL  
LEADERS IN EUROPE

Our new third generation of high performance, fast EDM drilling machines NOVIDRILL-III Generation offers an affordable alternative for all EDM drilling, deep hole drilling and high speed drilling. Whatever is required in hole making – through holes or blind holes, small holes or large holes, in steel, in stainless, in carbide, in copper, in zirconium or in any other conductive material – you get a multitude of EDM hole making technologies at your disposal.





# NOVIDRILL-III-PRO-400/500



## PC Based Windows level Software.

- Immediate DXF import from your CAD system and direct conversion
- Clear graphic support
- All drill coordinates visible
- Every hole programmable with different cutting parameters or depths

Technical data		400 -IIIPro		500-IIIPro
<b>Z axis travel</b> (drilling stroke)		350 mm		
W axis travel		300 mm		
<b>Distance director to work table</b>		50 - 350 mm   200-500mm		
Worktable size (L x W)		600 x 400 mm   630x440 mm		
<b>Travel of working table (manual &amp; auto)</b>		400 x 300 mm   500 x 400 mm		
Max. load of work table		200 kg		
<b>Digital display</b>		Three axes digital(0.001mm)		
ELECTRODE SPECIFICATIONS				
Electrode diameter		Ø 0,3 - Ø 3,0 mm		
<b>Working liquid</b>		Water or dielectric fluid		
GENERAL				
Max. machining current		30 A		
<b>Power supply</b>		380V / 50 Hz		
Total input power		3.5 KVA		
<b>Overall dimensions</b>		1200 x 1010 x 2170 mm   1300 x 1075 x 2320 mm		
Weight		960 kg   1065 kg		

## MAIN FEATURES:

- Compact space-saving design with integral dielectric system and generator for machining of small and medium-size parts
- Machine casting frame uses high quality cast iron, heat treated for stress release to keep machine body high rigidity without deformation.
- Machine construction according to computer analysis of tensile strength, compression resistance and stiffness strain.
- Highly accurate spindle head with the quill running on pre-loaded cross roller bearings
- Servo drive - step motor on Z axis for reliable control
- Manual central lubrication for table guides and spindles
- user-friendly, easy to learn operation; parameters are entered directly in the control panel and can be easily optimized.



## Don't know which machines is best suited for your needs?

Our engineers, will gladly help choose the best configuration for you based on your production needs. Feel free to contact them for a personalized offer: [sales@novick.eu](mailto:sales@novick.eu) | +32 (0) 475 736 351 (West Europe) | +40 (0) 722 346 170 (East Europe)



