MecSoft Corporation

Your CAM Partner

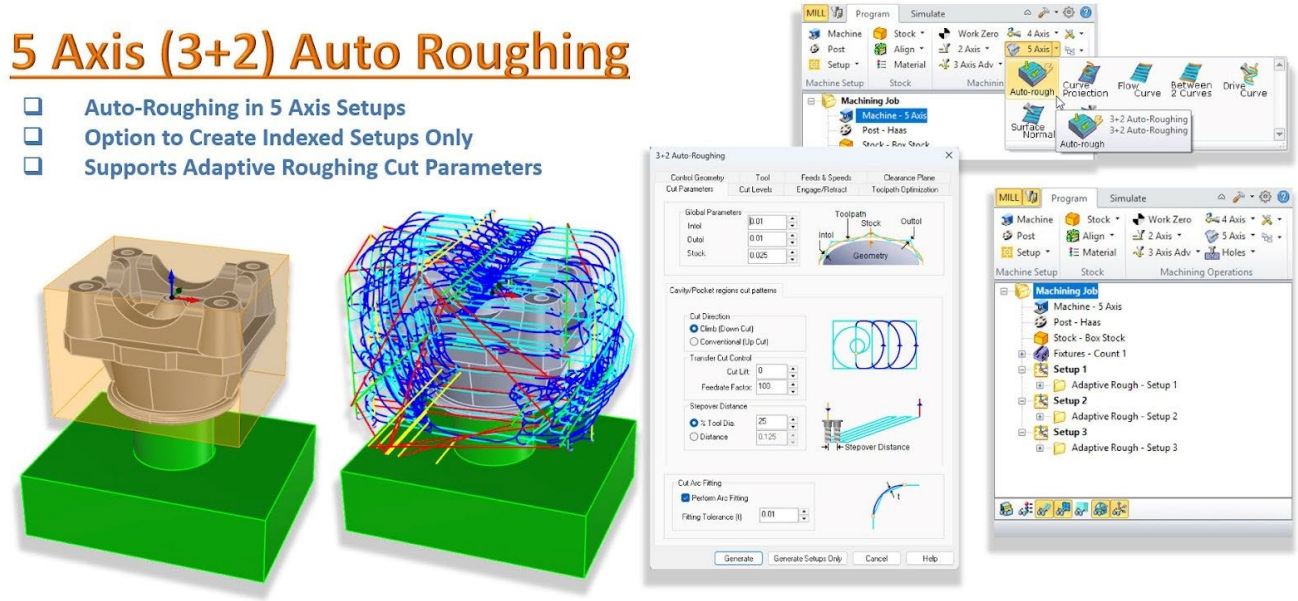
What's New in MecSoft CAM Products v2026

Mar, 2026

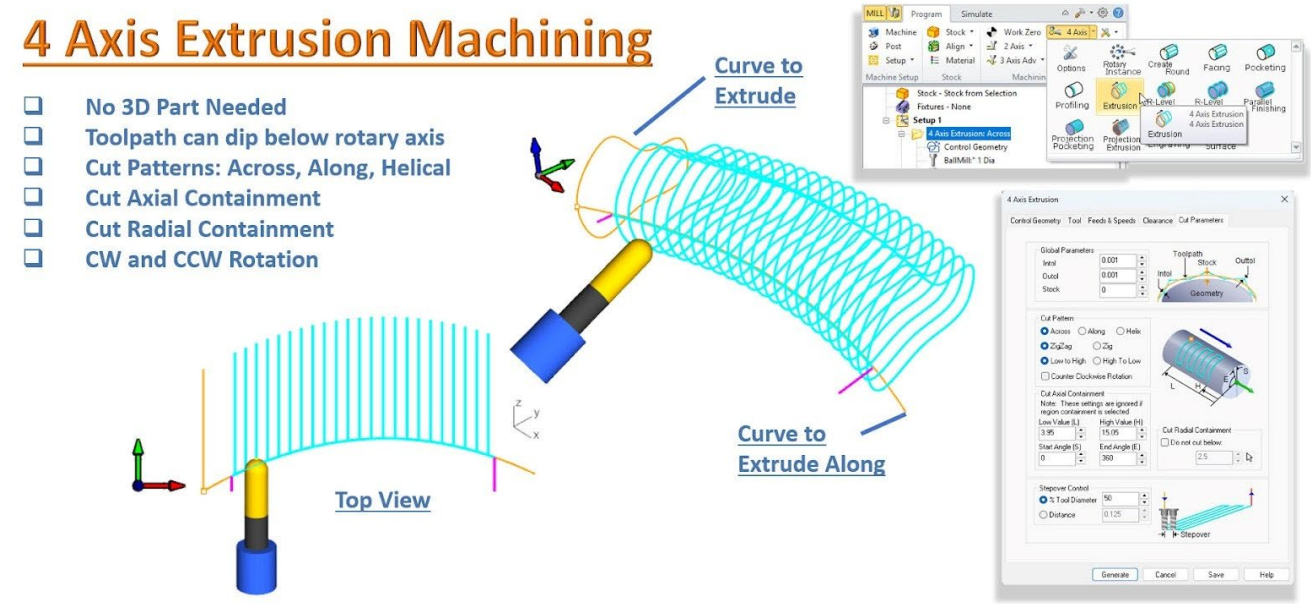
This document describes new features and enhancements introduced in MecSoft CAM 2026.

