

Economical 2½ and 3 axis NC Programming.

KeyMachinist inside KeyCreator - A Smooth Workflow from Modeling to Machining. KeyMachinist is the easiest to use and most cost effective milling solution ideal for mold, die & tooling, wood working, rapid prototyping and general machining.

KeyMachinist features include:

- Fast toolpath generation.
- Flexible cutting strategies.
- Supports large surface, solid, or hybrid files.
- Import Native CAD models or create geometry on the fly.
- Tools to repair geometry, covert splines to arcs and Lines.
- Create or modify surfaces, wireframes, and support for detailing.
- Drilling, pocketing, profiling, surface roughing and finishing cycles.
- Toolpaths easily edited and managed with the Toolpath Organizer.
- Toolpaths regenerate when geometry, tools or parameters change.
- 4th axis indexing or continuous motion replacing x or y axis.
- Graphical toolpath NC code verification.
- Configurable post processors.

KEYMACHINIST 2 Capabilities

Drilling

A complete solution with a full spectrum of drilling cycles. Spot, peck, boring, tapping, canned cycles and user defined.

Profile - 2D

Comprehensive 2D Contouring including various approach & depart strategies, finishing and roughing with multiple steps in XY and Z, choice of outputting either.

Pocketing

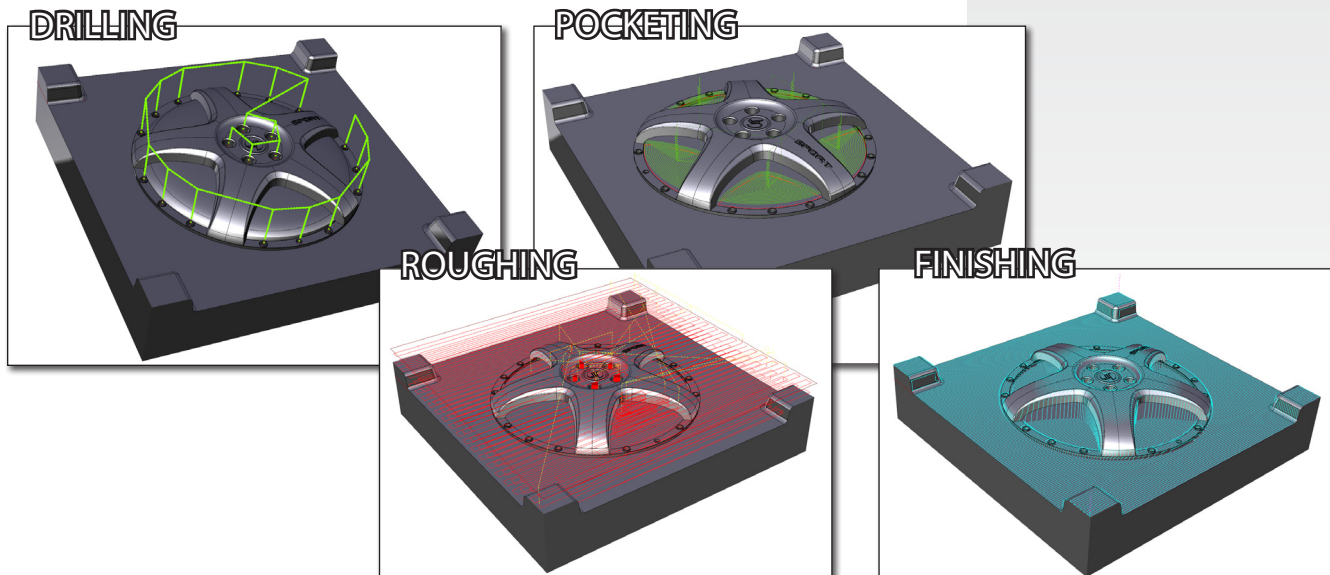
Generate multiple pockets in a single toolpath, with the option of defining top and depth for each contour or island.