**III  
THIRD  
GENERATION**

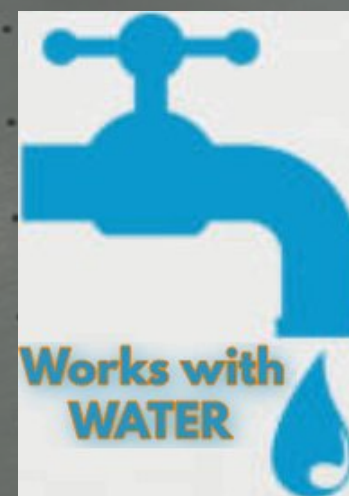


**GUARANTEE  
TABLE**

**3 AXIS**  
NOVIDRILL PRO+

**4 AXIS**  
NOVIDRILL PRO+

**5 AXIS**  
NOVIDRILL PRO+



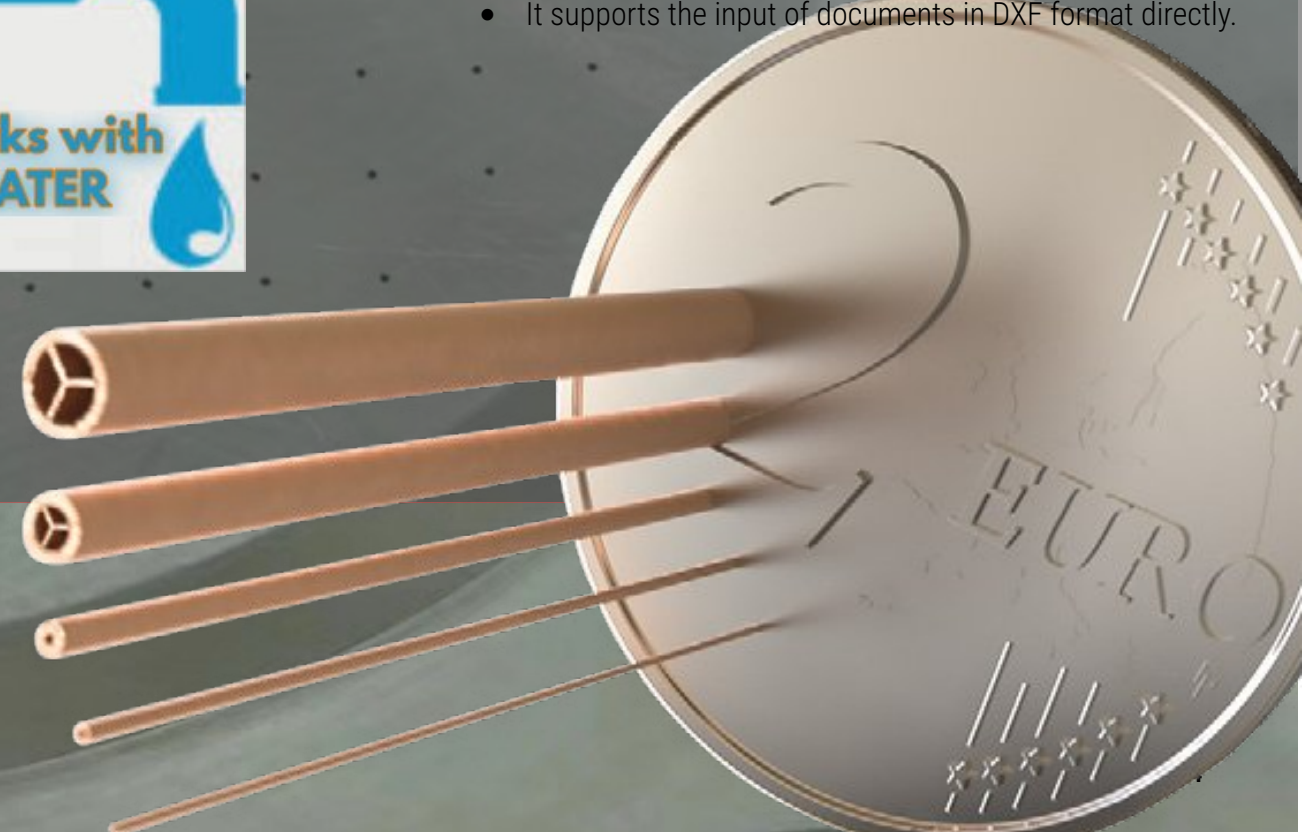
## 3-4-5 axis HIGH SPEED EDM DRILLING MACHINE

The Novidril's Pro+ CNC Controller is an embedded intelligent control system with independent core technology, and is the key product researched and developed successfully for the purpose of breaking foreign countries' monopoly in high-end control technology.

