



PRODUCT GUIDE

Mill | Multiaxis | Lathe | Mill-Turn | Wire | Router | Design | Technologies



MASTERCAM CONNECT AND LICENSING OPTIONS



In today's fast-paced manufacturing environment, staying ahead requires more than just software. Mastercam CONNECT is a comprehensive Maintenance and Support solution, keeping you up-to-date with the latest advancements, providing cost savings, and ensuring efficient and productive operations. With Mastercam CONNECT, get access to the latest technology, priority support, comprehensive resources, and more.

With Mastercam CONNECT, get access to:

- › Latest Releases
- › Priority Support
- › Beta Programs
- › Mastercam University
- › Tech Exchange

Flexible Licensing Options

The Subscription License provides flexible purchasing with predictable payments, product license change capability, and access to all Mastercam CONNECT benefits at a lower up-front cost, including on-demand, live, and in-product services for optimized usage. The Perpetual License (paired with a Mastercam CONNECT subscription) ensures access to the latest version of Mastercam for the duration of the term, along with limited subscription license benefits to enhance software utilization.

STRENGTH AND STABILITY IN MANUFACTURING

Mastercam is backed by a strong, stable organization and supported by the world's largest CAM network. In a time when consolidation across the CAM industry has created uncertainty for many manufacturers, including concerns, unsupported software, and limited access to expertise, Mastercam provides confidence and continuity.

With an uncompromising focus on customer success, our robust CAD/CAM solutions are built on four strategic pillars that deliver long-term strength and stability for manufacturers.

Technology

› Revolutionary Dynamic Motion™ toolpath optimization

Reduces cycle times by up to 40 percent while extending tool life and improving surface finish for measurable productivity gains.

Reliability

› Consistent precision you can trust

Advanced CAD/CAM tools and AI-enabled CAM intelligence deliver dependable machining performance and repeatable results.

Community

› The world's largest CAD/CAM user network

More than 450,000 users worldwide share knowledge, best practices, and proven approaches across all manufacturing disciplines.

Support

› Global expertise, local access

Comprehensive training, technical support, and partners in more than 100 countries ensure you have the resources to succeed.

TABLE OF CONTENTS

02 **MASTERCAM'S INNOVATIONS FROM START TO FINISHING**

Dynamic Motion® and Accelerated Finishing®.

04 **MILL**

3D Dynamic OptiRough, stock-aware roughing, refined 3D toolpaths, and more.

08 **MULTIAXIS**

5-axis roughing and finishing, plunge roughing, and flowline machining.

12 **LATHE**

Quick toolpaths, custom thread forms, and more.

14 **MILL-TURN**

Automated part transfers, tool planes, stock definition, and setup.

16 **WIRE**

Efficient tab creation and management, straight or tapered cut from either direction, and more.

18 **ROUTER**

Powerful 2D tools for nesting, contouring, pocketing, and drilling.

20 **DESIGN**

Model Based Definition, focused mesh, surface, and solid model creation.

22 **EDUCATIONAL SUITE**

Empower students with the CAD/CAM skills they need.

24 **INDUSTRY SHOWCASE**

Mastercam tackles challenging productivity demands in a variety of manufacturing industries.

26 **MASTERCAM SPECIALIZED ADD-ONS**

Additional CAD or CAM tool makes a specific job easier, faster, and more profitable.

28 **TOOLS TO KEEP YOURSELF COMPETITIVE**

Mastercam University®, Certification, and training.

MASTERCAM'S INNOVATIONS FROM START TO FINISHING

DYNAMIC MOTION TECHNOLOGY

Reduce Cycle times. Extend tool life.

Dynamic Motion® toolpaths safely maximize material removal rate, reducing cycle times by 25 to 75%. Dynamic Motion uses a proprietary software engine to continually adjust toolpath motion to maintain a constant chip thickness everywhere on the part. The result? Consistent machining performance, shorter cycle times, and longer tool life.



For more details and to see Dynamic Motion in action, visit Mastercam.com/dynamic.

SAVE TIME AND MONEY

100 titanium parts cut with and without Dynamic Motion toolpaths.

**WITHOUT
DYNAMIC**



× \$100/hour machine cost = \$97.31
\$97.31 per part × 100 parts = **\$9,731**


**WITH
DYNAMIC**



× \$100/hour machine cost = \$53.25
\$53.25 per part × 100 parts = **\$5,325**

47%
**REDUCTION
IN COST**



ACCELERATED FINISHING TECHNOLOGY IS REWRITING THE RULE BOOK

Mastercam's Accelerated Finishing® technology is the next leap forward in using today's innovative profile tools and delivering greater efficiency and higher machining productivity. Collaborating with the industry's best tool manufacturers, we take full advantage of these new tool designs to dramatically reduce finishing cycle times while improving surface finish.

For more details and to see Accelerated Finishing in action, visit mastercam.com/accelerated-finishing.



REDUCE CYCLE TIME



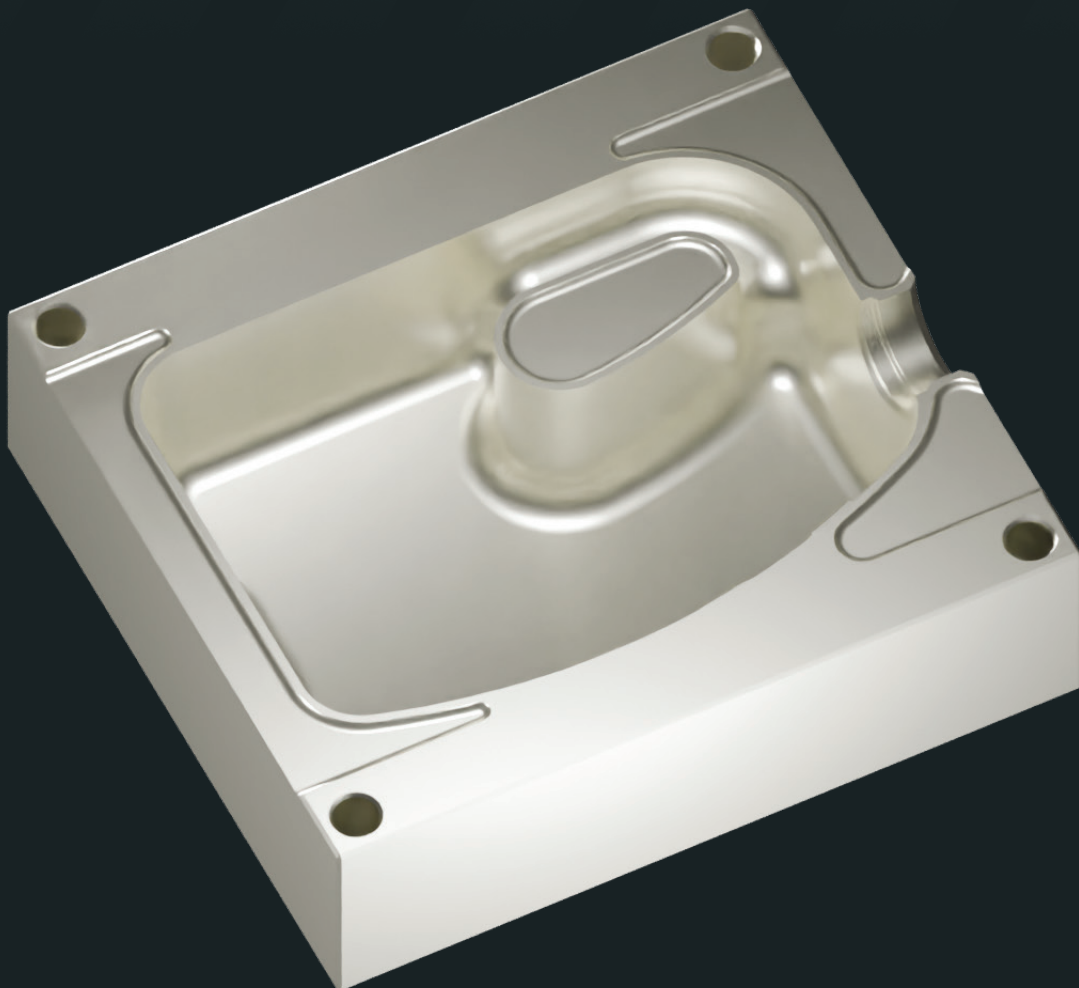
We introduced Accelerated Finishing and a lens-shaped circle segment tool to an aerospace parts sub-contractor who machines aluminum structural parts. Cycle time decreased from 30 minutes to 3.5 minutes per part for an **88% improvement** and a cost savings of \$66 per part. On a 1,000 part production run, it meant a **savings of over \$66,000**.

