



# SOLIDWORKS MACHINIST

SOLIDWORKS® Machinist is a 2.5-axis milling and turning solution powered by CAMWorks®. SOLIDWORKS Machinist offers 3+2 machining as well as full support for configurations, parts and assembly machining workflows. The foundation of SOLIDWORKS Machinist is rules-based machining, where you can teach the system what standard machining strategies are vital to them. These rules can then be automatically applied based on the material type and geometry of the feature. Leveraging the SOLIDWORKS part and assembly interface allows you to quickly learn SOLIDWORKS Machinist and take advantage of rules-based machining with minimal effort.

SOLIDWORKS Machinist delivers an easy-to-use and fully functional programming experience. The SOLIDWORKS Machinist bundles provide the user with two versions based on their programming workflow. The SOLIDWORKS Machinist bundles focus on allowing programmers to import and create 3D data used in the manufacturing process. SOLIDWORKS Machinist is available as individual seats. These seats are not compatible with a network or a SOLIDWORKS Network License (SNL).

## OVERVIEW

SOLIDWORKS Machinist uses rules-based machining to enhance the programming process in the same way rules-based design helped to speed up the drawing and design process.

With SOLIDWORKS Machinist, you will be able to enhance your manufacturing process by capturing company standards, speed up quoting and test manufacturability of a design earlier in the process. By using rules-based machining, your business can automatically apply standard strategies to determine how long it will take to make a part and if it could easily be machined. This automation will allow you to make decisions faster and with more confidence.

SOLIDWORKS Machinist combines design and manufacturing in one application with an easy-to-use interface. The result is an intuitive rules-based system that can be leveraged to save time and money while capturing company standards. Assigning machining strategies based on design tolerances, reduces errors and improve quality throughout the machining process.

## BENEFITS

### Simplifies collaboration

A single design and programming environment allows a smoother transition to CAM. Tasks that used to have to wait until engineering was complete can now occur in parallel with the design. The ability to save configurations independently within SOLIDWORKS Machinist allows users the freedom to create several part operations between different machines.

### Easier implementation of manufacturing checks

Rules-Based Machining automatically makes decisions based on geometry and standards, enabling companies to determine manufacturability and perform tasks sooner. Automatic Feature Recognition enables users to find problems earlier.

### Reduces time to capture tolerances in 3D models

Tolerance-Based Machining automatically reads tolerances defined by SOLIDWORKS MBD to provide the best machining strategy and updates machining strategies as designs, materials and tolerances change.



## Streamlines training

Rules-based machining enables new users to adapt to a company's machining process readily and get up to speed on company standards and processes without having to go through a lengthy training process. Rules-Based Machining saves the company time and money in onboarding expenses.

## Manage data more easily

CAM information is stored in the part or assembly file. The only external file is the G-code posted file that is specific to a CNC machine.

## CAPABILITIES

SOLIDWORKS Machinist Standard includes SOLIDWORKS CAM Standard functionality with Part-only modeling capabilities.

- High-Speed Machining creates toolpaths that lead to shorter cycle times while extending tool life and lowering machine wear.
- The NC Editor makes verification of G-code simple and quick. Users can also backplot the G-code for review and send the file directly to the CNC control using the DNC capabilities.
- Communication between programming and setup is easy with toolpaths output inside of eDrawings®. Operators can view the 3D model with the associated toolpaths to understand the machining order.
- Toolpath Simulation within SOLIDWORKS Machinist allows you to verify the correct machining strategies and setup information on each part produced.

SOLIDWORKS Machinist Professional builds on Machinist Standard capabilities by providing SOLIDWORKS CAM Professional and Assembly functionality in the CAD environment.

- Once the fixtures are designed, SOLIDWORKS Machinist Professional can automatically adjust toolpaths to avoid collisions with the designed components.
- SOLIDWORKS Machinist Professional offers the addition features of machining and modeling, turning and 3+2, HSM and configuration programming to drive four and five-axis machines. These additions allow users to define fixtures as well as leverage assembly configurations to program similar parts quickly.

SOLIDWORKS Machinist Professional includes SOLIDWORKS Part and Assembly modeling for import and design capability.

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