MILL

114 G2 X-147.47 1102.007 K20. 116 G1 X-56.503 Y165.703 118 G2 X-25.036 Y149.773 R20. 120 G3 X-14.812 Y140.002 R10. 122 G1 X-4.815 Y140.229

TRUST THE LEADER FOR SPEED AND EFFICIENCY

1136 G3 X-1.815 Y140.297 R10. 1138 G1 X8.182 Y140.523 1140 G0 Z51

> # .26 R21 .522

Y140.025 R10. 5 Y140.252

.74.192 Y70.092

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A6 G1 X-164.292 Y71.5
N188 G3 X-155.799 Y82.808 R10.
N190 G2 X-147.47 Y102.007 R20.
N192 G1 X-56.503 Y165.703
N194 G2 X-25.036 Y149.773 R20.
N196 G3 X-14.812 Y140.002 R10.
N198 G1 X-4 815 Y140 229

Mastercam Mill is rich in features yet still simple and intuitive to use 22, 267.5

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N204 G1 Z38.375 F190.9 N206 X-164.292 Y71.5 F381.8



dD

POWERED BY MASTERCAM'S DYNAMIC MOTION™ TECHNOLOGY

D

Y102.007 R20. Y102.007 R20. Y165.703 Y149.773 R20. Y140.002 R10.

N218 G1 X-4.815 Y140.22 N220 G0 Z63.375



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.

<u>With</u>

3 mins. 17 secs. \$100/hour machine cost 3 mins. 17 secs. x \$100/hr. = \$6.03 \$6.03 per part

x 100 parts = **\$603**

<u>Without</u>

16 mins. 41 secs. \$100/hour machine cost

16 mins. 41 secs. x \$100/hr. = \$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.

With your standalone license of **Mastercam Mill**, you now have the option of also running the corresponding version of **Mastercam for SOLIDWORKS**[®].



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.
- **Powerful editing features** provide flexible and easy control of toolpath strategies.
- Automate machining of chamfer features on solid models.
- 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 suite. 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 hear it directly from our customers.

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.

P 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 is more widely used than any other CAM program.



More experienced programmers



Strong support community



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