New Features, Enhancements, and Fixes

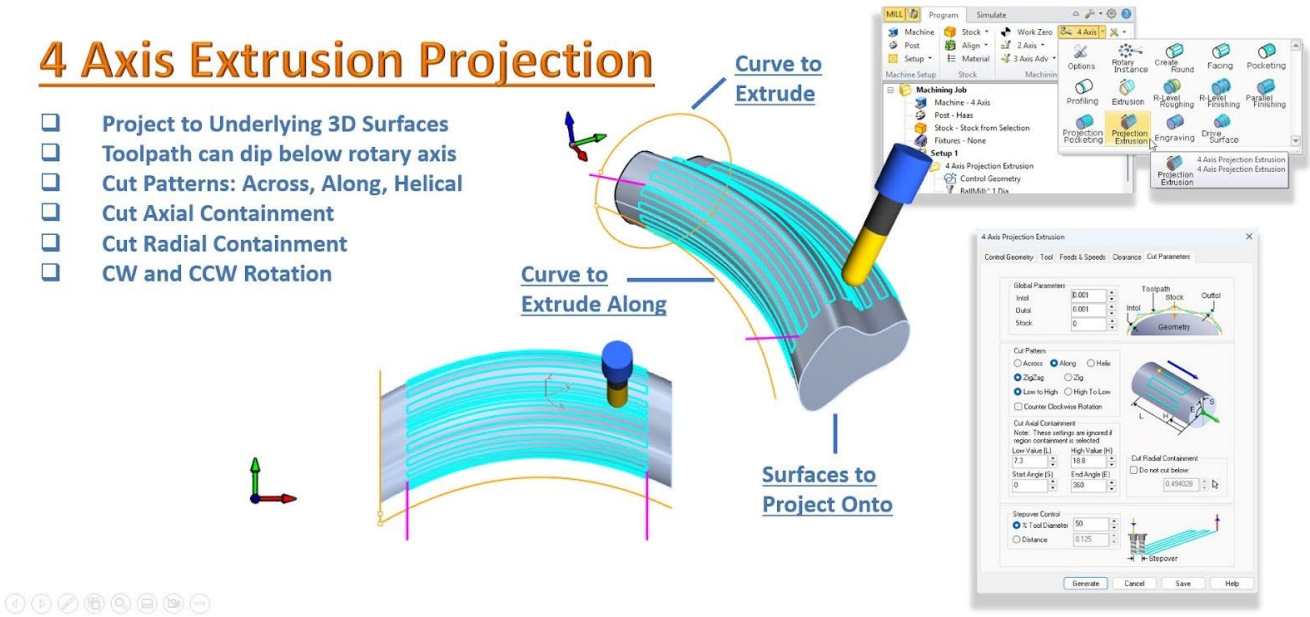
1. A new **Automatic 3+2 Roughing** Setups for more efficient multi-axis roughing workflows.