Dan Doiron, Product Manager-Milling, Emuge

MILL



Mastercam Mill delivers CAD/CAM power and control with an intuitive programming interface.



PRECISION AND EFFICIENCY FROM DESIGN THROUGH THE PRODUCTION LINE



OUTPERFORM YOUR EXPECTATIONS

Mastercam gives you the power to drive your CNC equipment with precision and efficiency. Our toolpaths help your machines achieve a reliable, efficient, smooth, and accurate motion. Part quality, extended tool life, and repeatability — even the longevity of your machines — are directly related to this motion.



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.

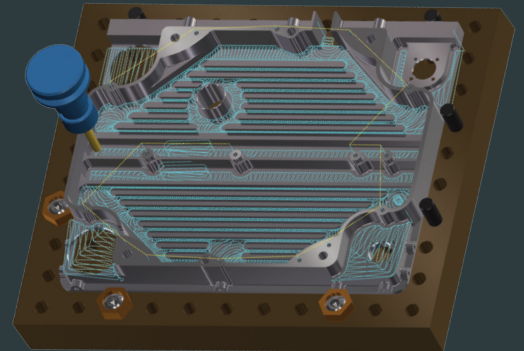


2D MILLING

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

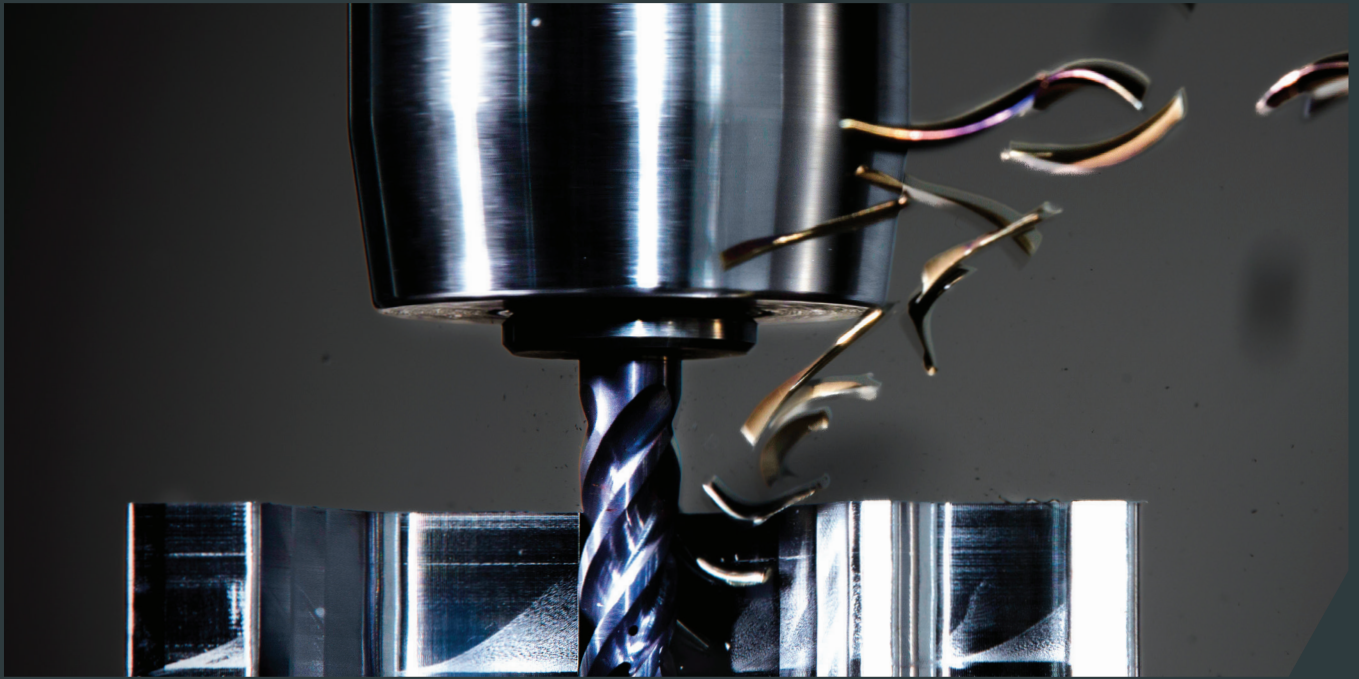
- › 3D power for your 2D parts — fast, automated 3D Dynamic OptiRough is included in all Mill products (Entry excluded).
- › Excel in any situation with the power of our Automatic Region Chaining, Chamfer Drill, Model Chamfer and Deburr toolpaths.
- › Easy, safe, and highly-automated hole making.
- › Dynamic Mill allows for precision chip control for a wide set of tools, plus specialized tool support.

Dynamic Motion powers much of our 2D solutions. It allows you to maximize your material removal rate to minimize cycle time.



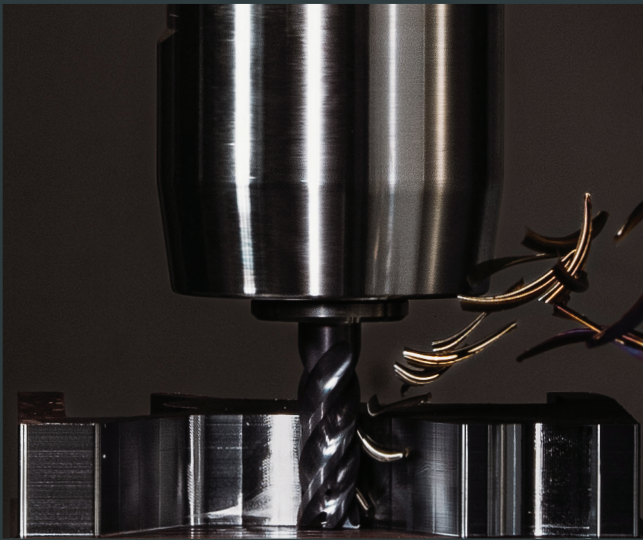
TRIM YOUR PRINT-TO-PART TIMELINE

For 2D users — those that do a lot of pocketing and contouring — Dynamic OptiRough is a game changer for programming prismatic parts. Previously only available to 3D users, this toolpath lets you rough an entire prismatic solid part fast, in one operation instead of individual roughing, pocketing, and contouring toolpaths. It's an incredible time saver.



