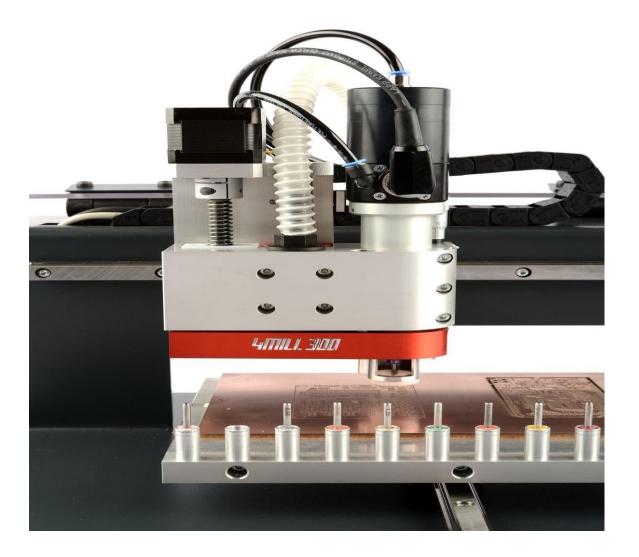


# **MIPEC 4MILL300ATC**

## PCB and RF Antenna Design with Automatic Tool Change



MIPEC can handle standard Single side and Double sided PCB designs, SMD, RF and various other applications.



#### 4MILL300ATC with automatic tool change-12 Nos

Mipec is trademark of P2J Technology, from Czech Republic. P2J Technology is specialized in developing and manufacturing of precise milling and drilling equipment that meets highest of customer's demands.

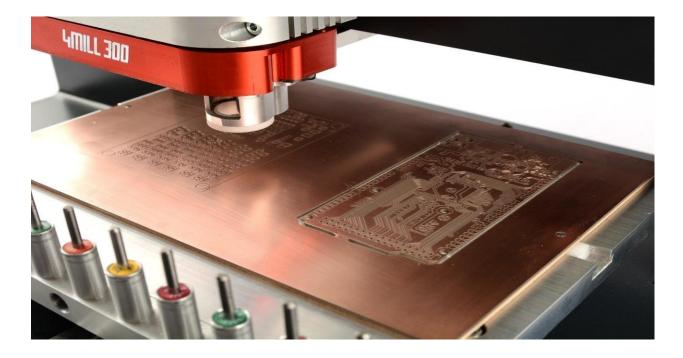
PCB milling machine 4MILL300ATC is a tabletop PCB Prototyping Machine. We proudly present our multipurpose machine with automatic tool change system for PCB prototyping, front panel making and 3D modeling. Make your double-sided PCB's in minutes using 4MILL. Thanks to its hi-precision lead screws and 60K HF spindle motor we can handle standard PCB designs, SMD, RF and various other applications. Do you need to drill holes from 0.2mm and/or tracks and insulation paths from 0.1mm? 4MILL is the machine for you!



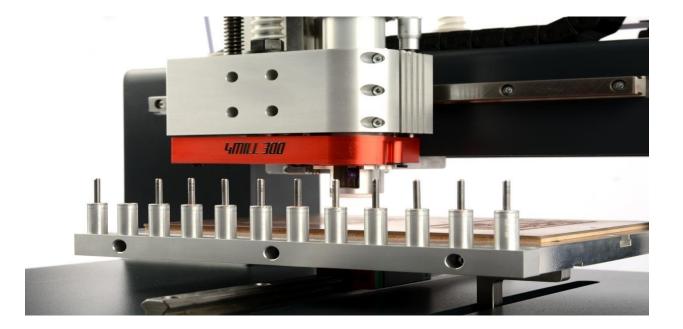
With a MIPEC PCB prototyping solutions, you can produce PCBs in your own lab – fast, environmentally friendly, and with high accuracy. It is no more necessary to wait days or weeks for your boards to be delivered from your external suppliers. With MIPEC prototyping method , you can proceed directly from the design phase to the implementation and testing of your design in the shortest possible period. If any design error is discovered, a new PCB can be produced almost immediately and you can run your tests again.



The new generation software for PCB prototyping is included: With professional machine comes professional software! TrackMaker, packed with features for quick processing and milling of your data. Load all layers with one click and start milling right away. Powerful for super-users and user-friendly for beginners. In fact, we are convinced that this is the most user-friendly package on the market.



