

# AUTODESK® POWERMILL® 2018

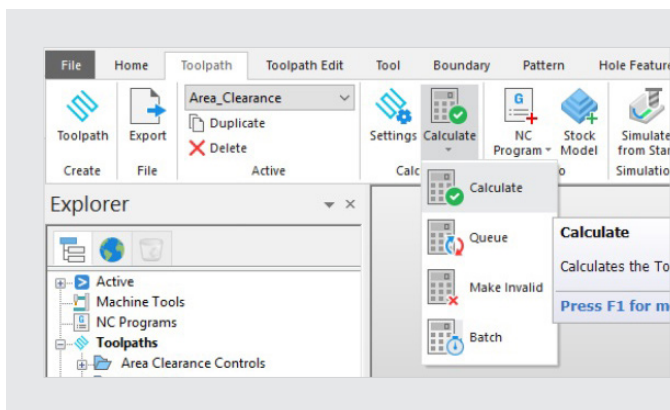
The expert high-speed and multi-axis solution

Visit [www.powermill.com](http://www.powermill.com) to find out more.

## What's new

### PowerMill 2018 offers a new look and feel, designed to make CAM programming even easier for new and existing users.

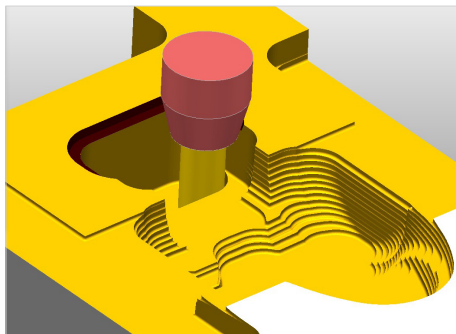
Introducing the PowerMill ribbon interface, designed to shorten the learning curve for new users whilst enabling experienced programmers to discover commands relevant to the task in hand. PowerMill 2018 offers improved 2D and mill-turn programming plus enhanced tools for stock simulation and 5-axis control.



#### NEW ribbon interface

PowerMill 2018 includes a dynamic new ribbon interface that organizes commands into logical groups and reduces screen clutter. The ribbon adapts to display commands that users need at any given time, allowing previously hidden PowerMill features to be discovered and used.

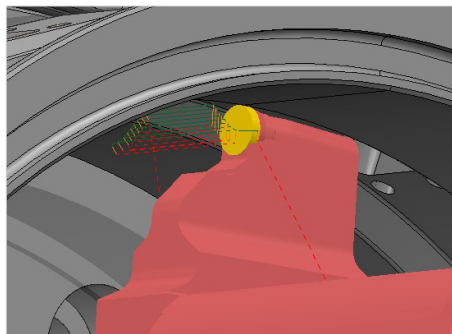
Additional guidance is provided by enriched, dynamic tool tips. Customize the ribbon to display commands used on a regular basis.



#### Dynamic stock simulation

PowerMill stock simulation now offers improved image quality combined with the ability to pan, zoom and rotate the 3D view. Display the workpiece, tool assembly, stock and machine in a single view. Access multiple shading modes including "kinematic", "rainbow" and "shiny".

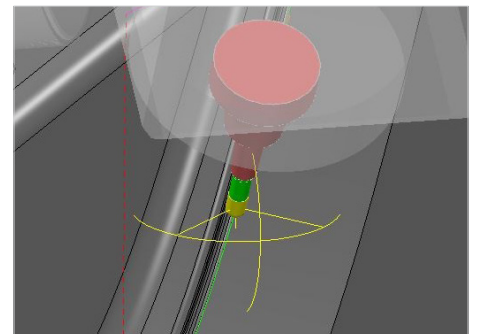
PowerMill 2018 now identifies and displays collisions and near misses involving the tool, machine, and stock helping programmers to validate the quality of their NC programs faster.



#### Enhanced mill-turn programming

Turning toolpaths can now be edited after processing. Limit, divide, reverse and reorder programs without the need for complete recalculation. Take control over non-cutting moves. Edit toolpath start and end points, and apply turning friendly leads and links.

Identify collisions and near misses involving the turning tool assembly, workpiece, machine and stock. Apply turning toolpaths to 3D stock models to more efficiently drive downstream milling operations on 5-axis mill-turn machines.