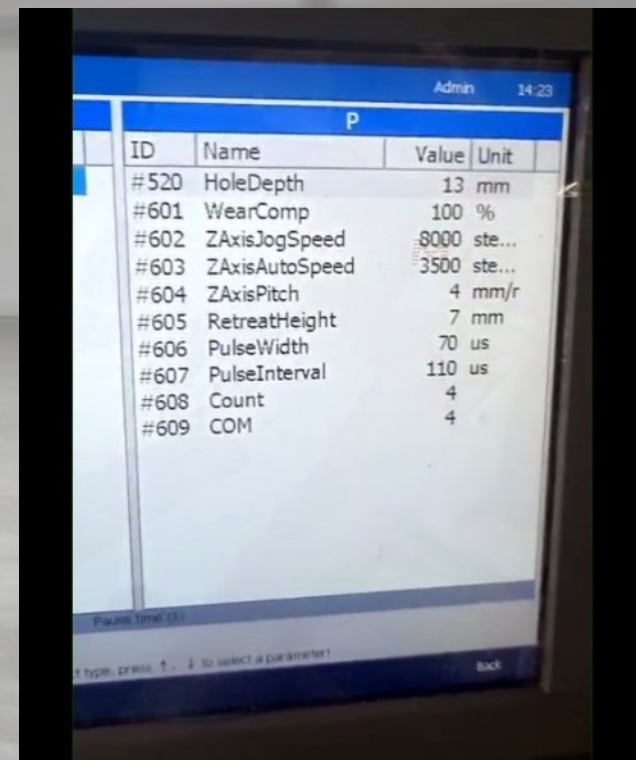
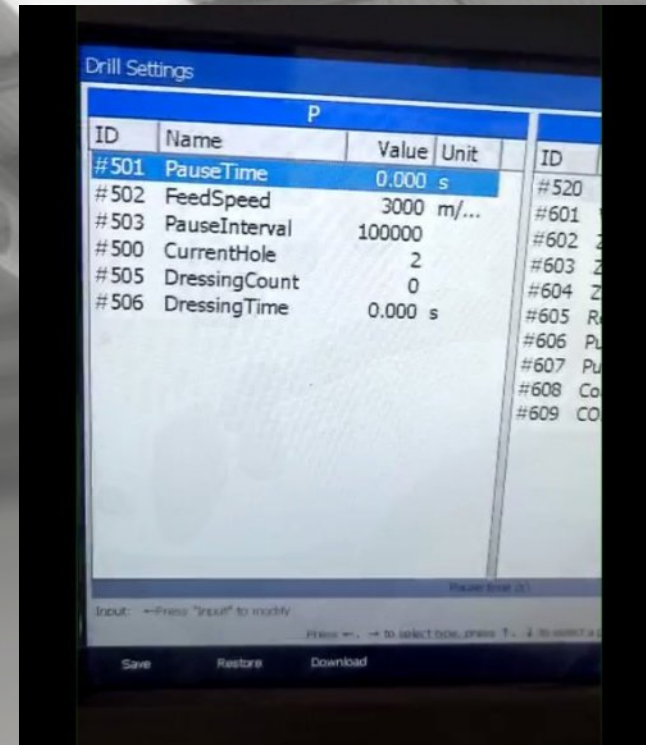
Novidril Pro+ series network-based CNC system: the product is the core product researched and developed successfully by the company on the basis of CNC system software & hardware platform of Ethernet communication technology of completely proprietary intellectual property rights.

The main technical indexes include:

- max 5 control shafts + main shaft, 5-shaft linkage
- Minimum moving unit: 0.001mm, maximum speed: 30m/min
- Radius, length, abrasion and reverse gap compensation of the tool
- High-speed & high-precision 3D dynamic front contouring control;
- Rapid graphic simulation display and real-time 3D trajectory dynamic graphic processing analog display;
- Break-point memory processing and power-off protection function;
- It's able to designate to start processing from any line;
- It supports the input of documents in DXF format directly.