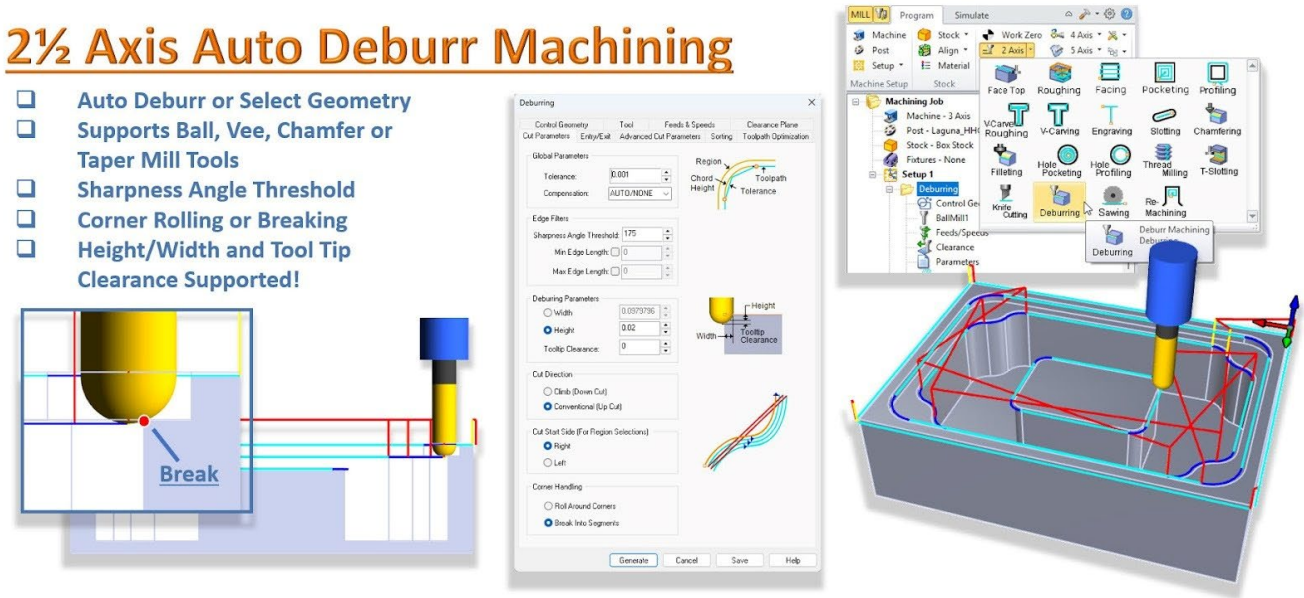
2. A new **4-Axis Extrusion Machining** Operation was implemented.



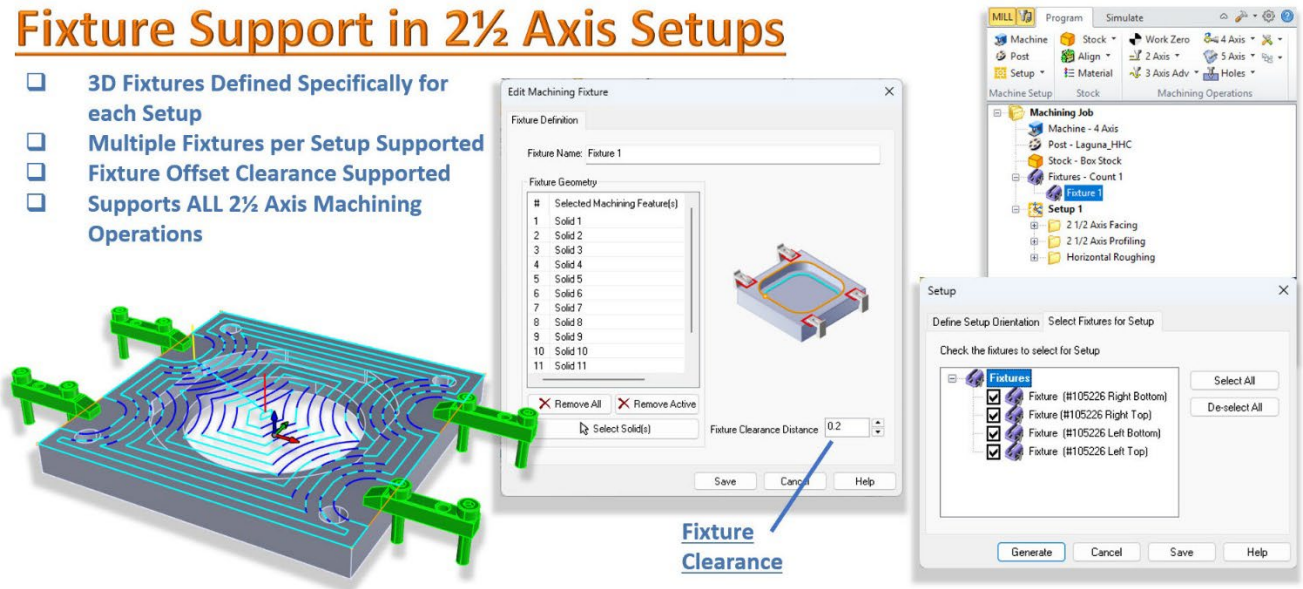
3. A new **4-Axis Extrusion Projection Machining** Operation implemented.