3D MILLING

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



- › Stock-aware roughing, semi-finishing, and finishing ensure precision parts.
- › Mastercam's Dynamic Motion technology ensures maximum tool life and high metal removal rates.
- › Equal scallop machining maintains a consistent finish while supporting curve input to influence the motion pattern.
- › Rest milling (remachining) identifies and machines areas needing a smaller tool.
- › Intelligent leads transitions and retracts ensure efficient linking and cut order.
- › Blend mill creates smooth motion as it blends across multiple input curves.

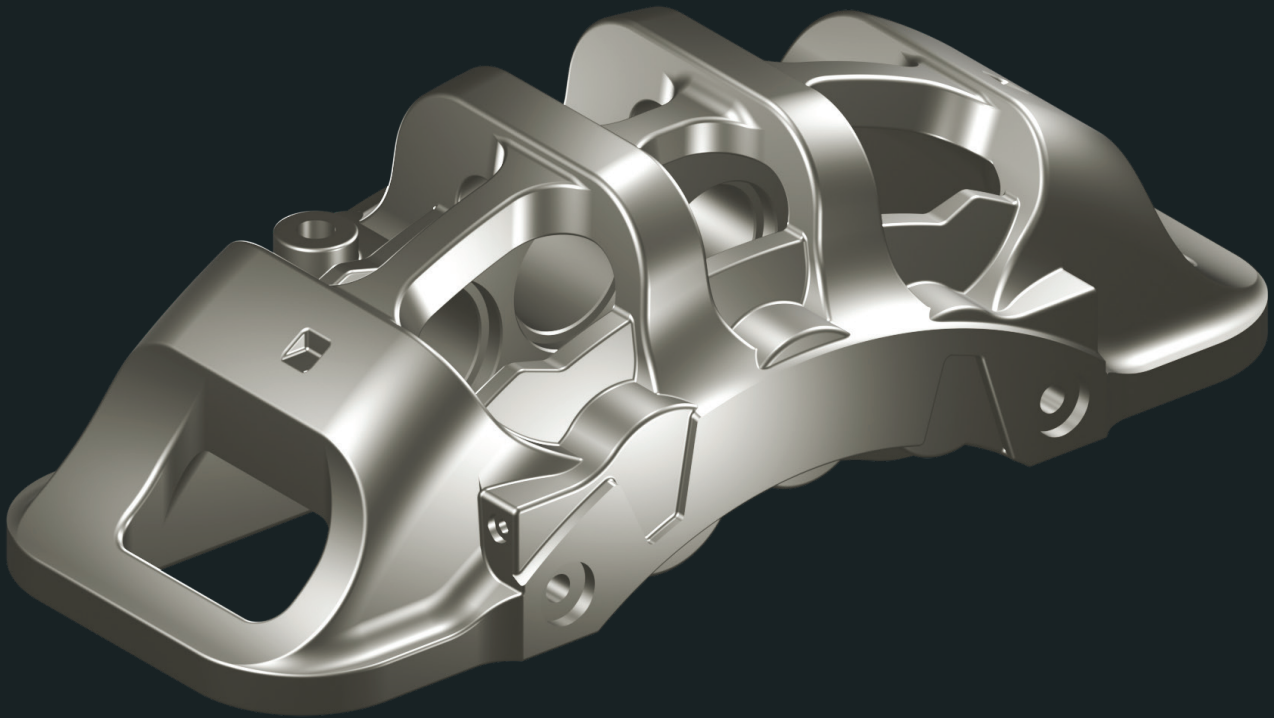
Cut multiple surfaces, solid models, and mesh data — our refined 3D high-speed toolpaths give you a smooth, precision finish, even on the most complex parts.

To learn more about Mastercam's Mill solutions, visit mastercam.com/mill-solutions.

MULTIAXIS



Enhance your productivity with Mastercam Multiaxis for intuitive programming of complex parts.



SIMPLIFIED ACCESS TO COMPLEX MACHINING

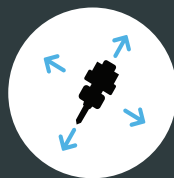


A PRACTICAL SOLUTION TO ENHANCE PRODUCTIVITY

Mastercam's Multiaxis is a powerful 4- and 5-axis solution that can work in conjunction with Mastercam Mill 3D, Mastercam Router 3D, and Mastercam Mill-Turn. This product maintains stock model awareness, a 5-axis safe zone around the machined part, and tilt axis limits on the tool angle to avoid violating machine limits for the safest machining possible. It also comes with extensive dynamic-style roughing capabilities for going beyond 3+2 roughing and into full simultaneous motion material removal. The abilities of Multiaxis, which range from standard to advanced, give users complete control over cut pattern, tool axis, and collision avoidance.



Cut Patterns, ranging from simple 2D wireframes to complex multisurface grids, guide the cutting along predetermined paths. These varied toolpaths optimize cutting while ensuring safety.



Tool Axis Control gives users the ability to specify tool axis, lead/lag, entry/exit, and tilt. This technology orients the tool's center axis as it follows the cut pattern, and it uses advanced gouge checking and a 5-axis safe zone during machining to protect the part.

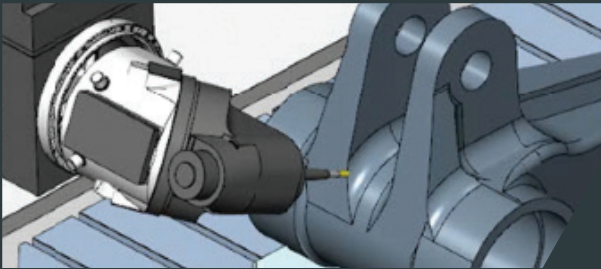


Collision Control provides a "near miss tolerance" field so that users can choose exactly how close they want to allow the tool to approach any workholding or machining component.

POPULAR MULTIAXIS TOOLPATHS

UNIFIED 5-AXIS

The result of customer feedback, with the Unified toolpath, users need to only select their Machining and Avoidance geometries once before being able to experiment with Cut Patterns. Not needing to reselect geometries every time will save mouse miles and time.



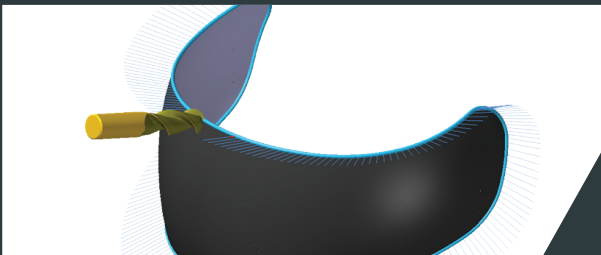
DEBURR 5-AXIS

Sharp edges are common occurrences on completed parts. Deburring those edges is a challenging manual task, and keeping up consistency is nearly impossible, but Deburr 5-axis automates this process.



