DUGARD

PractiTurn Controller



Turning, Evolved.

We are redefining the landscape of industrial machining by bridging the gap between heavy-duty reliability and modern simplicity. Specializing in high-performance lathes and milling machines, the company has built a reputation for producing rugged, industrial-grade hardware that doesn't sacrifice precision for durability. By focusing on the intersection of mechanical strength and digital intelligence, they provide a foundation for both traditional workshops and high-tech manufacturing hubs.

Key Features:

- User-Centric Design: Machines are easy to use, featuring intuitive designs that allow for seamless operation and adjustments without external tools.
- Plug-and-Play Philosophy: By eliminating complex setups, operators can focus on the craft of machining rather than technical configuration.
- AI-Driven Integration: Our AI reads blueprints and automatically generates machining profiles and toolpaths. This will be released in early 2027.
- Smart Partnership: The hardware acts as a partner on the factory floor, learning and adapting to your specific workflow.
- Servo motors included.



About the Controller

Meet the Future of Machining: The All-In-One Controller

Our AI-powered, on-machine controller eliminates external hardware and licensing by hosting a complete, independent production ecosystem. It removes the barriers between design and finished parts with an intuitive interface that gets smarter and more efficient with every update.

Intuitive



Drowning in cryptic G-code and complex menus that require an engineering degree to navigate?

Switch to an interface built for operators, not just engineers—slashing training time and human error instantly.

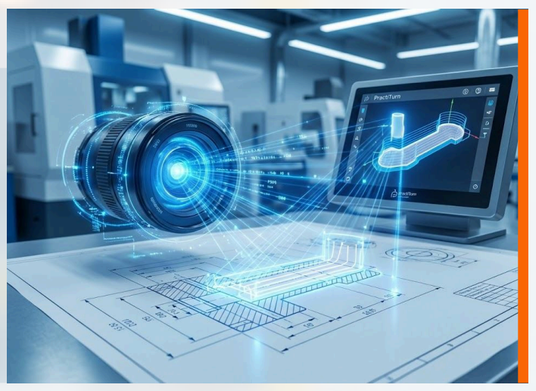


AI Technology
(Coming 2027)



Still manually typing from paper? One single typo can cost thousands in scrapped parts.

Bridge design and production - our AI reads drawings and automatically turns them into toolpaths.



Easy Wiring



Tired of wasting billable days on complex wiring nightmares and manual calibration guesswork?

True plug-and-produce - connect it, and it syncs instantly so you can start working right away.



All-In-One



Stop paying for external CAM software and the specialist to run it.

Draw, generate toolpaths, and simulate — all-in-one intuitive controller workflow.

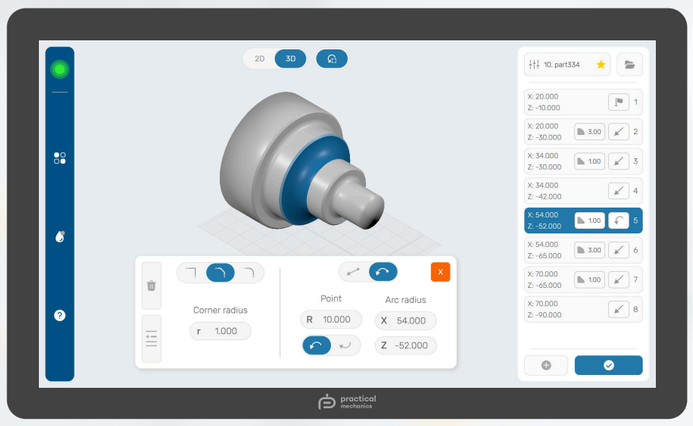


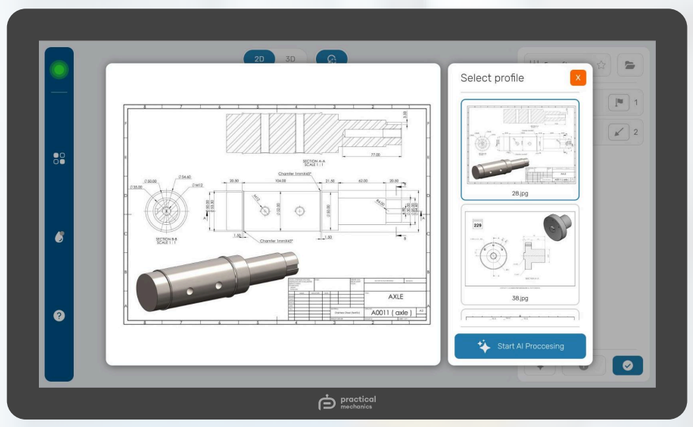
User Interface

Manual
Experience full control with an intuitive interface designed for precise, hand-guided machining and quick setups.



