

Protona

Conversational NC Programming Software



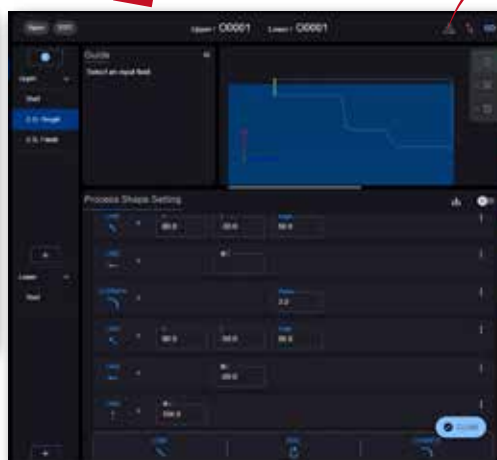
Designed for **Multitasking Machines**,
by a **Multitasking Machine Manufacturer**,
for **Multitasking Machine Users**

Protona – Become a “Pro” in NC Programming with Ease, Reliable, and Fast.

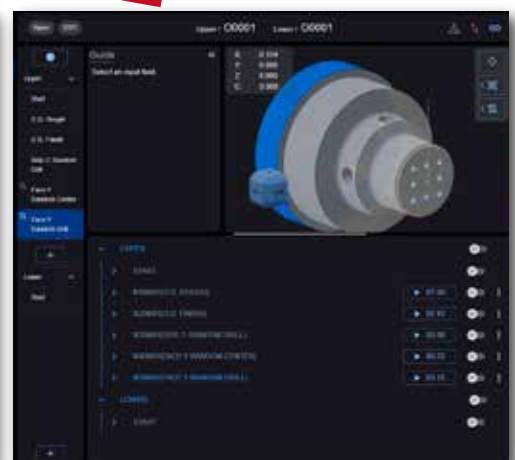
Compared to conventional conversational NC programming tools, Protona offers a simpler and more intuitive user experience.
Even beginners can create professional-quality NC programs while keeping learning time to a minimum.



Select the
machining process



Enter material dimensions and
coordinates



NC program is complete!



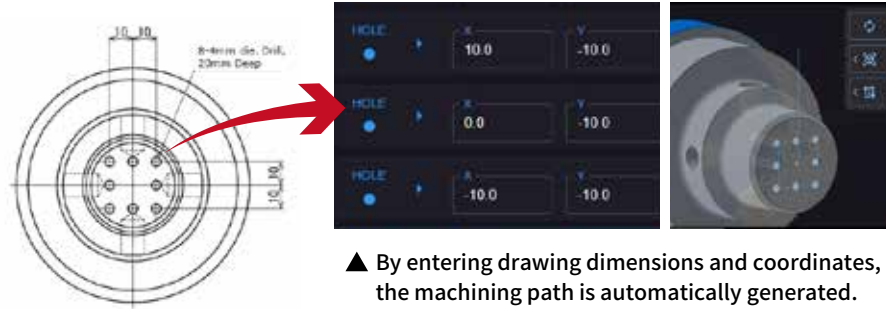
Nakamura-Tome



Protona 10 points

1 Intuitive Programming

Simply input the coordinates from your drawing to automatically generate an NC program. There's no need to memorize a wide range of G-codes or M-codes, reducing the learning curve for beginners.



2 Guided Interface

Create NC programs step by step through a guided workflow. Clear visuals and text explanations make it easy to follow—even for users with no prior experience.



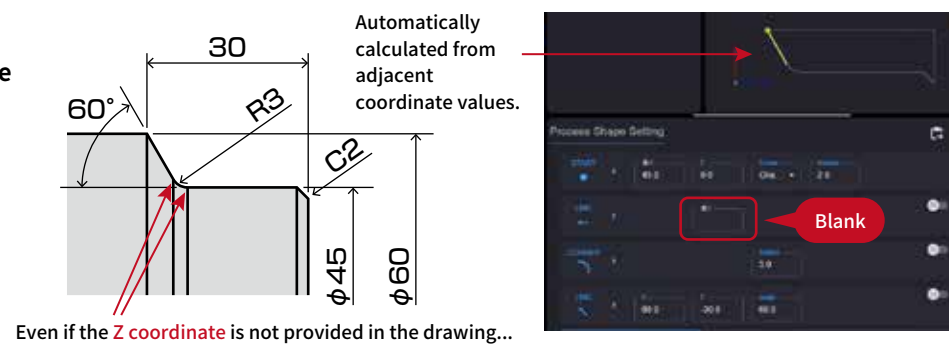
3 Automatic Cutting Conditions

Enter material type, diameter, and tool information to automatically set cutting conditions and approach positions. These values can be modified directly on-screen.