SWARF 5-AXIS

Sometimes called “Flank-milling”, Swarf 5-axis uses the side of a tool to cut a wall. It is very popular in aerospace milling.



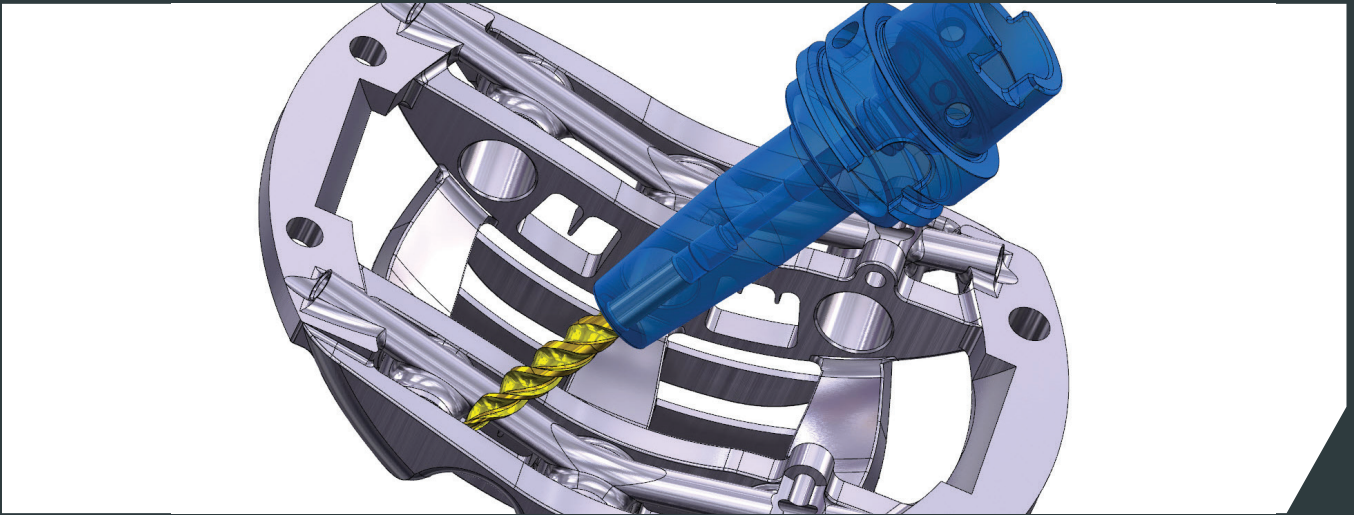
CURVE 5-AXIS

This toolpath is one of Mastercam’s most popular. The cut pattern follows a curve (a line, a spline, a circle, or a surface edge) that can be wireframe, solid, or surface.

TILT TO AVOID

Available in Mastercam’s 3D HST Finishing paths, Tilt to Avoid is the fastest way to add Multiaxis motion to a 3-axis toolpath. With just one click, the tool assembly is checked against the machining and avoidance geometries and introduces tilt where necessary to machine the path.

MAKE IT MULTIAxis



Multiaxis machining expands on the traditional 3-axis machine's motion abilities. Instead of moving along three simple linear axes, Multiaxis machines can move in four or more directions by adding rotary axes and parallel linear axes. Some modern Multiaxis centers can use nine axes, but most use only four or five simultaneously.

Launching into the Multiaxis world can be — understandably — daunting. In the past, access to training resources could be limited, and often, the only publicly available material came from forums or user YouTube videos. While these are still valuable resources, Mastercam has taken steps in recent years to make learning easier. Mastercam University is an online learning center full of self-directed courses that walk users through simple and advanced machining topics. It has a full, end-to-end Multiaxis course on all our toolpaths and on standard Multiaxis machining concepts as well.



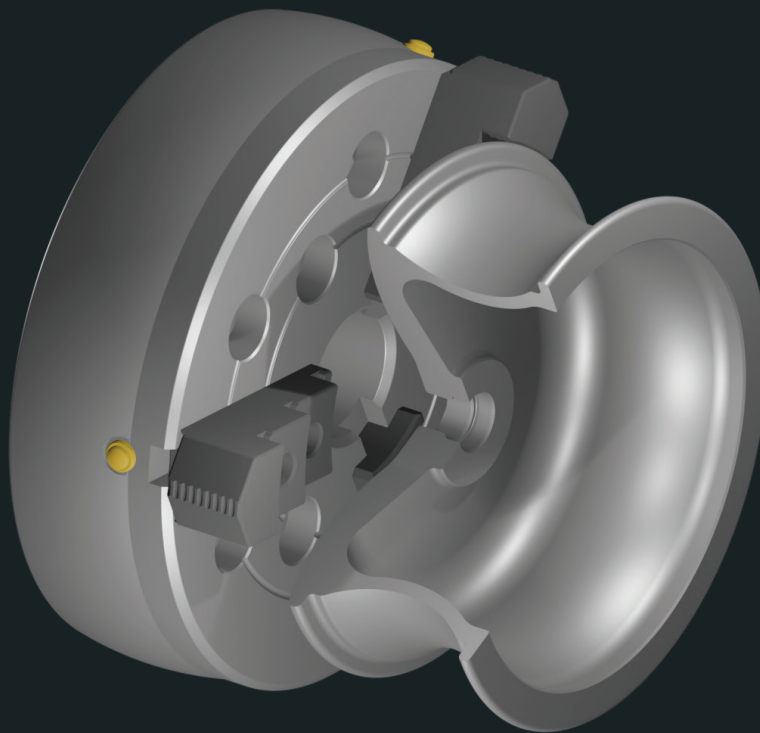
Mastercam and its Channel Partners have also produced and released extensive official YouTube tutorials on everything from individual toolpath use to fully-fledged examples with real parts. Many Channel Partners also offer training at their locations or will even visit your shop, and all of them will have their own Multiaxis resources and experts to help you make the most of your software. If you want in-person training, reach out to your local Channel Partner as a first step.

To learn more about Mastercam's Multiaxis solutions, visit mastercam.com/multiaxis.

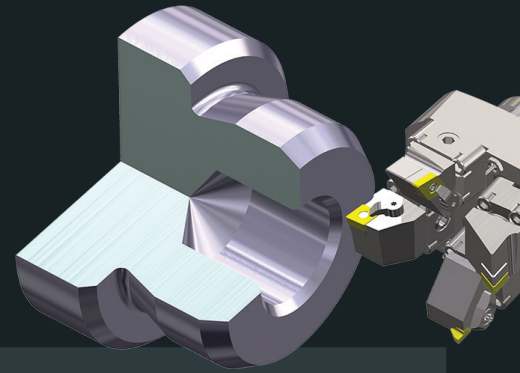
LATHE



Mastercam Lathe lets you move the same part file between milling and turning operations with ease and confidence.



POWERFUL, FLEXIBLE TOOLS FOR TURNING



A SET OF TOOLS THAT STREAMLINE YOUR ENTIRE PROCESS

From importing CAD files to Dynamic roughing and precision finishing, Mastercam Lathe gives you a variety of strategies to turn parts with greater efficiency and productivity.

