

## PORT EXPERT

### Specialized Multiaxis Programming for Port Work

Mastercam Port Expert creates accurate porting toolpaths on surface or solid data. It minimizes unnecessary motion at the machine, resulting in a highly efficient toolpath with superior finish quality. It can also be used for any tube-type work that is similar in design to a port. Port Expert uses a tapered lollipop tool, with collision checks for the entire tool (shank, arbor, and holder).

### Cutting Options

Multiple cutting options are available with Mastercam Port Expert. You can cut only the top; cut only the bottom; or cut the entire port, and specify how much stock to leave.

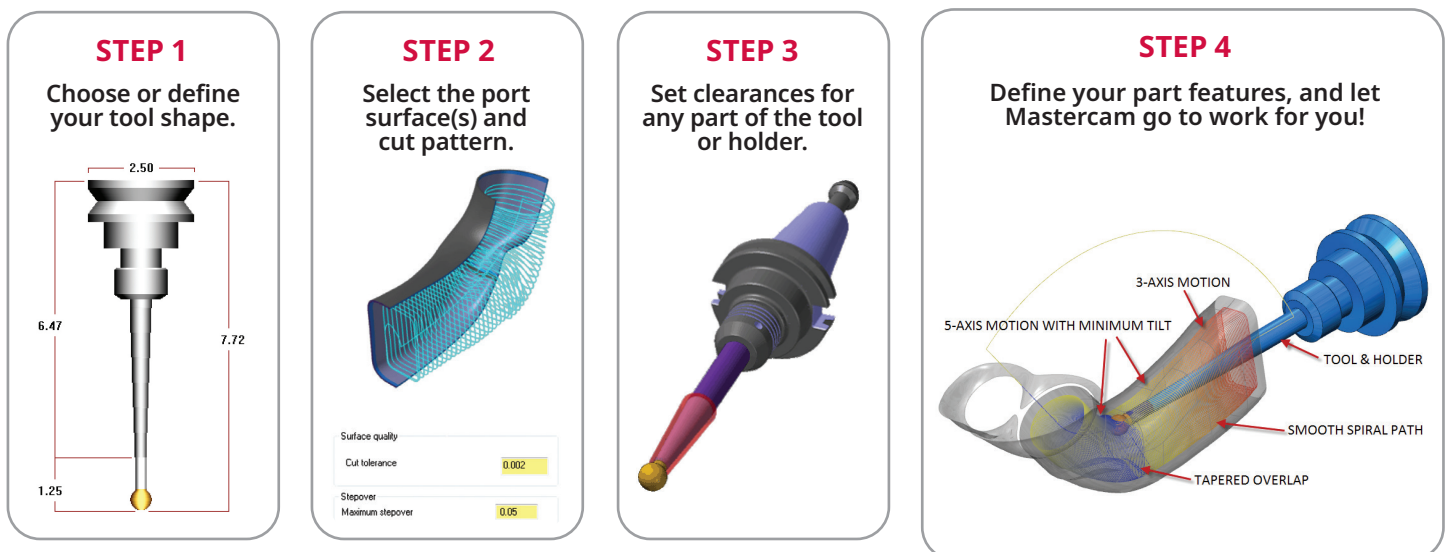
### Toolpaths

Port Expert toolpaths use 3-axis machining as far into the port as possible, and then convert automatically to 5-axis motion with minimum tilt. This leaves no fishtails or inefficient reverse moves, and smoothly transitions where the toolpaths meet at the middle of the port.

### Additional Features and Benefits

- Port Expert provides both roughing and finishing toolpaths to make ports from castings or billets.
- Geometry can be made of multiple surfaces that are stitched together.
- Automatically calculates optimal tilt angles, so there is no need to split the surface or create tool axis control splines.
- Mastercam Simulation proceeds step-by-step through the toolpath, even showing the motion used in transition at the middle of the port.
- Generates 5-axis code that can run any capable CNC machine.
- Simplifies the programming of complex port shapes.
- Greatly decreases programming time.

### The Port Expert Process



Note: Mastercam Blade Expert is a Mastercam product that must be purchased separately. It runs on Mastercam Mill 3D, Mastercam Router 3D, Mastercam for SOLIDWORKS® Mill 3D and Mastercam for SOLIDWORKS® Router 3D. Mastercam Multiaxis is not required for Mastercam Blade Expert.

Mastercam Port Expert comes with unparalleled support from the World's #1 CAD/CAM community.  
For more information, visit [Mastercam.com/PortExpert](https://www.mastercam.com/PortExpert).

To gain the benefits of Port Expert, contact your local  
Mastercam Reseller at [Mastercam.com/Resellers](https://www.mastercam.com/Resellers).

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*"Port Expert not only cuts my programming time way down, but it also reduces the machining motion and the wear and tear on my tools. I was able to put a toolpath on my first port in about 10 minutes. I'm quite impressed to say the least."*

Tom Hemphill, Owner, Hemphill Racing  
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