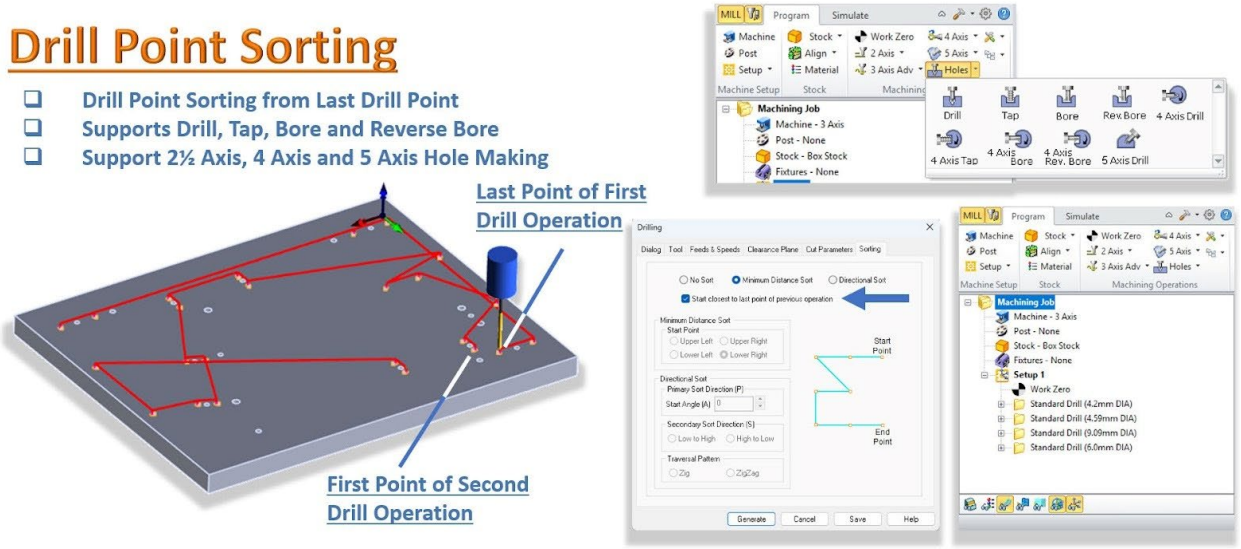
4. New **automatic deburring/chamfering of edges** for 2-1/2 axis machining added.



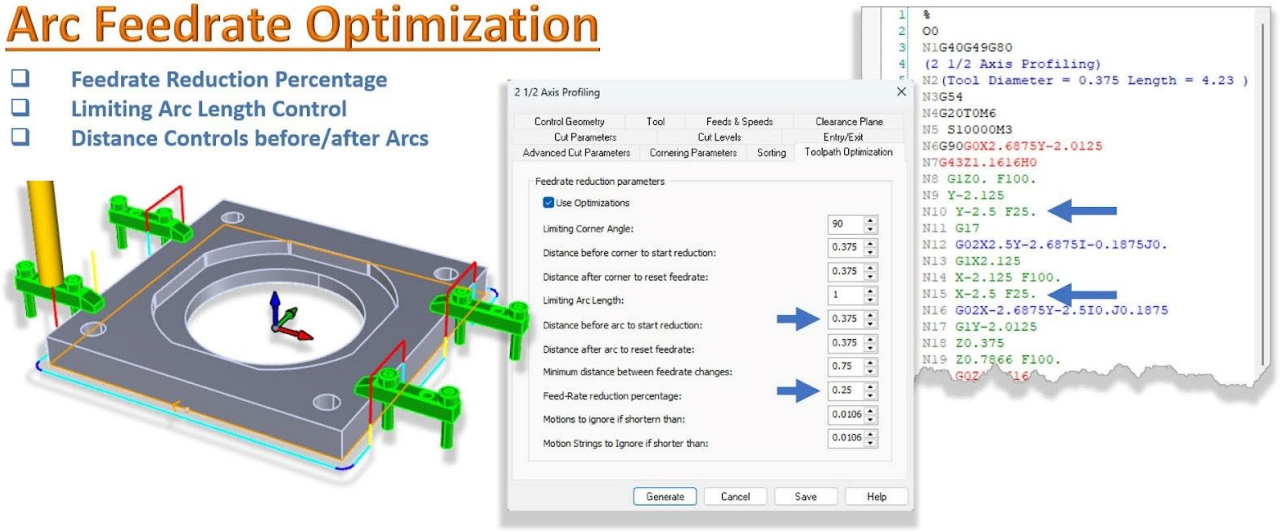
5. Support for **3D Fixtures** with 2-axis machining methods was implemented.



