



ModuleWorks

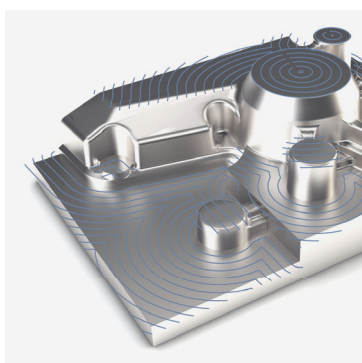
Get There Faster.

3-Axis Component

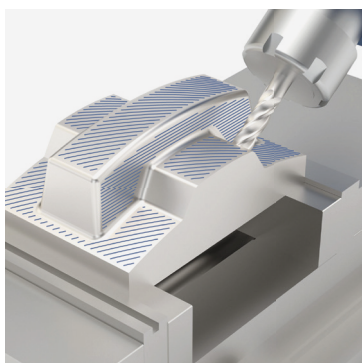
Industry-proven CAD/CAM software components with mesh-based cycles providing robust gouge free roughing, rest-roughing, finishing and rest-finishing toolpaths to machine a range of parts including prismatic and mold and die parts.



Core Model



Flatlands Cycle



Shallow Boundary

Key Benefits

- State-of-the-art technology
- Easy to use
- Reduced time to market
- Cost-effective implementation

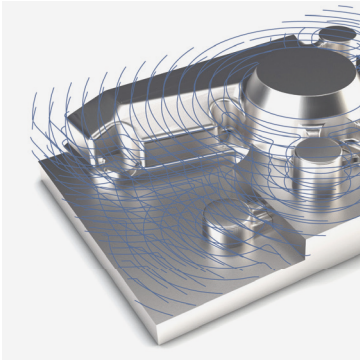
General Features

- Tool types – sphere, bull, endmill, taper, lollipop
- Tools – flute, shaft, arbor, holder
- Input – Solid/STL mesh, DXF-style boundary data
- Rough and rest-rough toolpaths – offset/parallel/adaptive
- Finish and rest-finish toolpaths – parallel/zlevel/constant cusp/flatlands/pencil/spiral/radial/projection
- Boundary support – user-defined, steep/shallow, silhouette, rest finish

Machining Highlights

- Manual and automated 3+2 axis roughing
- Holder collision checking with part and in-process stock
- Undercut finishing support
- 3- to 5-axis toolpath conversion
- Point distribution and arc fitting
- Lead and link control flexibility

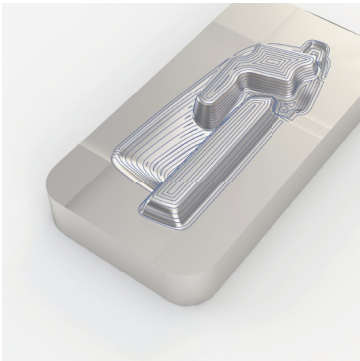
Fact Sheet: 3-Axis Component



Core Roughing Cycle

Roughing

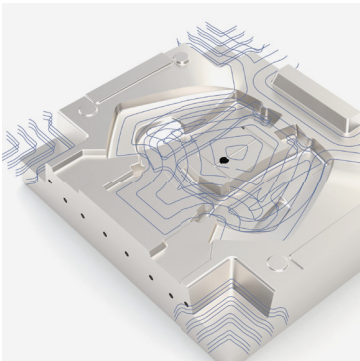
- Roughing types: offset/parallel/adaptive
- Rest roughing based on tool and stock
- Automatic collision avoidance
- Support for 3D stock model to minimize air cutting and optimize the feedrate
- Various ramp options and pre-drill support for entry moves
- Automated undercut roughing



Cycle Constant Cusp

Finishing

- Parallel cuts
- Zlevel
- Constant cusp
- Project curves - spiral/radial/user-defined/offset
- Flatlands
- Pencil
- Rest finish based on tool and stock
- Undercut finish with ball and tipped disc tool
- 3- to 5-axis conversion (3-axis toolpaths may be provided by host system or ModuleWorks' 3-axis machining component)



Offset Roughing

Advanced Architecture

- Toolpath caching mechanism for faster re-calculation
- Parallelization - multicore and multithreading support
- X64 and X86 bit support

For information on other CAD/CAM components, including simulation and 5-axis toolpaths, visit:
www.moduleworks.com



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