EFFICIENT PROGRAMMING, DESIGNED FOR MODERN MANUFACTURING

Mastercam Lathe delivers a set of easy-to-use, advanced programming tools, with greatly expanded options when paired with Mastercam Mill. Easy rough, finish, thread, groove, bore, and drill routines combine with C/Y-axis machining to cut any job. Dependable toolpath verification ensures your parts are done right the first time.

FAST, EASY TURNING

- › Program in a few clicks with Quick Toolpaths.
- › Complete threading including custom thread forms.
- › Grooving with multiple depth cuts, peck motion, and full-radius plunge turning.
- › Intelligent ID, OD, face roughing, and finishing.
- › Full milling support available for machines with live tooling or C and Y axes.

SAFE MACHINE AND CUT CONTROL

- › Chuck, part, steady rest, and tailstock detection.
- › Automatic gouge checking on the tool's front and back.
- › Control chip breakage on difficult-to-machine materials.
- › Full collet and solid jaw support.
- › Expanded job setup, part transfer, and programming options on select lathes.

SWISS MACHINE SOLUTIONS

You no longer need a separate software package for Swiss machines — something programmers and machinists appreciate. Our Swiss machining solutions combine Mastercam Mill and Mastercam Lathe with specialized post processors. This configuration adds machine-specific controls inside the Mastercam interface, delivering accurate G-code for a wide variety of Swiss machines.

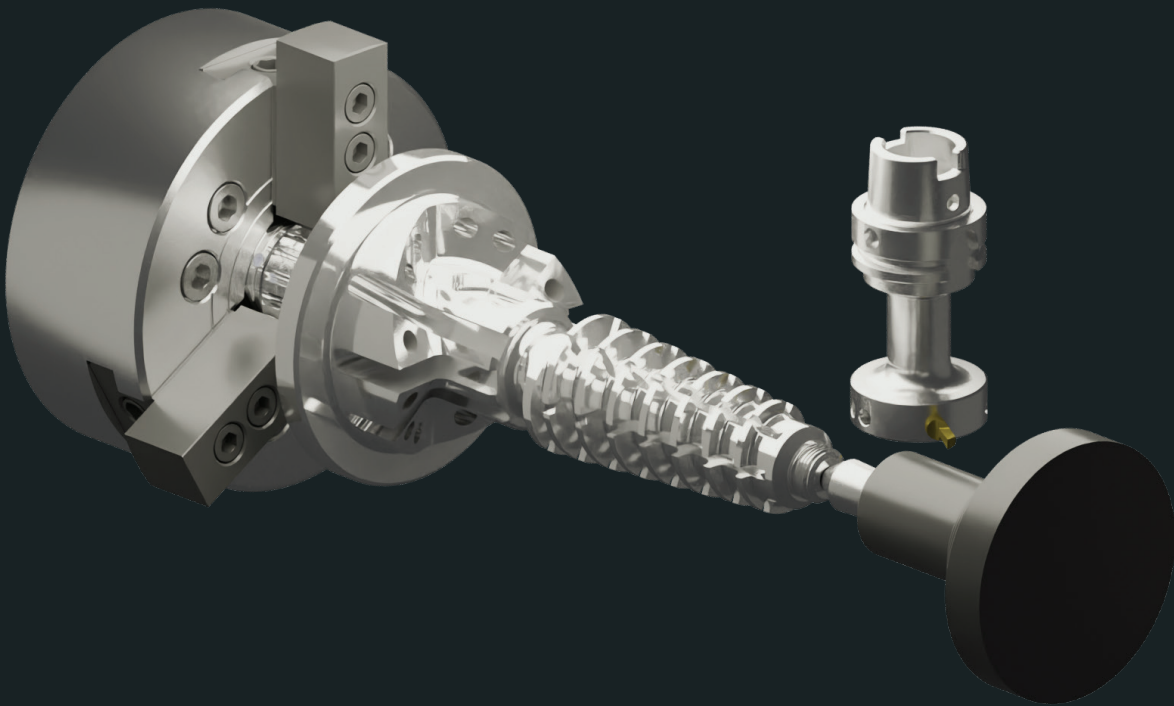
The solution provides customized choices directly within Mastercam for:

- › Swiss-style bar feed stock advance.
- › Machine-specific setup parameters.
- › Swiss-style pick off / cut off strategies.
- › Expandable custom machine options including lasers, high-frequency turning, high-pressure coolant, and more.

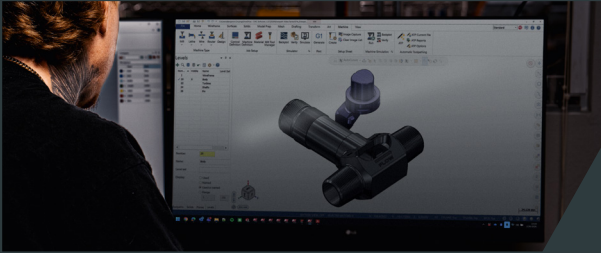
MILL-TURN



Automate your complex programs for high-powered, multitasking machining centers. Program it right the first time, every time.



STREAMLINED MACHINING CAPABILITIES



MASTERCAM MILL-TURN SIMPLIFIES CONTROL OF HIGH-POWERED, MULTISTREAM MACHINING CENTERS

With Mastercam, your workflow is efficient. Choose your machine, and Mastercam Mill-Turn automates part transfers, tool planes, stock definition, and setup. Then apply your toolpaths, quickly synchronize them, verify your project with simulation, and post your code. Changes along the way are fast and easy — the way programming should be.

Mill-Turn's Sync Manager is a user-friendly way to optimize part cycle times and manage interactions between toolpath operations. Easily navigate a Gantt-style timeline and vertical stream interface to coordinate operations and track cycle times.



GET MORE OUT OF YOUR MACHINES WITH MACHINE SIMULATION

Machine Simulation provides visual verification and assurance that the interaction and syncing between operations performs exactly as you planned. Validate against potential collisions and track cycle time estimates to achieve maximum efficiency.

AVOID MISTAKES, SAVE TIME AND MONEY

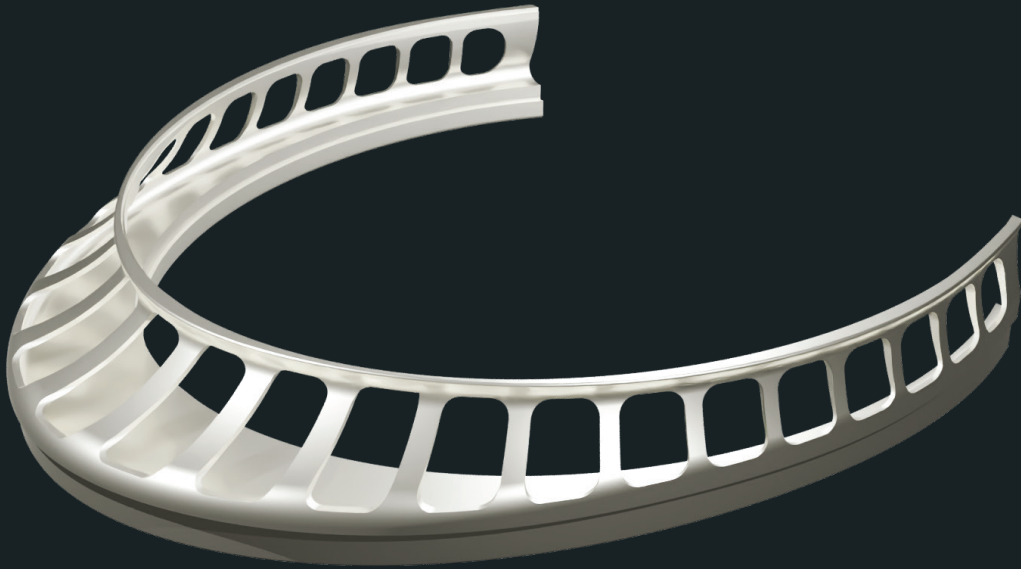
Machine components, custom workholding, multiple steady rests, tailstock, tools, and parts are simulated from the safety of your desktop, ensuring a safe and secure machining experience. You can identify potential collisions, see your cutting motion, and explore ways to optimize your processes with simulation. View all streams and statistics of the entire machining process, with the capability to jump to any point in the process with the click of a button.