4 Automatic Coordinate Calculation

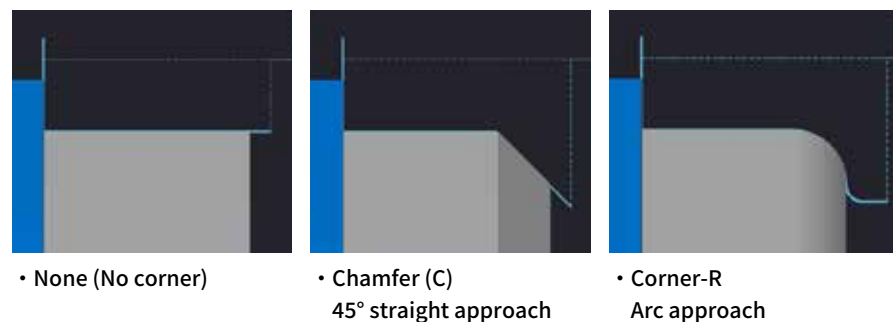
Missing coordinates are automatically calculated based on adjacent values. This eliminates manual calculation and improves accuracy.



5 Automatic Approach Generation

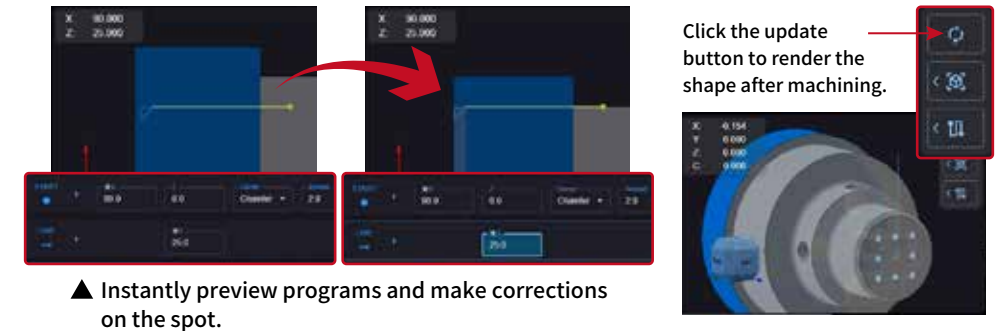
Finishing operations automatically generate an optimized approach path based on the shape.

Generate NC programs with professional quality!



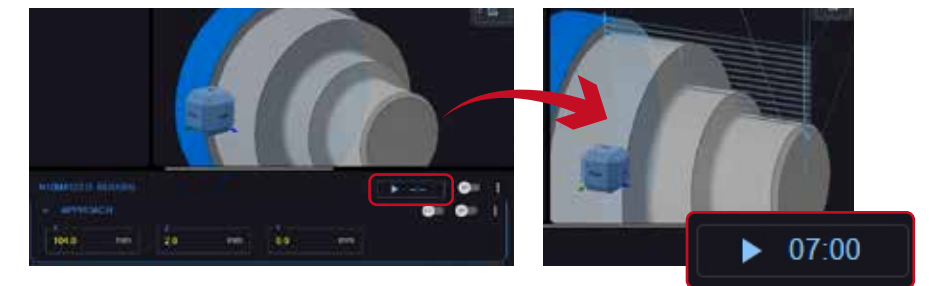
6 Real-Time Geometry and Toolpath Display

Immediately visualize the part shape and toolpath.



7 Estimated Machining Time

Click the ▶ (Play) button to run a simulation and view the estimated machining time ideal for layout planning and quoting.



8 Easy Process Editing

Each machining process can be easily rearranged via drag and drop. The machining time for each process is displayed, allowing you to fine-tune the time balance and create programs just the way you want.