Profile Drawing
Create complex geometries effortlessly using our built-in sketching tool, designed for fast on-screen design without external software.

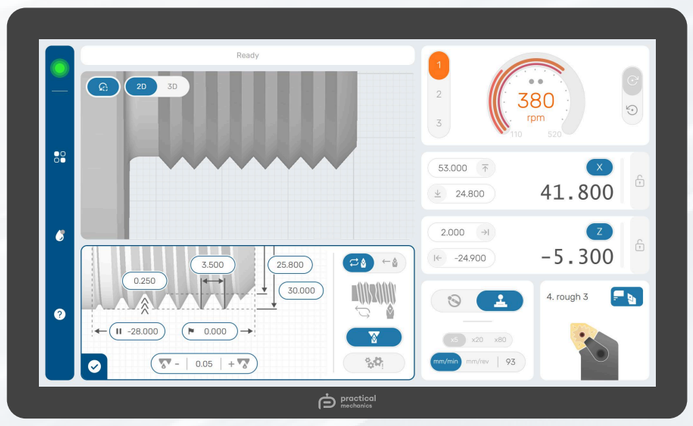




AI Drawing Reader
Upload your blueprints and let our advanced AI instantly translate technical drawings into actionable machining paths.

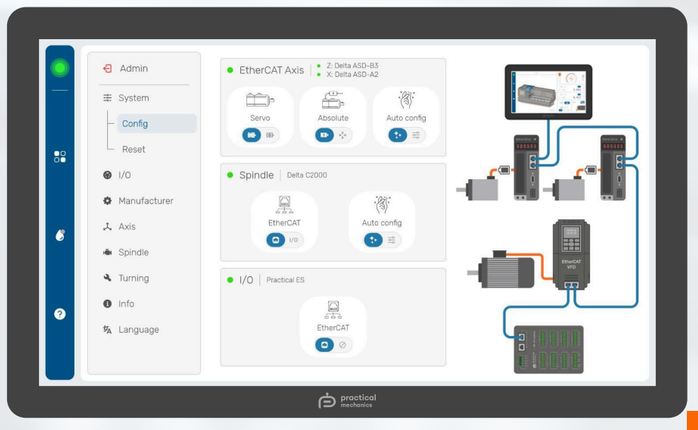
Profile Turning
Execute intricate turning cycles with automated precision, turning your custom profiles into finished parts with a single touch. No G-code programming required.





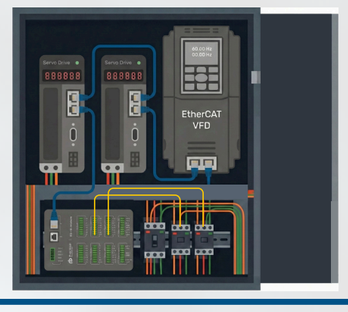
Threading
Simplify complex threading operations with smart synchronization and pre-set standards for perfect leads every time.

Configuration Screens
Navigate through clean, organized settings to tailor your machine's performance and parameters to your exact specifications. Designed for easy setup by any operator —no expert engineer required.

