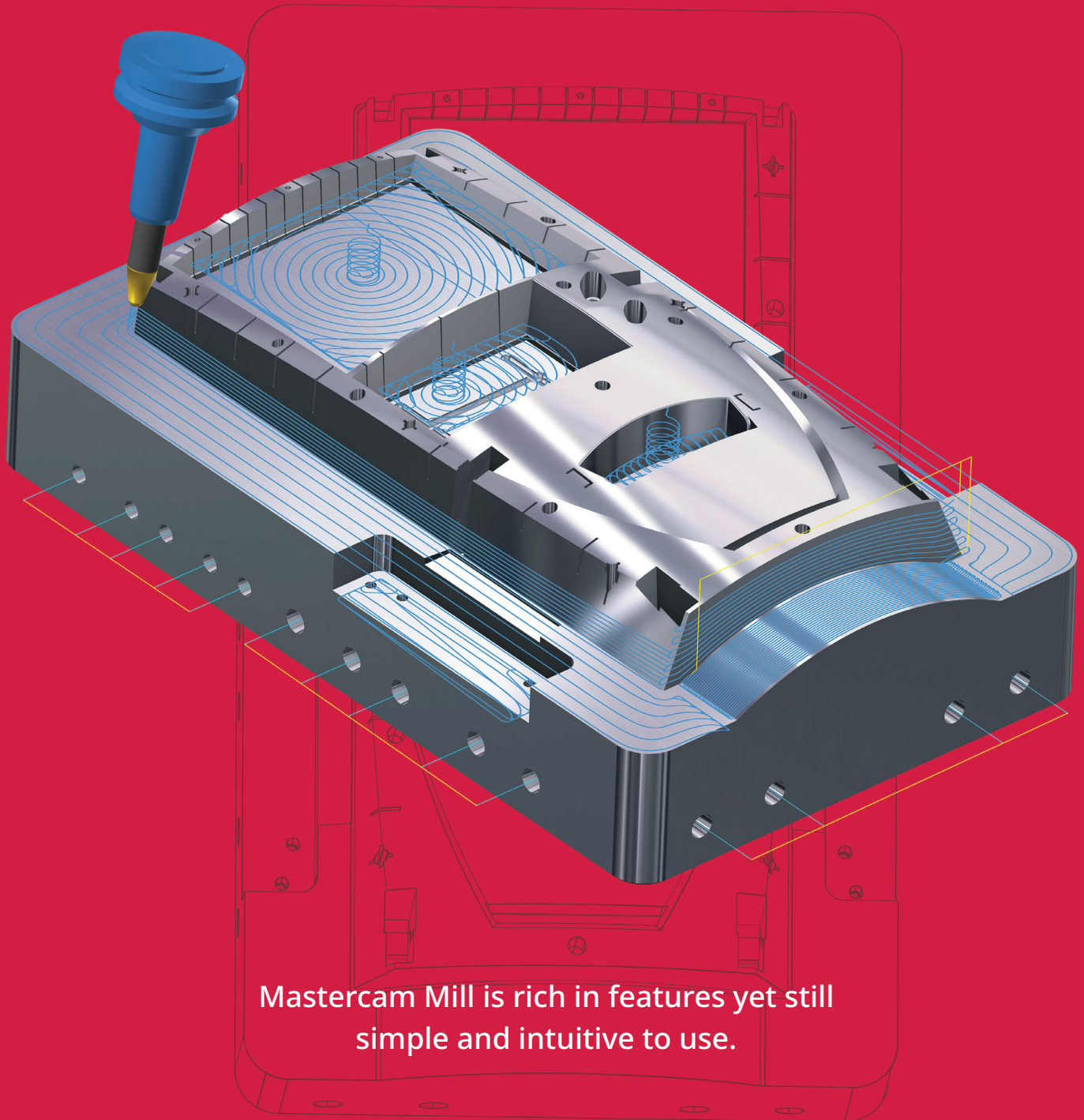




MILL



Mastercam Mill is rich in features yet still
simple and intuitive to use.

Mastercam 2020



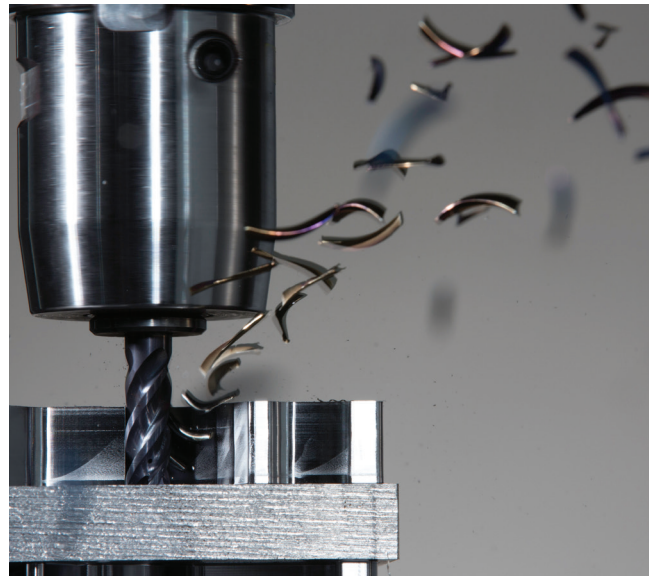
Mastercam Mill includes the option to run a corresponding **Mastercam for SOLIDWORKS®** environment. Standalone licenses of Mastercam for SOLIDWORKS® Mill and Mill 3D are also available for purchase.