KEYMACHINIST 2

- Drilling
- Profile Milling
- Pocketing
- Toolpath Utilities

KEYMACHINIST 3

- Includes KeyMachinist Mill 2
- Roughing
- Finishing
- Point Mill
- Pencil - Wedging
- Convert 2D/3D wireframe geometry to Toolpaths



KEYMACHINIST 3 Capabilities

Roughing:

Z-Level Contour

Create successive constant Z contour's within a selected boundary. The tool spirals or ramps down, along the contour of the next level to be machined ensuring complete material removal and smooth motions at sharp corners.

Zig-Zag

Create continuous, constant Z parallel toolpaths. The tool will rough on a Z plane until it encounters the model geometry making a perpendicular move then reverse direction. Once the Z level is completed the next level will be machined.

Uni-Directional

Create toolpaths in one direction. The tool will rough on a Z plane until it encounters the model geometry climbing the model to the previous Z level of machining. Once the Z level is completed the next level will be machined.

Follow Surface

The tool will rough on a Z plane until it encounters the model geometry climbing the model to the previous Z level of machining. It then rapids to the clearance plane, moves to the next position, machining down to the current machining plane.

Rotary Table Operation

Used for either 4th axis indexing or as a full continuous motion axis replacing the X or Y axis.

Included with KeyMachinist Mill 2 & 3

Toolpath Verification

Verify toolpaths as they are cut from a solid block of material.

Finishing:

Planar

The tool path is generated in parallel vertical planes following the contour of the geometry.

Radial

Radial finishing creates toolpaths that radiate outward from a user defined point. Ideal for round parts.

Plateau

The toolpath follows the contour of the part staying at a constant Z level with variable step-down based on wall steepness.

UV Flow

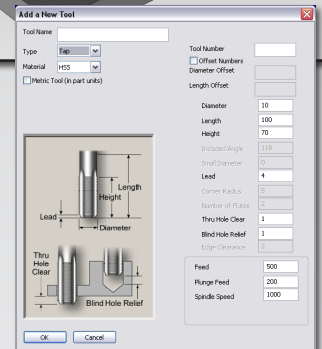
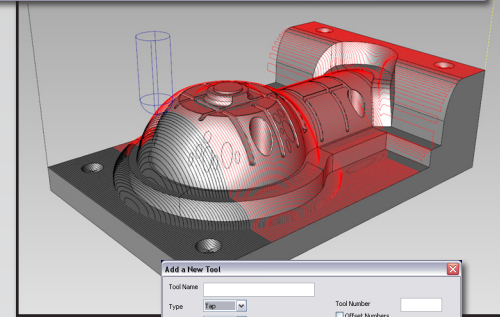
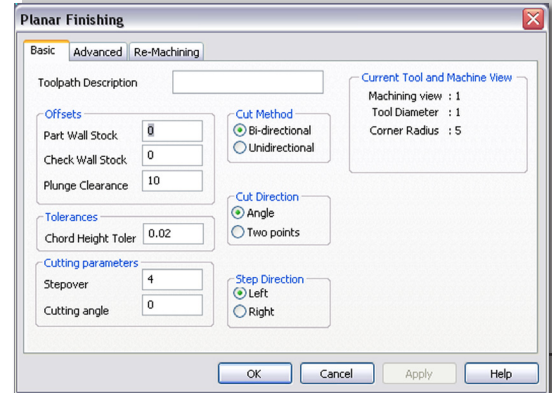
Flow line machining cuts single or multiple surfaces using their natural shape to define the cutter path, delivering a smoother finish.

Pencil Tracing

Pencil Tracing removes material from hard to reach areas along the intersection of surfaces.

Geometry to Toolpath

Create a toolpath from 3D wireframe geometry.



Postprocessor

Configurable postprocessor provides a powerful and flexible utility for creating new custom post-processors, or modifying existing ones. Many library posts currently available and provided free of charge.