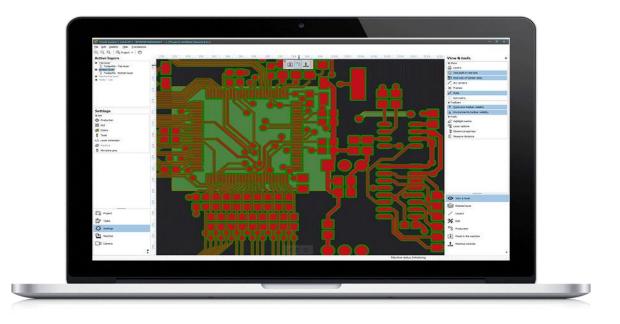
### Automatic Tool Change 12 No's





### TRACEMAKER:

TrackMaker is an integrated insulation and machine-control package dedicated for PCB milling. TrackMaker is running on Windows™operating system.



#### DATA IMPORT

Various import formats: Gerber D & X, Excellon, ODB++, DXF, Sieb & Meyer, HPGL and more

#### EDIT & ADD

Board editing and adding of shapes, draw your own geometries and tool-paths Trackmaker can generate toolpath for machine and offers additional functions like editing, converting and manipulating data imported from other Cad packages

#### **MIPEC's prototyping solutions have numerous advantages:**

You will reduce fabrication of your PCB prototypes from weeks to just a few hours,

You are absolutely independent from external PCB suppliers,

Your flexibility will increase enormously,

You will reduce your time to market,

Your design stays inside the company for increased security.

**Software** : 4MILL300ATC Machine is delivered together with USB dongle based license of TrackMaker software.

#### Add-on accessories consisting from:

Tool Set:	CONSUMABLES FOR PCB MILLING:
Isolation Path Cutter, Universal cutter, Micro cutter, Contour router, End mill, Drill Bits	Copper plates FR4, format A5, 2 sided Copper plates FR4, format A5, 1 sided Drill underlay material, format A5 Cleaning pads Sticky tape



## Specifications:

Model: 4MILL300ATC	
	illing, drilling and Engraving RF Antenna Design System)
Manufacturer:	MIPEC
Max. Working area:	240 x 180 x 30mm (Z)
Max. PCB Size	200 x 140 mm
Milling spindle:	High Speed spindle 60000 RPM, software controlled
Resolution:	brushless motor with pneumatic clamp
Repeatability:	$\pm 0.005 \text{ mm}$
Tool-changer:	12 positions Automatic
Tool-holder:	1/8 Inch (3.175mm)
Milling depth adjustment:	µm precise depth adjustment
	120 Drills/min
Drilling speed: Travel speed X/Y:	40mm/s
Machine Table:	Flat milled aluminium table with center T-Slot
X/Y/Z drives:	
Isolation & Track Width	hybride motors
	Upto 0.1mm (4 mil) Micrometer depth regulation to fabricate antenna
Z Depth Regulation:	
Minimum track size	0.1 mm (4 mil)
Minimum gap size	0.1 mm (4 mil)
Tool Length Detect & Surface Detect	Auto with floating head technology for surface
	irregularity detection
Machine table:	flat milled aluminium table with central T-slot
Interface to PC	USB
OS compatibility	Windows 10 and latest
Dimensions:	W-420 x D-455 x H-435mm
Weight:	42kg
Power supply:	110/230V, 50-60Hz
Software:	TrackMaker integrated software for machine control and
	cam operation it can import Gerber D&X, Excellon,
	ODB++, DXF etc
Testing	License Type: Perpetual USB Dongle based
Testing	CAD/CAM packages will be supplied to test Single sided PCB, double sided PCB and antenna prototyping
Dust Extractor (Vaccum system)	Yes Included with software controlled automatic on/off
	switching with spindle motor. It has HEPA Filter 0.4kW
	single phase motor with tank capacity of 2 Litres
Acoustic cabinet	Yes Included
Imports	Gerber D & X, Excellon, ODB++, DXF, HPGL and
	more
Air compressor for ATC	Yes Included
Applications	Antenna Prototyping, Rapid Prototyping, Teaching,
	Student Project, PCB Engraving/Milling, model making,
	Technology Research and more
Material Supported	FR4, Copper Clad, Acrylic etc.
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