INTELLIGENT MACHINING SAVES TIME AND MONEY

Mastercam's Dynamic Motion and Accelerated Finishing combine for powerful productivity gains.

For nearly a decade, Mastercam has included Dynamic Motion. Carving out massive amounts of material quickly while dramatically extending tool life, Dynamic Motion immediately saves money. Combined with vendor-specific tool support and Mastercam's expanded Accelerated Finishing, projects come off the machine faster and with higher quality than ever before.

Mastercam Mill has been shop-tested more than any CAM program in the world. You can count on Mastercam for real-world, proven results.



TIME AND MONEY

100 steel (4140) parts cut with and without Dynamic toolpaths.

WITH

3 mins. 17 secs.

\$100/hour machine cost

3 mins. 17 secs. x \$100/hour
= \$6.03

\$6.03 per part
x 100 parts =
\$603

WITHOUT

16 mins. 41 secs.

\$100/hour machine cost

16 mins. 41 secs. x \$100/hour
= \$27.81

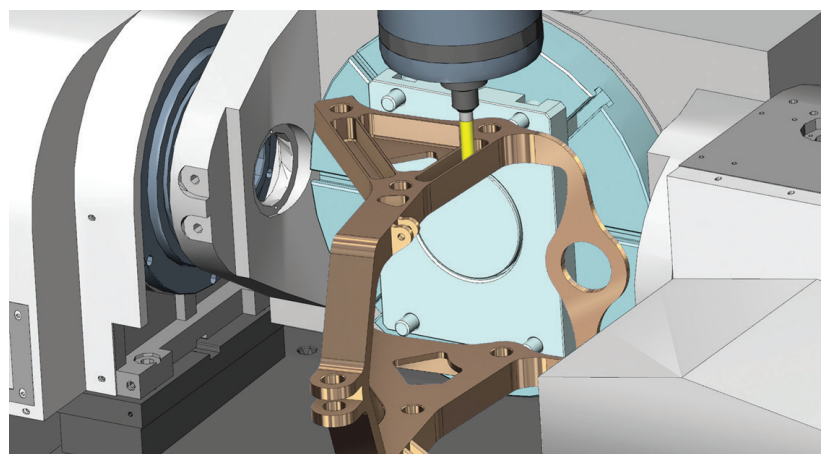
\$27.81 per part
x 100 parts =
\$2,781

**Real world savings
of 78%**

Flexible, expandable, and connected.

Comprehensive toolpath strategies provide multiple approaches for programming any part, regardless of complexity. Modify any element, and toolpaths are updated, eliminating rework.

Build libraries of your favorite machining strategies. Choose customized operations, apply them to your next job, and reduce your programming time. With interfaces to digital tool libraries and other manufacturing software, Mastercam ensures you are ready for the next digital revolution. Fast, easy, productive — the way programming should be.



Mastercam's active Stock Model, Toolpath Verification, and Simulation mean increased confidence on every project. Tool library support, including CoroPlus® and MachiningCloud, helps you make tooling decisions fast.

2D MACHINING

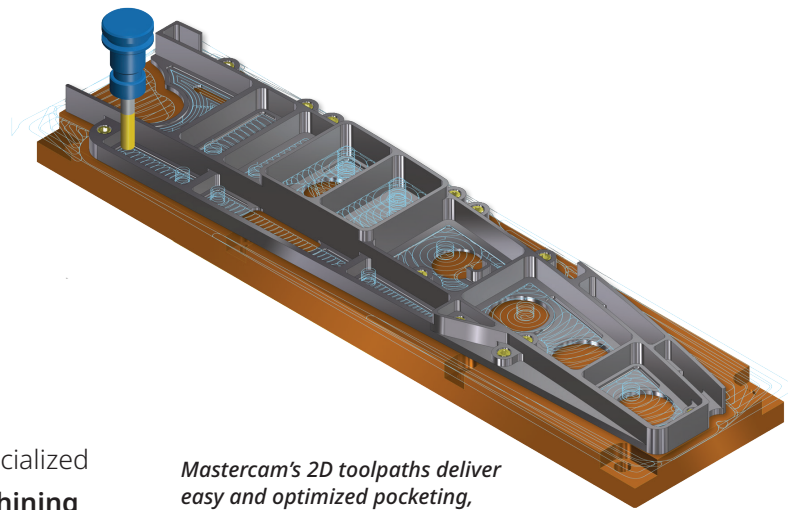
Serious 2D capability.