To learn more about Mastercam's Mill-Turn solutions, visit mastercam.com/millturn.

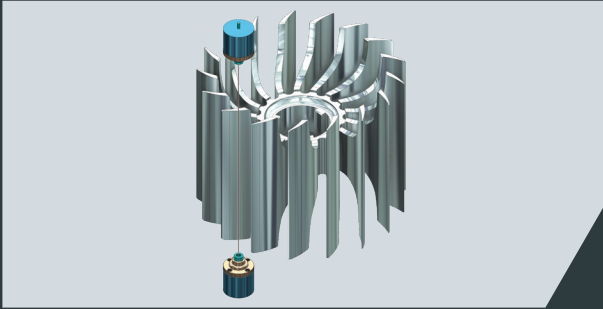
WIRE



Mastercam Wire delivers powerful, comprehensive wirepaths in a streamlined, easy-to-use interface.



MASTERCAM CONTROL FOR WIRE EDM



DESIGNED FOR EFFICIENCY

Mastercam Wire lets you move a single part file between machines, saving time and avoiding mistakes. User-customizable wire libraries store power settings and other registers for rough and skim passes.

Other features include:

- › Efficient tab creation and management.
- › Control settings for corner types and taper angles at any point in the contour.
- › Straight or tapered cut from either direction.

CHOOSING THE BEST SOFTWARE FOR YOUR SUCCESS INCLUDES MANY FACTORS TO CONSIDER

A global community of Mastercam users, experts, educators, and enthusiasts helps you get the most from your investment. Mastercam Channel Partners bring years of experience, helping to ensure that you are getting the most practical and comprehensive support in the industry.



EXPAND YOUR SHOP'S CAPABILITIES

For basic 2-axis contouring and complex 4-axis motion, you can be ready for any job. Mastercam delivers:

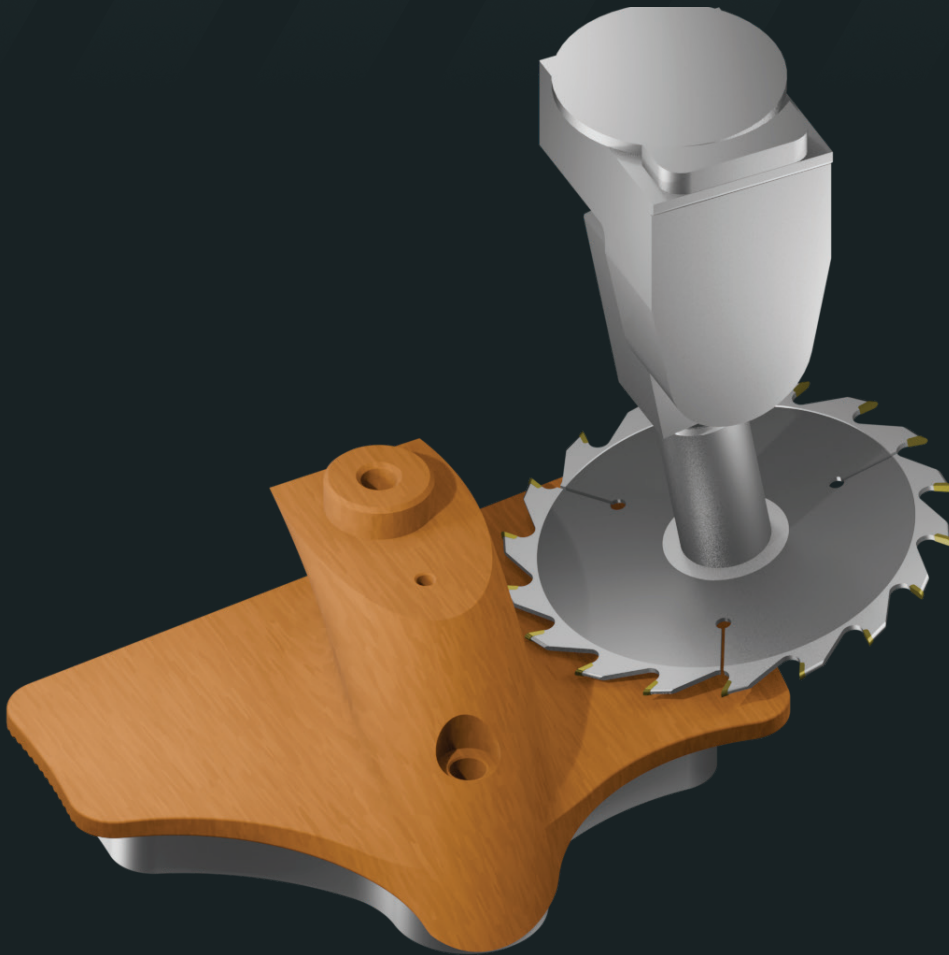
- › **Contouring** made easy in 2- or 4-axis.
- › **Automatic** lead-in and lead-out strategies.
- › **Automatic or manual** 4-axis syncing.
- › **Automatic** skim and reverse cuts.

Open virtually any CAD file or use Mastercam's built-in 3D modeling tools.

ROUTER



Mastercam Router delivers complex routing functionality from an easy-to-use interface.



FLEXIBILITY AND CONTROL

SOLUTIONS FOR ALL YOUR 2D, 3D, OR MULTIAxis CHALLENGES - FROM WOOD TO COMPOSITES

Once you program a part, no matter how complex, you can modify any element of the job and get updated toolpaths without slowing down. You can also build a library of your favorite machining strategies and apply them to new models.

Mastercam's powerful Dynamic Motion technology not only helps extend tool life and reduce machine wear, but helps eliminate tool dwell damage as well. **Automatic Toolpathing** (ATP) brings in parts from today's top design packages to help speed flat panel work.



A COMPREHENSIVE PACKAGE OF POWERFUL TOOLS

2D machining can range from simple to very complex. Mastercam Router delivers powerful 2D tools from nesting, contouring, pocketing, and drilling to automated, feature-based, solid model programming.

For 3D machining, Mastercam Router gives you streamlined, efficient 3D roughing and finishing, including automated leftover stock cleanup.