6. Drill point sorting was enhanced to start sorting from last point of pervious operation was implemented.



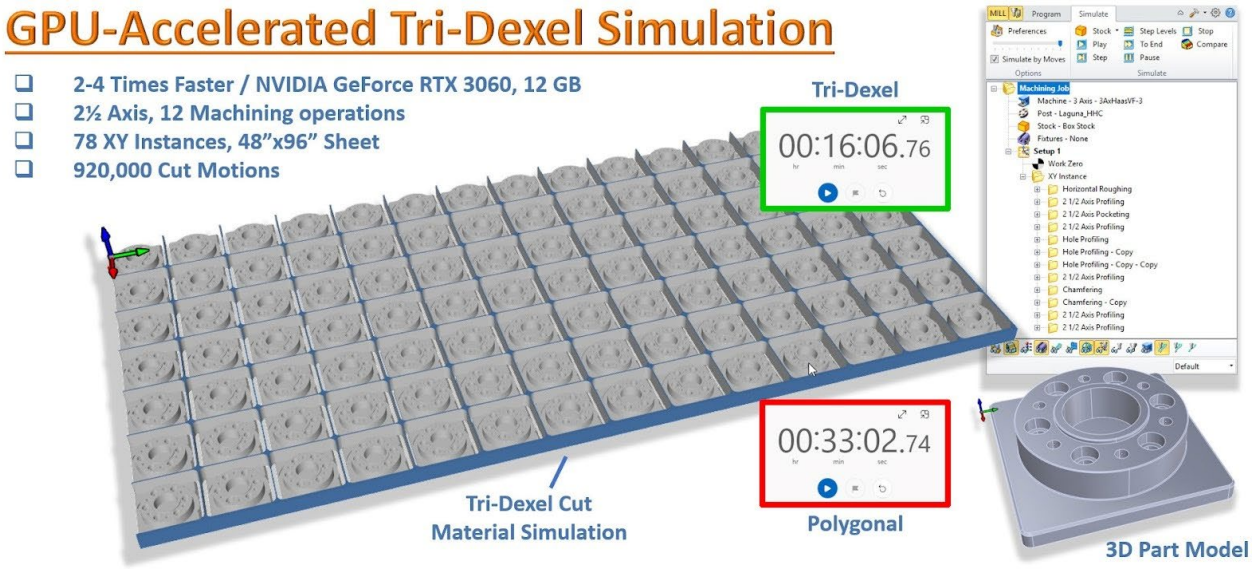
7. A new **Arc Feedrate Optimization** enhancement was implemented.



8. **Trapezoidal bridges** for 2-1/2 axis profiling were implemented.
9. **Thread milling enhancements**, were implemented including:
    a. Retract-on-center option.
    b. Safer retract behavior for helical motions to help prevent tool or hole damage.
10. New **5-Axis enhancements** were implemented including:
    c. Option to specify a **fixed tool axis** for 5-axis operations.
    d. **5-Axis Continuous** enhancements.

Simulation and visualization

1. A new GPU-accelerated TriDexel cut simulation implemented.



2. Machine tool simulation fixes from ticket were applied.
3. API simulation enhancement: ability to simulate machining operations to the end (FN-T59).

Post-processor enhancements and fixes

1. Output Setup angles via post variables (FN-T49).
2. Modal output support for machine angles (FN-T45).
3. Post variable added to detect Work Offset on/off (FN-1452).
4. CYCLE_CSINK_DEPTH always 0.0 fixed (FN-1454).
5. Leading zero formatting issue fixed when “Show Leading Zeros” is disabled (FN-1478).