From simple to complex, Mastercam Mill's 2D machining capability delivers the tools you need to compete.

- **Feature Based Machining** (FBM) automatically programs prismatic solid features like drill holes, contours, and pockets.
- Easy, automated, flexible hole making.
- Precision chip control for a wide set of tools, plus specialized tool support including ISCAR®'s **High Efficiency Machining** (HEM) tool set and more.

Dynamic Motion powers much of our 2D solutions. It allows you to maximize your material removal rate and can lower your cycle time, while increasing the life of your cutting tools. Check out

Mastercam.com/Dynamic to learn more.



Mastercam's 2D toolpaths deliver easy and optimized pocketing, contouring, drilling, facing, and much more.



The proof of any CAM software is what comes off the machine. Mastercam is crafted to help you get the best possible finish in the shortest amount of time.

3D MACHINING

Our finish is more finished.

Mastercam provides unsurpassed control on surface cuts, delivering superior finishes and optimized cycle times.

- Mastercam's Dynamic Motion technology powers **dramatically efficient roughing**.
- Constant scallop machining maintains a consistent finish on sloped and flat surfaces.
- Constant-Z rest milling (remachining) identifies and machines areas needing a smaller tool.
- **Hybrid finishing** creates a single toolpath that changes cut methods as the slope changes.
- **Pencil tracing** walks a tool along the intersection of surfaces to clean out hard-to-reach areas.

Cut multiple surfaces, solid models, and STL data — our refined 3D toolpaths give you a smooth, precision finish to please even your toughest customers.

MULTIAXIS MACHINING

Complexity simplified.

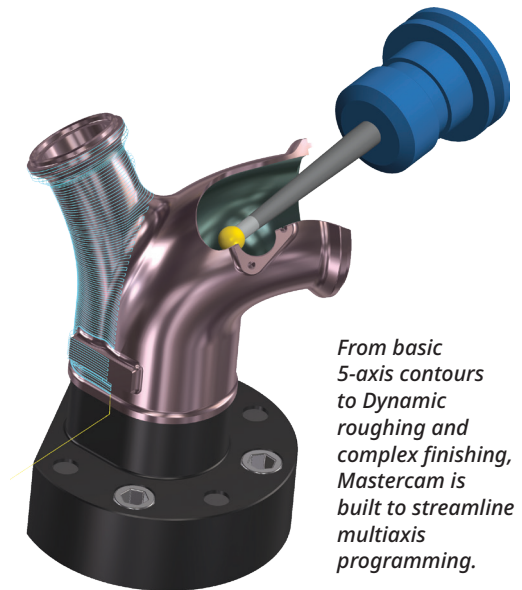
With Mastercam, you have complete control over the three crucial elements of multiaxis machining: cut pattern, tool axis control, and collision avoidance. From 4-axis rotary and roll-die cutting to multiblade impellers with tight internal cuts, Mastercam helps simplify even the most complex jobs.

Other highlights include:

- **Multisurface 5-axis** roughing and finishing (including depth cuts), plunge roughing, and flowline machining.
- Swarf machining over multisurface floors.
- **Advanced gouge checking**, a “safe zone” around the part, and safe linking between operations .
- Fast, simple 5-axis trimming and stock-aware drilling.
- Ability to create full 5-axis motion from a **3-axis toolpath**.

For specialty machining, ask about these available Add-Ons:

- **Mastercam Blade Expert** for multibladed parts and hubs.
- **Mastercam Port Expert** for head ports and tube-type applications.



From basic 5-axis contours to Dynamic roughing and complex finishing, Mastercam is built to streamline multiaxis programming.

MASTERCAM'S SPECIALIZED ADD-ONS

Very often, that one additional CAD or CAM tool makes a specific job easier, faster, and more profitable. If you need very specialized options to precisely match your customer, your workflow, or your products, Mastercam Add-Ons can help.



Mastercam Port Expert

Create precision engine cylinder head porting toolpaths on surface or solid data, while minimizing unnecessary motion.



Mastercam Blade Expert

Highly efficient toolpaths for multibladed parts, delivering superior blades, splitters, floors, and fillets.



Mastercam ProDrill

Automatically detect, group, and apply drill strategies to large amounts of holes, and automatically create tool definitions from existing geometry.



Mastercam Productivity+™

Bring Renishaw® in-process probing and inspection to your Mastercam programs. Easily set up, validate, and even make in-process adjustments where appropriate.



5-Axis Drilling and Curve Machining

Two targeted, powerful, multiaxis techniques that add extra flexibility to your milling; can be upgraded to the full Multiaxis product.



Mastercam Art

Quickly bring your 2D sketches, clip art, photos, and CAD files to life by crafting them on-screen and cutting them with easy, specialized toolpaths.

For more information, contact a local Mastercam expert at
Mastercam.com/Resellers.