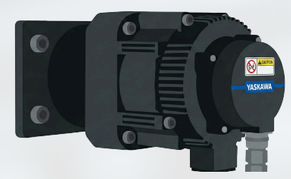


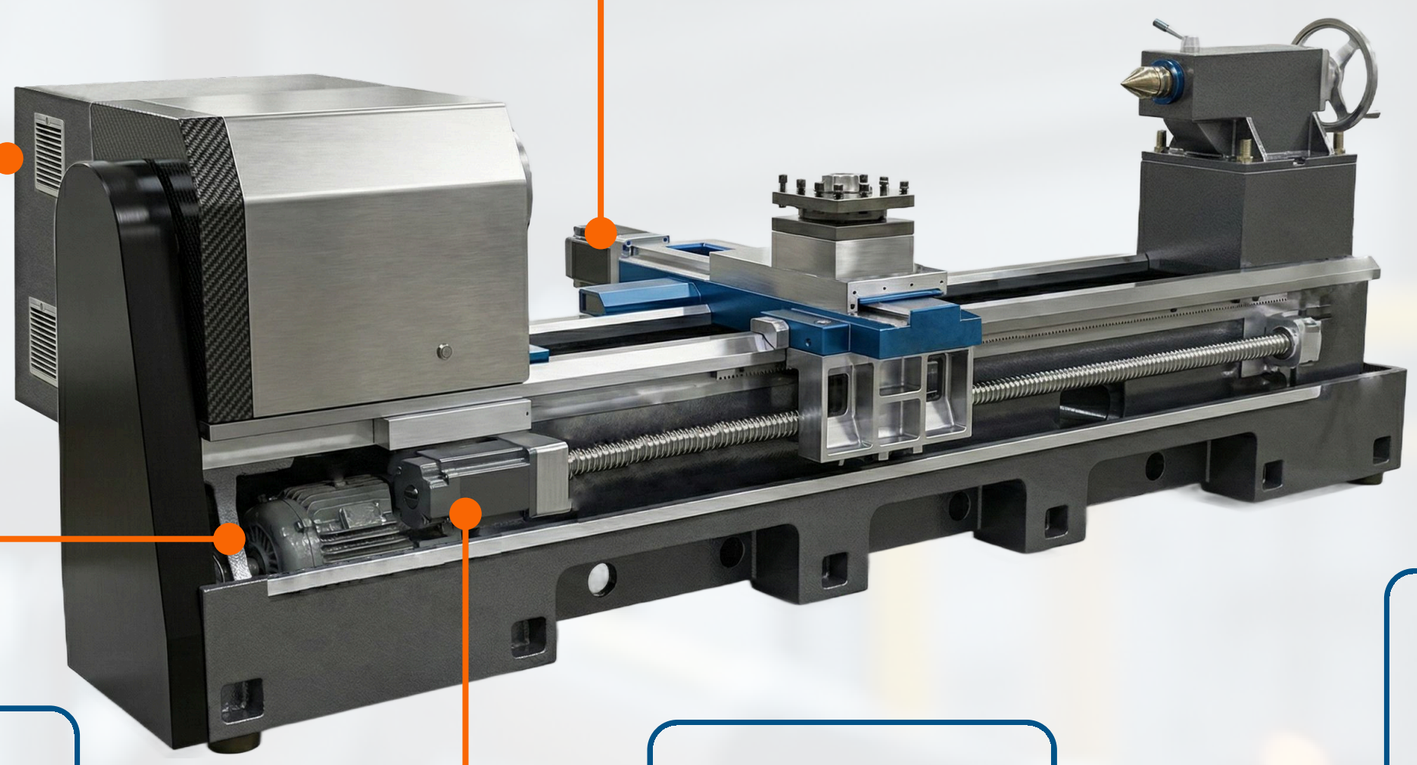
Parts & Connection Schema

Electrical Cabinet

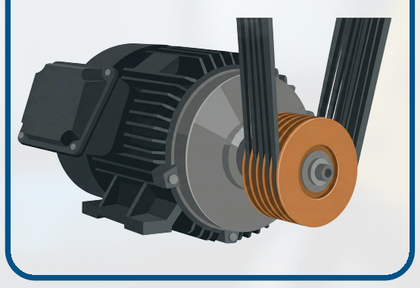


X Servo Motor

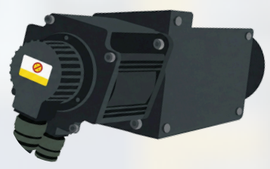




Spindle Motor



Z Servo Motor



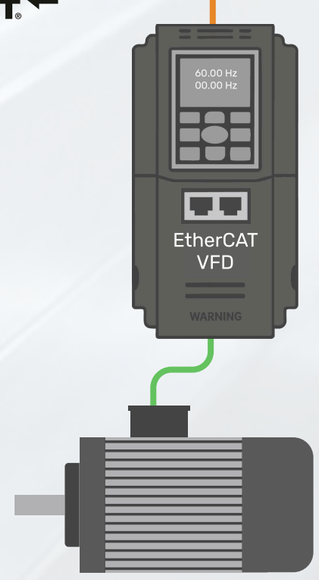
Control Panel



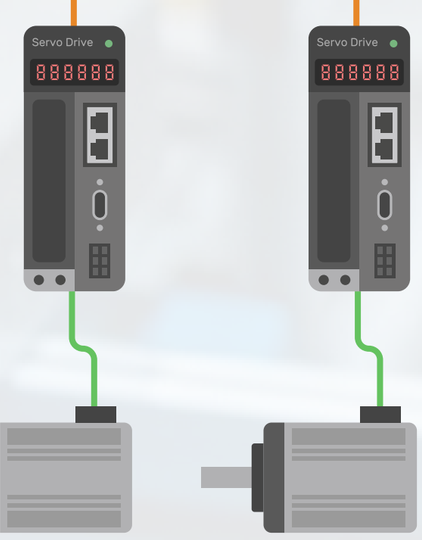


EtherCAT

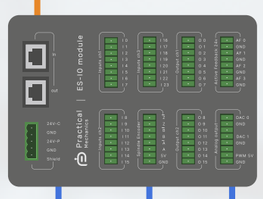
Spindle VFD



Servo / Stepper Drives



IO Module (Optional)





Joystick



Hand Wheels



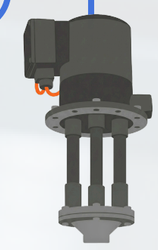
Buttons



Status Light



Oil Pump



Emulsion Pump