Other Notable Changes

1. Drill Points start and end display in drill operations that have multiple points
2. Support for Dual Head Machining using Machine Control operations
3. Overlap of angle limits in 5 Axis Machining is now possible
4. Ability to handle un-winds using custom code in the post-processor for 5 Axis machining

RhinoCAM API enhancements

1. WorkZero can specify which Setup it applies to.
2. Copy Setups and MOps via API.
3. Import/Export individual Setups/MOps to/from Knowledge Base files (FN-T55).
4. SetActiveModule docking pane visibility fix (FN-1445).
5. Regenerate single MOp via API consistency fix (FN-1448).
6. Support for new machining operations in the API (FN-T44).
7. Knowledge Base preview fix when saved/exported via API (FN-T54).
8. ToolManager.ClearTools() API side-effects on simulation fixed.

Performance, stability, and code quality

1. Programmable post-processing performance improvements by 2x.
2. Memory/performance/code optimization work.
3. Internal optimization updates.

Notable toolpath and CAM fixes (selected)

1. Horizontal Finishing Clear Flats: clear-flats behavior corrected (FN-1405).
2. Horizontal Roughing: skip-level issue fixed; plus fixes for cut levels passing through part geometry (FN-1327).
3. 4-Axis: Z-axis incorrectly treated as rotational axis fixed (FN-1321); 4-axis roughing “levels” containment behavior fixed (FN-1451).
4. Pocketing from Rhino curve geometry fixed (FN-1460).
5. Engraving large curve selections generation hang fixed (FN-1430).
6. 5-Axis drilling collision with surfaces fixed (FN-1462).
7. Toolpath cutting into check geometry / shaft clearance ineffective fixed (FN-1467).
8. UI issue: Tool Axis Control Rotation Angle in 5-axis operations fixed (FN-1468).
9. Spiral/helix markers missing and posted as linear fixed (FN-1477).

UI and usability

1. “Run Automatic check for updates at startup” preference state display fixed.
2. “Close X” icons missing in browsers fixed.

Third-party library updates

1. ModuleWorks libraries updated.
2. MachineWorks libraries updated to 8.7 p04.
3. Windowing libraries updated

Maintenance Improvements and Fixes

Toolpath generation, gouge avoidance, and machining behavior

1. Entry/exit motion and collision detection fixes (including pocketing entry/exit collision detection).
2. Pocketing regression fixes (incorrect toolpath scenarios).
3. Clearance-related fixes in ModuleWorks.
4. Facing regeneration/cut direction issues fixed (FN-1417; plus “missing toolpath” in regenerated Facing, FN-1432).
5. Cut direction reversal in high-speed cut pattern fixed (FN-1357).
6. Chamfer edge case fixed (tool diameter smaller than chamfer width) (FN-1420).
7. 2-axis roughing gouge when using flat areas as control geometry fixed (FN-1221).
8. 2-axis re-machining entry motion depth/ramp behavior fixed (FN-1207).
9. V-carving regeneration corrected to output cutting arcs (FN-1401).
10. Hole profiling ramp entry validity fixed (FN-1419).
11. Profiling side detection fixed (FN-1403).
12. Clone region consistency and completeness fixed (FN-1352).
13. Shift-key region selection behavior corrected for Avoid Regions (FN-1392).
14. Added logging when engage/retract motion is rejected due to potential gouging.

Post-processing and programmable post improvements

1. Crash fix when posting into a file.
2. Programmable post variable retrieval consistency fixed (GetStr/GetFloat/GetIntVar vs block output).
3. Missing line number in DCycle Off output fixed.
4. Output Cut Start macro for optimized DCycles fixed.
5. Post output extension logic fixed when “Use Extension From file” is enabled.
6. Default setup angle issues in post corrected.

Simulation, display, and performance

1. Display slowdown issues resolved.
2. Performance issue and “shaking toolpath” corrected.
3. Tool projection logic performance enhancement.

4. Simulation accuracy slider logic fixed.
5. RhinoCAM API ToolManager.ClearTools() affecting simulation fixed.

UI/help/documentation

1. Multiple online link corrections.
2. License dialog “Request Activation Codes” link corrected (FN-1350).
3. Updated system language dropdown ordering.
4. Tool library “Save As” now shows the current library name (FN-1412).
5. Preference behavior fixes (e.g., machine limits being overwritten unexpectedly) (FN-1414).
6. “Do not show this dialog again” behavior fixed for overwriting tools.