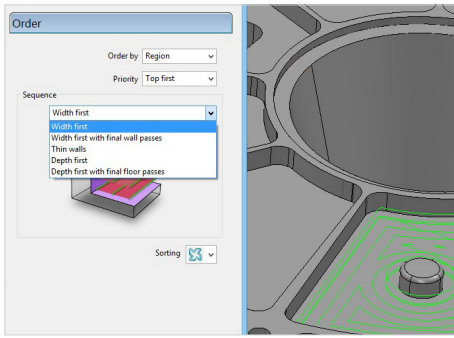


#### Dynamic Machine Control in a Region

PowerMill 2018 provides enhanced Dynamic Machine Control. Make multiple, localized edits to the 5-axis motion of toolpaths. Use a virtual CNC machine tool to dynamically update regions to use alternative rotary axis configurations.

Help achieve smooth machine motion with intelligent machine interpolation between neighboring toolpath edits.





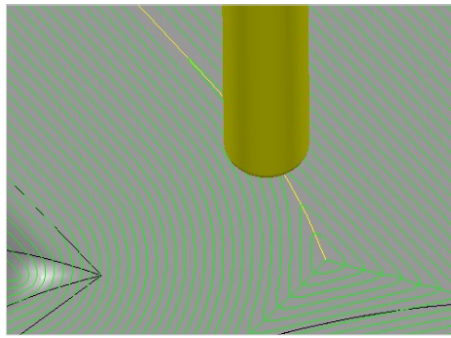
## NEW 2D strategies

PowerMill offers two new 2D machining strategies:

Use “Top Fillet Finishing” to machine convex fillets on 2D features. Combine with ball nose or specialized “rounding” tools to cut fillets more efficiently.

Use “Feature Finishing” to machine the sidewalls and bottoms of 2D features with a single toolpath. Advanced ordering options provide additional choice when machining deep pockets or thin walled components.

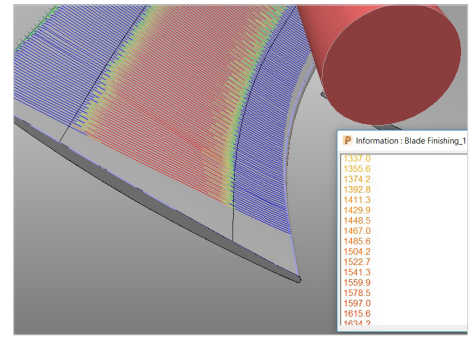
2D area clearance toolpaths now detect and avoid collisions involving the tool assembly and stock.



## 3D offset center-line

Use the optional “center-line” check box to include additional toolpath segments in the corners of 3D offset finishing toolpaths. Remove extra material for a more consistent surface finish and reduced need for manual polishing.

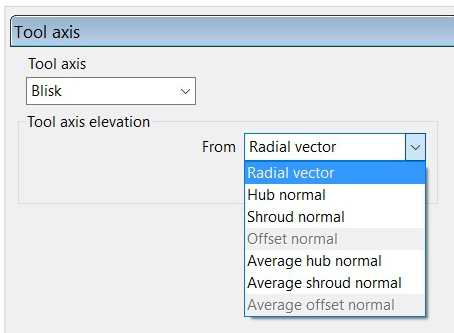
Access the center-line option in “3D Offset Finishing”, “Steep and Shallow” and “Optimized Constant Z” toolpath types.



## Surface Based Feed Rate Edits

Edit the feed rate for localized regions of a toolpath that contact specific groups of surfaces. Use to help control 5-axis motion when rotary axes experience large amounts of movement in a short space of time.

Help avoid sudden and jerky machine motion with user control over the transition between feed rates.



## Blisk Toolaxis Controls

PowerMill 2018 allows programmers to combine specialized blisk toolaxis modes such as “hub normal”, “shroud normal”, and “radial vector” with a broader range of toolpath types.

Use with strategies such as “Surface Finishing” for even more choice when programming blades, blisks, impellers and other revolved parts.

**“We recently purchased 5-axis machinery. PowerMill helps us do the impossible. It’s the bible in the industry now.”**

– Andrew Gruening, Programmer | Superior Tool & Mold

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