## Novidrill III-PRO+ Range

Model	Novidrill 400Pro+	Novidrill 500Pro+	Novidrill 630Pro+	Novidrill 800Pro+
Table dimensions	mm 420 x 620	500 x 700	685 x 1020	750 x 1150
X-Y stroke	mm 300 x 400	400 x 500	500 x 630	600 x 800
Z1 Stroke - Electrode drilling	mm 350	350	400	500
stroke				
W Stroke - electrode guide	mm 160	160	160	160
stroke				
Z2 Stroke - Spindle head	mm 260	260	260	260
stroke				
Highest workpiece possible	mm 420	420	500	600
Drilling Capacity	mm 0.2-6	0.2-6	0.2-6	0.2-6
Drilling Generator	A 50	50	50	50



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SPEED AND SIMPLICITY

Operation made easy

100% increase in productivity due to low wear of electrode and stable very high pressure



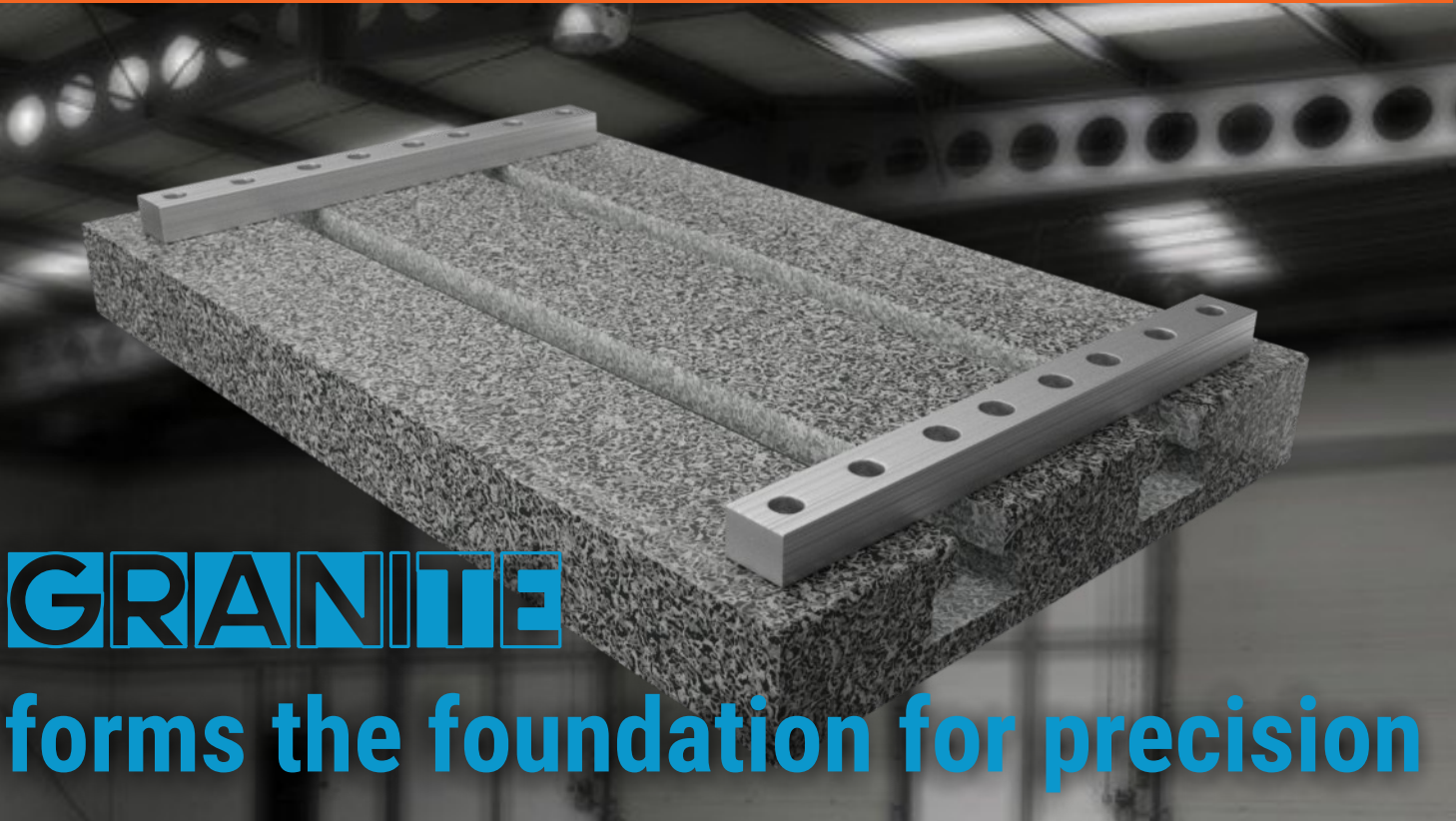
Material	Electrode Dia.	Drill Depth	Machining Time
Allow Tool Steel	0.5 mm	12.5 mm	25 ~ 35 seconds
	0.5 mm	25 mm	50 ~ 60 seconds
	1 mm	25 mm	55 ~ 65 seconds
Tungsten Carbide	0.5 mm	12.5 mm	4 ~ 5 minutes
	0.5 mm	25 mm	8 ~ 9 minutes
Aluminum	0.5 mm	12.5 mm	40 ~ 50 seconds
	0.5 mm	25 mm	90 ~ 100 seconds
	1 mm	70 mm	3 minutes