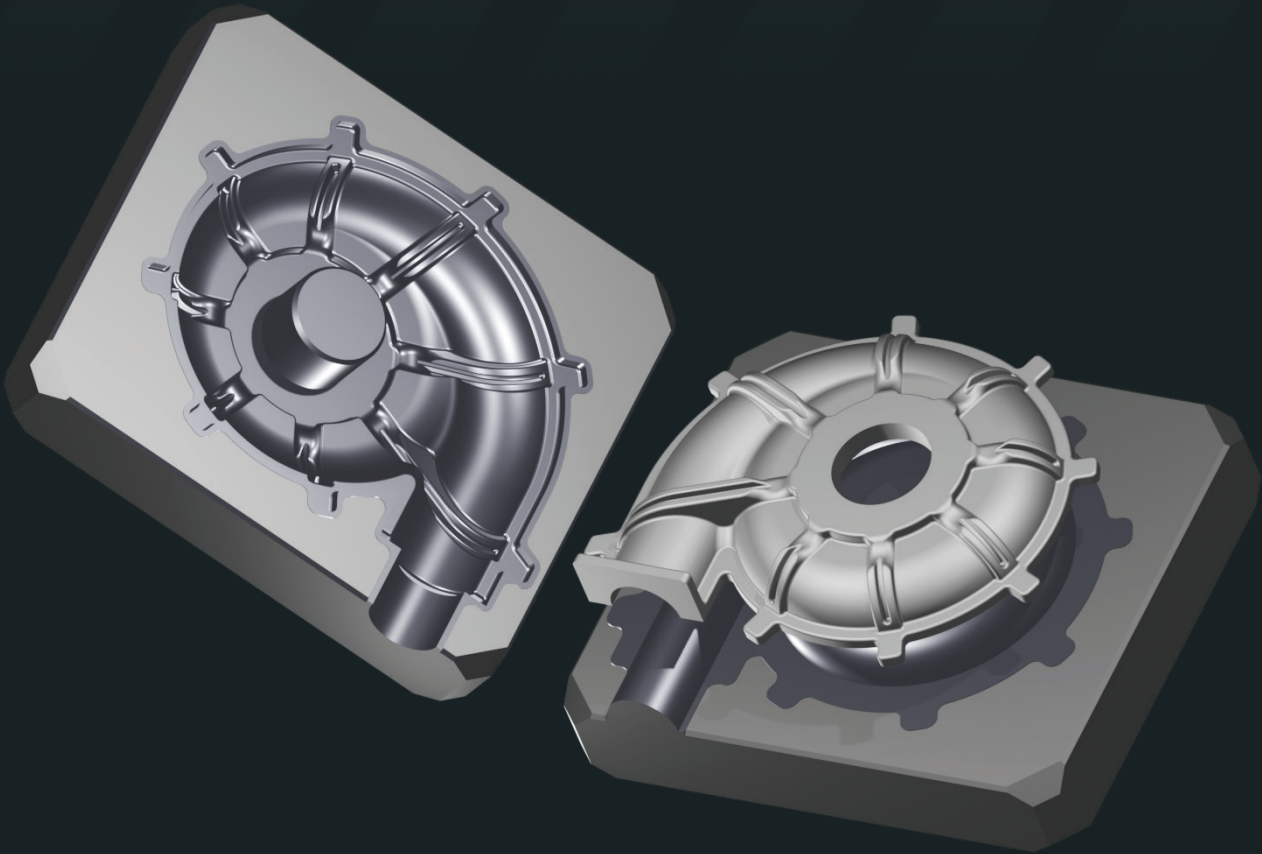
Mastercam's multiaxis capabilities give you complete control over the three crucial elements of multiaxis machining: cut pattern, tool axis control, and collision avoidance.

To learn more about Mastercam's Router solutions, visit mastercam.com/router.

DESIGN



Focused CAD means machine-ready parts faster.



MODELING AND PREP TOOLS

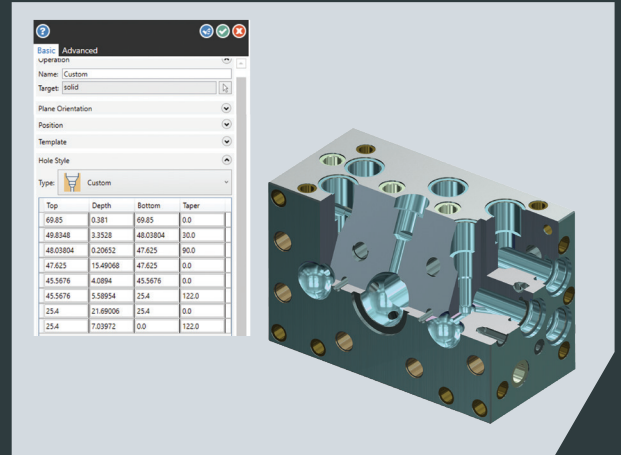


GET YOUR PARTS ON AND OFF THE MACHINE QUICKLY

Whether you bring in a file from an outside CAD package or design one yourself, Mastercam's powerful, easy-to-use CAD engine is included in each main Mastercam product and is also available separately.

WORK WITH YOUR EXISTING CAD FILES

Mastercam helps to preserve design intent with Model Based Definition (MBD) support and acceptance of varied file formats. These include IGES, Parasolid®, SAT (ACIS solids), AutoCAD® (DXF, DWG, and Inventor™ files), SolidWorks® (including history tree), Solid Edge®, SpaceClaim, STEP, STL, and more. Add-On translators are available for Siemens NX, CATIA™, Pro/E (PTC Creo), and more.



WHETHER YOU ARE PREPPING CUSTOMER FILES...

Getting a part file from an outside source can pose unique challenges. You might need to repair a surface, cap or hide a feature, or create an electrode. You may need to streamline, fix, or modify a complex mesh, or just make sure your fixtures are represented on the part. Mastercam includes a powerful set of model prep tools to make sure the process goes smoothly. Focused mesh, surface, and solid model creation and editing tools let you bring a part from the designer's desk to your machining process, fast.

...OR DESIGNING YOUR PARTS FROM SCRATCH

Having powerful CAD at your fingertips makes your CAM system that much more effective. Mastercam includes a robust set of modeling tools, from complete wireframe to surface and solid modeling. A true hybrid modeling system, Mastercam lets you create, combine, and machine whichever CAD geometry suits your needs.

THE TOOLPATH TO A SUCCESSFUL CAREER PATH



WHAT TODAY'S PROS TEACH TOMORROW'S PROS

The Mastercam Educational Suite gives students access to the full industrial version of Mastercam, not a scaled-down or training-only product. As the most widely used CAM software in both industry and education, Mastercam ensures students graduate fluent in the same tools they will use on the shop floor.

MASTERCAM™ + camInstructor®

Mastercam and camInstructor deliver a complete, classroom-ready CAD/CAM curriculum that combines industry-leading software with structured training. Included with the Mastercam Educational Suite, camInstructor 101 provides step-by-step, project-based lessons and full instructor resources. Together, they help students build real-world skills and prepare for careers in manufacturing.

Our Educational Suite* comes complete with the following:



Mill



Lathe



Multiaxis



Mill-Turn



Wire



Router



Design



Deburr



ProDrill



Data Translators



Probing

We also offer Add-Ons for specialty manufacturing applications:



Port Expert



Blade Expert



APlus®

*Mastercam Educational Suite and camInstructor 101 provide solutions and instruction to the same interface and capability needed to drive CNC equipment as industrial versions, but files are saved in a format that is not compatible with industrial versions of Mastercam.