G-codes and M-codes are automatically updated when process are moved between channels.



A feature unique to multitasking machines!

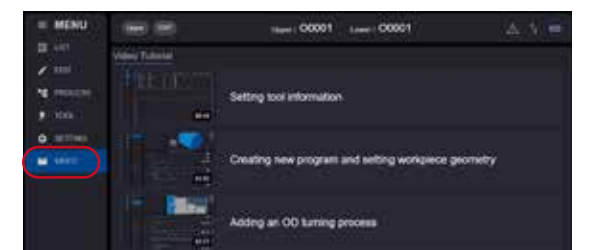
9 No NC Code Conversion Required

Check the program contents directly on-screen without converting to NC code.



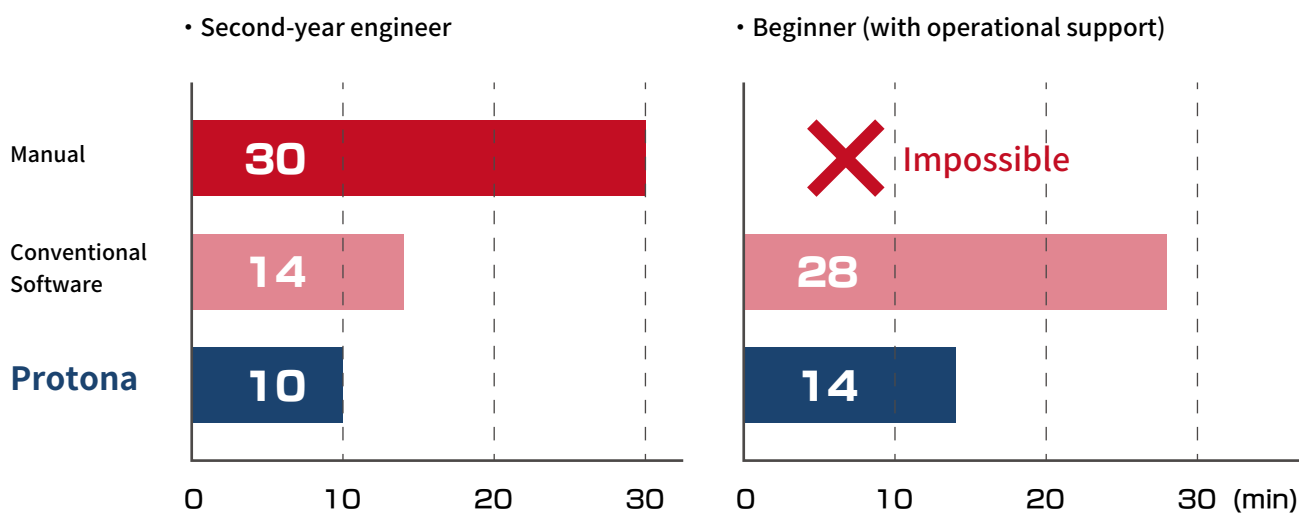
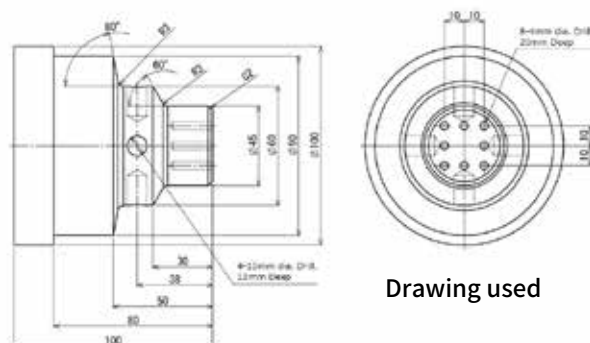
10 Built-In Tutorials

Access tutorial videos anytime from the “Videos” menu to learn how to use Protona effectively.



Protona Effectiveness

Two engineers—a second-year employee and a beginner (with operational support)—were asked to create NC programs using three methods: manual input, conventional software, and Protona. Both were able to complete their programs faster using Protona.



*2 As of June 2025, Protona comes standard on the NT-Flex.
Support for additional models will be rolled out gradually.

*3 Installing the software on existing machines requires a paid upgrade.



<https://www.nakamura-tome.com>



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