- Drilling speed can reach up to 30 - 80 mm/min, depending on material
- Can drill on inclined or curved surfaces directly
- Can be used for drilling the wire-cut starting holes, filter holes, jet holes, gas holes, group of holes and very deep holes etc.

- Can drill small holes in any conductive material like cold rolled and stainless steel, hard alloys, aluminum, copper, carbide, cobalt, zirconium, etc
- Can erode the drill or threading tap (or other tooling) which are broken inside the work-piece, without destroying the thread or holes



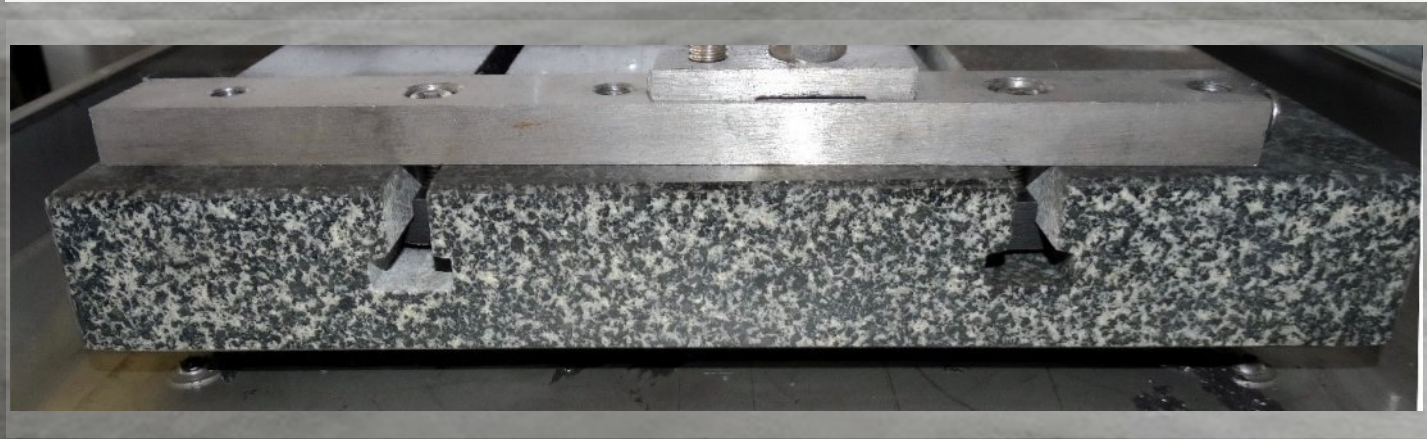
Novidrill third generation models use ordinary tap water as dielectric. This coupled with a high-pressure waterjet air pump system to provide for excellent flush and stability at the electrode during the burn makes the set-up operation more user friendly while keeping work free of oils or other contaminants. It reduces drastically the “bullet nose” effect.



