

**TORMACH®  
1300PL®**



**TRAVELS**

X-Axis	50 in. (1270 mm)
Y-Axis	51.5 in. (1308 mm)
Z-Axis	3.9 in. (100 mm)

**MAXIMUM FEED RATE**

X- and Y-Axis	1,000 IPM (25.4 m/min)
Z-Axis	120 IPM (3.0 m/min)

**TABLE SPECIFICATIONS**

Table Size	51.2 in. × 51.2 in. (1.3 m × 1.3 m)
Table Type	Water Table
Material Weight Capacity	750 lbs. (340 kg)
Liquid Capacity	59 US Gallons (223 liters)

**MACHINE SPECIFICATIONS**

Machine Footprint	78 in. × 70 in. (1.95 m × 1.7 m)
Overall System Height	55 in. (1.4 m)
Typical System Weight	1,232 lbs. (559 kg)

**LINEAR MOTION COMPONENTS**

X- and Y-Axis Motor	Servo-Driven
Z-Axis Motor	NEMA-23 Stepper
Guideways	Precision Linear Guideway
Power Transmission	Planetary Gear (X-Axis) 5 mm HTD Belt (Y-Axis)

**MACHINE CONSTRUCTION**

Water Table	Welded Steel
Machine Base	Welded Steel
Gantry Bridge	Aluminum
Gantry Supports	Steel

**SHOP REQUIREMENTS**

Power Required	Single-Phase 230 Vac, 50/60 Hz, 20A breaker
Air Pressure	Between 90 - 120 psi (620 kPa - 825 kPa). If air supply is greater than 120 psi (825 kPa), you must use a regulator.

**RESOLUTION AND ACCURACY**

Resolution	0.0005" (0.0127 mm)
Repeatability	±0.001 in. (±0.0254 mm)
Positional Accuracy	≤0.005 in. / ft (130 micron / 300mm)

**MACHINE CONTROLLER**

POWERED BY  
**PathPilot®**  
A Better User Experience

**PathPilot® HUB**

PathPilot HUB is a browser-based, full-featured PathPilot simulator, producing usable G-Code.

- User-friendly design
- Cloud-based simulator via PathPilot HUB
- Intuitive conversational programming
- DXF import capability
- Auto Cut Feeds & Speeds Calculator built in
- Usable G-Code Memory: 80 GB
- Built-in Dropbox™ support for seamlessly transferring programs

**TORCH**

Plasma Source Options	Hypertherm • Powermax45 XP • Powermax65 • Powermax85
Torch Type	Floating head with digital torch height control (THC)
Torch Features	Breakaway torch with collision detection

**DELIVERY NOTES AND WARRANTY**

Liftgate-Ready?	Yes, it's liftgate-ready — Forklift not required
Required Equipment	Pallet jack and an engine hoist or gantry crane
Warranty	2 Years

# PATHPILOT CNC CONTROLLER



## America's Favorite CNC Controller

We saw PathPilot as an opportunity to make a better machine control software. We consistently get high praise on it because it's easy to learn, easy to use, and can help you do almost anything. That feedback is hard earned and it means the world to us.

## Cost-effective. All the other kinds of effective, too.

Cost and capability are two of the biggest barriers in a CNC investment.

Tormach was built on the idea of minimizing those barriers. Get cutting, get making, using high-value, well-appointed machines. If that sounds like a reasonable promise to you, you might be our people.

## If it's included, it's included.

We developed PathPilot with the features we'd want in a control software. And we eliminated headaches like costly upgrades (we think they should be free or close to it) or the kind of a la carte pricing that holds advanced features behind a big paywall.

The extras shouldn't be extra. Costs shouldn't be hidden. Updates should be accessible.

If you're investing in a Tormach with PathPilot, we want you to have all of PathPilot so you can do amazing things. Out of the box. That's what we believe because ownership should be a joy.

## Program, learn, and train with PathPilot HUB.

## From the middle of nowhere. Even the outskirts of nowhere.

If you're new to CNC or new to PathPilot, you can get up to speed with PathPilot HUB. All you need is a login (which won't cost a thing) and an Internet connection, you can start getting into programming in PathPilot's environment.

If you're a Tormach owner, you can program from anywhere and upload your PathPilot HUB code to your local controller and start making chips once you get home to your machine. Ah, home. Curl up with a blanket and hot chocolate and watch the chips fly. Maybe that's just us. Don't judge.

When we say we empower people who make things, THIS kind of innovation is how we do it.

### PATHPILOT CNC CONTROL: COMES LOADED WITH PREMIUM FEATURES AS OUR STANDARD

<b>User-Definable Macros</b>	PathPilot comes with subroutine support baked in. Operators can build and customize G-code subroutines for fast programming of specific application needs.
<b>Trajectory Planner/High-Speed Machining</b>	Look-ahead path blending in PathPilot's trajectory planner allows for high-speed machining.
<b>Visual Conversational Programming</b>	A full-color graphic interface, walks operators through easy-to-understand, intuitive step-by-step templates to quickly write G-code for milling sequences.
<b>Expanded Memory</b>	80GB of built-in storage and memory has PathPilot ready-to-roll!
<b>Second Home Position</b>	Operator-defined Home position allows the user to set a preferred table location for easy tool loading or inspection.
<b>Spindle Orientation</b>	Tormach's MX machine spindles will fully support spindle orientation – at no extra charge!
<b>Built-in Dropbox™ Support</b>	Seamlessly transfer high-performance transfer and synchronization of program files and data sets of virtually any size.
<b>WiFi Ready</b>	All the software necessary for connection is included in PathPilot. The only cost is a mere \$18.95 for the WiFi dongle/adaptor (PN 38207).
<b>USB I/O Kit</b>	PathPilot supports up to 4 USB I/O kits for a total of 16 ins and 16 outs - all individually controlled by M codes. Easily trigger aftermarket accessories such as auxiliary pumps, robotic part loaders, probes, and more. Per kit cost is \$249.50 (PN 32616).

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Specifications subject to change without notice.

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