

SPEC SHEET

770M CNC MILLING MACHINE

TORMACH.COM/770M

TRAVELS

X-Axis	14 in. (356 mm)
Y-Axis	7.5 in. (191 mm)
Z-Axis	13.25 in. (337 mm)

SPINDLE

Spindle Power	1.5 hp (1.12 kW)
Maximum Speed	10,000 RPM
Transmission	Poly-V Belt
Spindle Taper	R8
Thread Machining	- Tension/Compression - Auto-Reversing - Thread Mill

MAXIMUM FEED RATE

X- and Y-Axis	135 IPM (3.43 m/min)
Z-Axis	110 IPM (2.79 m/min)

POWER

Power Required	Single-Phase 115 Vac, 50/60 Hz, 15A breaker Supplied with NEMA 5-15P plug; requires NEMA 5-15R receptacle
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MACHINE SPECIFICATIONS

Table Size	26 in. × 8 in. (660 mm × 203 mm)
Table Slots	5/8 in. (15.9 mm) (three slots)
Spindle Nose to Table Max Clearance	14.25 in. (362 mm)
Spindle Centerline to Machine Column	8.6 in. (218 mm)
Typical System Footprint	56 in. × 48.5 in. (1422 mm × 1232 mm)
Overall System Height	88 in. (2235 mm)
Typical System Weight	950 lbs. (431 kg)
Maximum Weight on Table	500 lbs. (227 kg)

FRAME

Frame and Table	Cast iron frame and table, with hand-scraped hydrodynamic ways and tapered adjustment gibs
Way Surfaces	Low-friction PTFE-filled, Acetyl-bonded sliding surface. Similar to Rulon® and Turcite®.

WARRANTY

1-Year Warranty against defects in material and workmanship. Extended Warranty available.



OPTIONAL ACCESSORIES

10-Pocket Automatic Tool Changer
Power Drawbar
4th Axis
SmartCool™ Coolant System
RapidTurn™ Chucker Lathe Accessory
PathPilot® Operator Console
Full Enclosure
High-Speed Spindle

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
	Support for up to 4-axis continuous machining
	Intuitive conversational programming
	Usable G-Code Memory: PathPilot Controller: 80 GB PathPilot Operator Console: 40 GB

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

User-Definable Macros	PathPilot comes with subroutine support baked in. Operators can build and customize G-code subroutines for fast programming of specific application needs.
Trajectory Planner/High-Speed Machining	Look-ahead path blending in PathPilot's trajectory planner allows for high-speed machining.
Visual Conversational Programming	A full-color graphic interface, walks operators through easy-to-understand, intuitive step-by-step templates to quickly write G-code for milling sequences.
Expanded Memory	Standard PathPilot Controller has 80 GB of built-in storage and memory has PathPilot ready-to-roll! The PathPilot Operator Console comes with 40 GB of storage.
Second Home Position	Operator-defined Home position allows the user to set a preferred table location for easy tool loading or inspection.
Spindle Orientation	Tormach's MX machine spindles will fully support spindle orientation – at no extra charge!
WiFi Ready	All the software necessary for connection is included in PathPilot.
USB I/O Kit	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).