Big advantages with granite table:

- You can NOT drill in the table
- Granite guarantees a better flatness of the table
- Very high precision and rare possibility of deformation
- Table resist to corrosion of the dielectric liquid (drilling liquid)
- The table does not get rusty
- Maintain the super precision and keeps it longer
- Super hard surface
- Parts can not be welded to the table due to bad electrical contact with table

GRANITE TABLE





# INTEGRATED TECHNOLOGY DESIGN



## Main advantages

- Accommodates 0.2 mm to 3.0 (opt 6)mm diameter electrodes
- Electrodes up to 400/500 mm length
- High speed processing generator
- High precision Guide for super precision drill positioning
- High precision on all three axes for accuracy and user-friendly operation with 0,001mm smallest input value
- Operator friendly swivel control panel
- Best high-pressure coolant pump on the market
- Standalone (easy for cleaning) coolant tank with high capacity filtration unit with 5-Micron coolant Filtration System (low-cost commercial water filters)

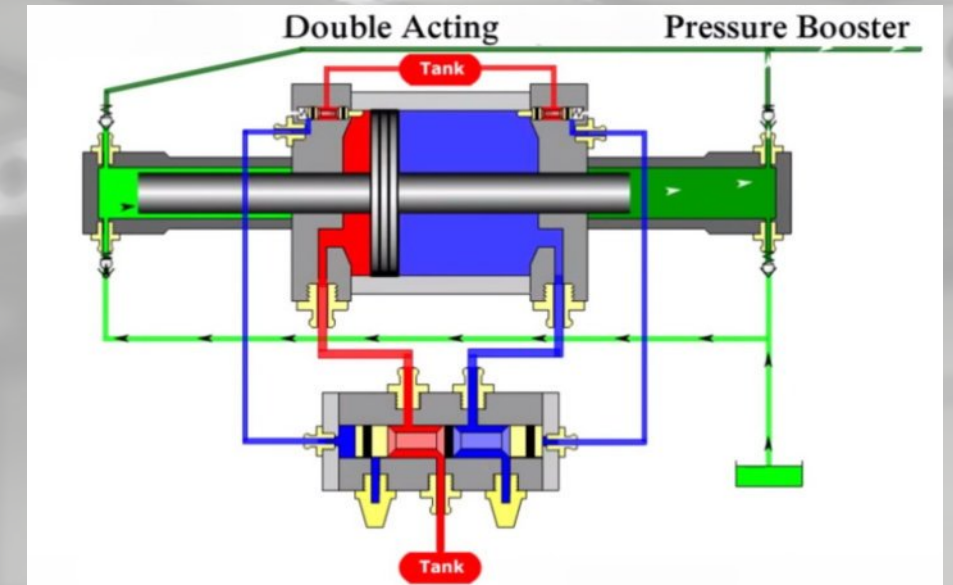
## Main features

- Solid design of the machine base. The meehanite cast iron components and highgrade guides are an assurance of durability and long-term accuracy.
- Good accessibility permits convenient and swift set-up. The tidy work area is designed and optimized for easy workpiece clamping. Furthermore, the work table from granite makes the machine compact and permits loading with heavier workpieces.
- Worktable comes with 2 stainless mounting tooling rails for easy setup and good conductivity.
- Drilling rates up to 1mm/second can be achieved and obtainable hole sizes are between 0.2 and 3mm, with a length-to-diameter ratio of over 150:1.
- An EDM drilling system simply must get the job done – and must not distract from important tasks. The Novidrill III is therefore designed to bring the user quickly and simply to his goal. Speed and simplicity are also all-important as far as maintenance and organization are concerned – everything is readily accessible and accommodated immediately in the machine. The perfect complement to the wire-cutting machines. The start-EDM drilling systems not only master small dimensions on start holes but also functional deep bores.



# EDM ENGINEERING AT ITS BEST

- High pressure dielectric fluid is one of the most important factors to drill straight and deep
- **Novidrill's ability to use ordinary tap water as dielectric**, coupled with a unique **pneumatic activated super high pressure (70-120bar) pump system** (similar as a high pressure waterjet cutting machine) guarantees excellent flush and stability at the electrode during the burn.
- Auxiliary Flush provides continuous cleaning of die guide and work piece and aids electrode entry and breakthrough.