SKILLS GAP, MEET OPPORTUNITY

TEACHING STUDENTS REAL-WORLD, WORK-READY SKILLS

- › **One-stop solution** offering CAD/CAM, milling, turning, multiaxis, and more.
- › **Easy to teach** and easy to learn with a simplified user interface option — great for new users.
- › Trusted platform with **40+ years** of direct service to educators.
- › **Technological leadership** gives students access to tools used in professional shops.
- › **Free Resources** for teachers and students include Mastercam Learning Edition & Mastercam University.
- › **Open platform** lets you design in Mastercam or use CAD files from other sources.



LOCAL, HANDS-ON SUPPORT

Mastercam's local support networks form a much-needed conduit between education and industry. Teachers and students gain direct access to our industrial channel's deep knowledge of CAD/CAM and manufacturing expertise. And when students are ready for the job market, they benefit as members of the world's largest industrial CAM network.



INSTRUCTORS INSPIRING INSTRUCTORS

The Mastercam Educators Alliance (MEA) is a growing community of educators who teach and use Mastercam. It provides a free platform to interact with other instructors and gain access to subject matter experts and content that is tailored to the needs of MEA members.

HELPING STUDENTS LEVEL UP

Mastercam is dedicated to giving students access to CAD/CAM software to help them prepare for careers in manufacturing. We are strong supporters of competitions for students throughout the U.S. and the world. This commitment extends to WorldSkills International where Mastercam is the exclusive software used in the CNC Milling & CNC Turning competitions.



To learn more about our Academic Resources, visit mastercam.com/community/education-resources.

INDUSTRY SHOWCASE

Mastercam is the most robust CAM software used around the world in a variety of manufacturing industries. From aerospace to automotive and education to energy, Mastercam tackles challenging productivity demands.





AEROSPACE & DEFENSE

Manufacturers obtain manufacturing technology for quality and precision at an exceptionally high level.



CONSUMER GOODS

Mastercam offers manufacturers great product design and manufacturing productivity, while cutting costs and maintaining quality.



EDUCATION

Educators choose Mastercam to introduce students to manufacturing and provide practical skills and experience.



ENERGY

Mastercam offers manufacturers the precision, flexibility, and fresh innovation they require.



MEDICAL

Mastercam offers manufacturers quality and precision at the highest level needed for medical applications.



TOOL & DIE

Manufacturers utilize Mastercam software for shorter cycle times and precision finish for productivity and profit.



TRANSPORTATION

Mastercam provides manufacturers with productivity enhancements across diverse applications.



HEAVY INDUSTRY

Manufacturers utilize Mastercam software to maximize production capacity without sacrificing quality.



WOODWORKING

Manufacturers use Mastercam solutions for dynamic production needs using CNC machines.



MASTERCAM'S SPECIALIZED ADD-ONS

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.



Port Expert

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



Blade Expert

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



ProDrill

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



5-Axis Curve Machining and Drilling

A targeted and powerful multiaxis technique that adds extra flexibility to your milling; can be upgraded to the full Multiaxis product.



Mastercam Probing

Program your spindle-mounted touch probe as intuitively as toolpaths. Automatically generate and embed G-code into your NC program, to enhance part quality and boost productivity.



Mastercam Deburr

Take advantage of the streamlined Deburr cycle in a 3-axis environment without a Multiaxis license. Streamlines any deburring process, saving time and improving deburr quality. Mastercam Deburr enhances and simplifies the deburring process through automatic edge detection.



APlus®

Designed for additive manufacturing (AM) using Direct Energy Deposition (DED). APlus has toolpaths developed specifically to handle any geometry in AM, as well as features and utilities designed to remove uncertainty out of the process and to improve efficiency.



TOOLS TO KEEP YOURSELF COMPETITIVE



MASTERCAM UNIVERSITY®

Online, video-based training developed by Mastercam and trusted partners. Sharpen your skills on your own schedule, use it to bolster your resume, and access the materials you need for Mastercam Certification. Mastercam University is easy to use, gives you real-world training applications, and covers all levels of Mastercam skills from basic to advanced.



University.Mastercam.com

MASTERCAM CERTIFICATION



If you are looking to set yourself apart as a skilled Mastercam programmer in the increasingly competitive job market, Mastercam Certification is the answer. Your path to Mastercam Certification begins at Mastercam University. With certified Mastercam credentials, you can advance your programming skills and earn the competitive advantage you seek.

MASTERCAM TRAINING AND SUPPORT



CAD/CAM is a support-intensive business. We understand that our users require comprehensive training options to get started with Mastercam and then to stay current with the latest advancements.

To get the best training, you need flexible options, and the strength of the Mastercam community means our users have access to a global network of excellent opportunities for training.

CORPORATE TRAINING FROM MASTERCAM

A global community of Mastercam users, experts, educators, and enthusiasts helps you get the most from your investment. Mastercam Channel Partners bring years of experience, helping to ensure that you are getting the most practical and comprehensive support in the industry.

CHANNEL PARTNER TRAINING

Your local Channel Partner is the best place to find out about training opportunities using the world's most widely used CAM software. Mastercam Channel Partners can help you access on site, classroom, and virtual trainings for everything from standard skills tutorials to customized CAD/CAM workshops for the specific needs of your manufacturing enterprise.

THIRD-PARTY TRAINING

Mastercam users enjoy access to a variety of training options available from official, third-party training partners.

A SACRED BUILD:

Crafting a Gothic Monastery with Mastercam

High in the mountains of Wyoming, Carmelite Monks are blending centuries-old architectural inspiration with modern machining technology. With support from Mastercam and partners like DMG Mori, the monks are constructing a medieval-style monastery designed to endure for a thousand years.

Faced with limited resources and no formal machining background, they turned to Mastercam to bring their intricate stone designs to life. The project demonstrates Mastercam's power, precision, and flexibility in handling complex geometries and large-scale material removal.

These capabilities allow the monks to create detailed, high-quality stonework that reflects both artistic vision and structural permanence.

HIGHLIGHTS OF MASTERCAM FEATURES:

Stone Carving & Architectural Elements



- › Multiaxis toolpaths enabled highly detailed carvings, including gargoyles, foliage, and Gothic ornamentation.
- › Complex geometries were programmed with precision, allowing seamless machining of tight cavities and organic forms.
- › Advanced toolpath strategies eliminated the need for secondary finishing on intricate parts.
- › Surface finishes and fine details were achieved with minimal manual intervention.

Production Efficiency



- › Tasks that once took hours were reduced to minutes using optimized toolpaths.
- › A gargoyle that required six months of hand carving could be completed in days.
- › Significant time savings accelerated overall construction progress.
- › Streamlined programming improved workflow for monks with limited CAM experience.

Creative Freedom & Precision



- › The monks achieved complete control over design details, from vine-covered arches to sculpted figures.
- › Mastercam enabled execution of features that were not possible with previous CAM systems.
- › Unlimited design flexibility allows continuous refinement and artistic expression.



Mastercam® is a registered trademark of CNC Software, LLC. All other trademarks are property of their respective owners. ©1983-2026. All rights reserved.



671 Old Post Road Tolland, CT 06084 USA
[mastercam.com](https://www.mastercam.com)