The combination of the super high-pressure dielectric fluid, the rotation of the tubular electrode and the high electrode feed rate (controlled by a fast response servo) make it possible to produce holes at a very fast rate and of very small dimensions (till 0,2mm diameter)

The use of our pneumatic intensifier pump results in drilling parts up to 50% faster and with lower operating costs as much as 40%! Our high-pressure pump produces 30% more pressure than a standard water jet pressure pump, resulting in a 40-50% increase in productivity for many materials.

Compared to a water jet piston pump under typical operating pressures our pump uses 30% less water, 30% less power, and generates up to 50% less electrode consumption, resulting in a 40% reduction in operating costs.





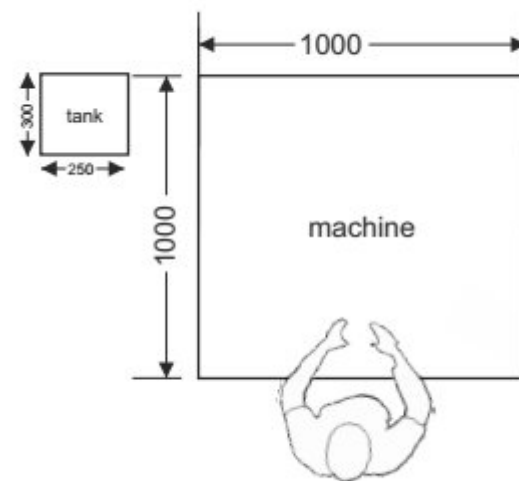
# NOVIDRILL-III-Pro/Pro+

## III THIRD GENERATION

### Dimensions - Floorplan

Keeping the footprint small and the machine affordable while offering the power to drill even exotic extreme hard materials, Novidrill-III Pro/Pro+ does it all and punches drilling holes from 0.2 mm through 3.0 mm(opt 6mm).

The novidrill-III comes with a 2 times bigger separate coolant tank, this to keep the temperature stable, the coolant more clean and to be able to clean the tank easily. Tank can be placed in the back or left from the machine



Stiffness and precision are hallmarks of the new NOVIDRILL-III-Pro/Pro+. State-of-the-art methods have been used in their development, while the finest of modern machining and assembly techniques have gone into their construction. Each machine is verified with a laser that checks the positioning of each axis to make sure it meets the norm of VDI 3441. Also, each machine must comply with the requirements of ISO 230-4.

Excellent quality products with reasonable prices have been increasingly welcomed by worldwide buyers. In recent years, NOVICK has made breakthroughs in technology and machine quality. Rigorous quality control is thoroughly conducted throughout the entire manufacturing processes from casting the frame parts, to machining, assembling and quality control.



## NOVIDRILL-IIIth-Generation

### CNC EDM DRILLING

Designed to meet the needs of any job shop and the most demanding Toolmaking workshop, the Novidrill III-Pro/Pro+ is simply the most unique EDM Drill on the market today. This feature packed machine combines affordability, precision and versatility with a host of standard features.

**Compare the features with others and we are sure you'll agree:  
The Novidrill-III-Pro/Pro+ offers more than competitive machines that sell for twice the price!**

- Compact space-saving design with integral dielectric system and generator for machining of small and medium-size parts
- Machine casting frame uses high quality cast iron; heat treated for stress release to keep machine body high rigidity without deformation
- Machine construction according to computer analysis of tensile strength, compression resistance and stiffness strain.
- Highly accurate spindle head with the quill running on pre-loaded cross roller bearings
- Servo drive motor on Z axis for reliable control
- Manual central lubrication for table guides and spindles
- User-friendly, easy to learn operation; parameters are entered directly in the control panel and can be easily optimized.

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