



# ***Mastercam***® 2018



MILL



LATHE



MILL-TURN



WIRE



ROUTER



MASTERCAM for  
SOLIDWORKS®



DESIGN

# Mastercam® 2018

## BE A PART OF THE LARGEST CAM NETWORK ON THE PLANET



Over **430** sales and support offices worldwide



**Industry leaders** in education, aerospace, automotive, consumer, medical, and more



**98 countries** provide local training services, technical support



Over **250,000** seats installed



Most **widely-used** CAD/CAM software in the world



Social media interaction and a **wealth of knowledge** just a click away

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(L-R) Brian Summers, Vice President;  
Meghan West, President; and  
Mark Summers, Chairman.

## SHAPING THE FUTURE OF MANUFACTURING

**For over thirty years, Mastercam has been at the leading edge of CAM.**

We've earned our place by continuously working to improve and innovate for the benefit of our customers. We're dedicated to the idea that as a company — and as individuals — we are responsible for defining the next generation of manufacturing. To make this happen, we have accelerated internal processes to inspire and incubate innovation from every corner of our company. We have always taken pride in the steady flow of new ideas at CNC Software, Inc. And we believe these new initiatives will increase the speed of innovation, letting us continue to give you the edge you need in a competitive marketplace.

Mastercam's Dynamic Motion™ toolpaths have created tremendous efficiencies for many of our customers. And now Mastercam's Accelerated Finishing™ technology, created to support profile tools, is another leap forward in speed, quality, and efficiency (more on page 3).

While other software companies have cut support networks, ours remains strong and is getting stronger. The Mastercam support network offers unparalleled CAM experience, our online training delivers in-depth learning tools, and our certification program provides tangible proof of your skills.

Our goal is to always be the best CAD/CAM software company in the world. Being the best means providing excellent support, product innovation, and continuous improvement through real-world feedback from those that matter the most — you, our incredible customers and industry partners. We are optimistic about what the future holds, because we know that with you, we will have a hand in shaping it.

Meghan West  
*President, CNC Software, Inc.*

# MASTERCAM'S LATEST INNOVATION

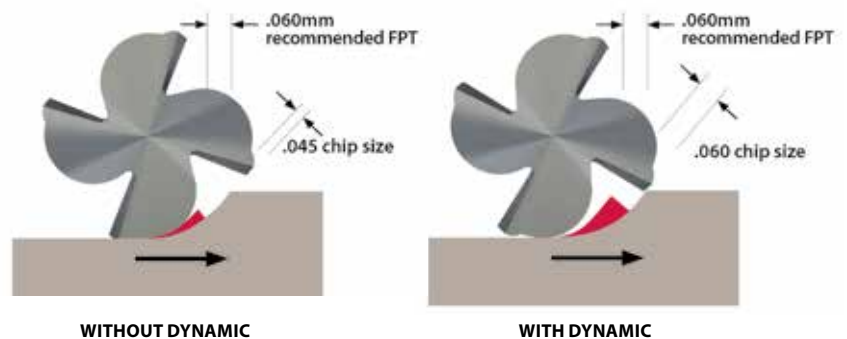
## DYNAMIC MOTION TECHNOLOGY IS A GAME-CHANGER.



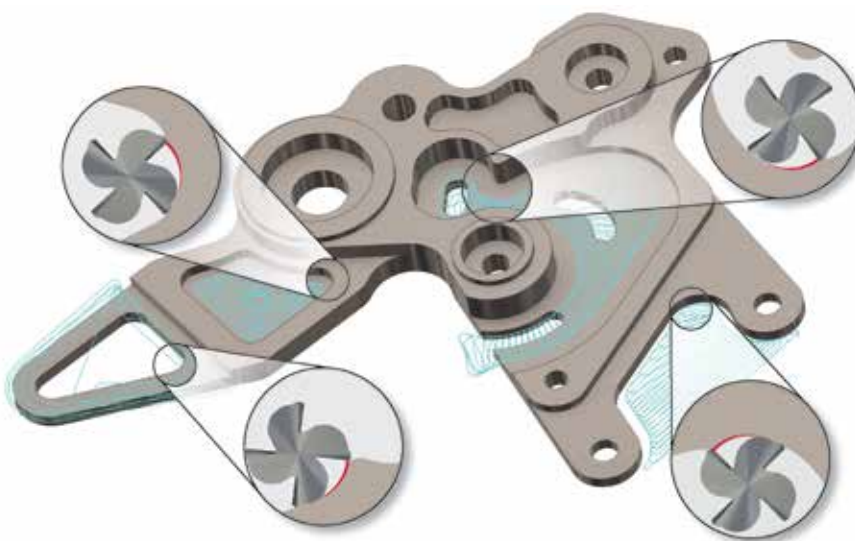
Dynamic Motion toolpaths maximize safe engagement and can reduce cycle times by 25 to 75%. Dynamic Motion uses a proprietary set of rules to analyze material removal, constantly changing the cut motion based on the stock at that moment. The results are radically shorter cycle times, as well as longer tool and machine life.

### The secret is in the chips.

A consistent chip load is crucial to an efficient cut. Mastercam's Dynamic toolpaths calculate the precise peak efficiency of the tool, material, and speed. When you get it right, heat is taken away in the chips, keeping the tool and part cool to the touch. You see it in uniform chip size. You hear it in how the machine runs. You'll appreciate it in dramatically shorter run times, fewer tool replacements, and a much stronger bottom line.



The magic of Dynamic toolpaths is driven by the recommended chip load for the tool, the optimum feed rate, and recommended surface speed.



### Optimum cutting on any geometry.

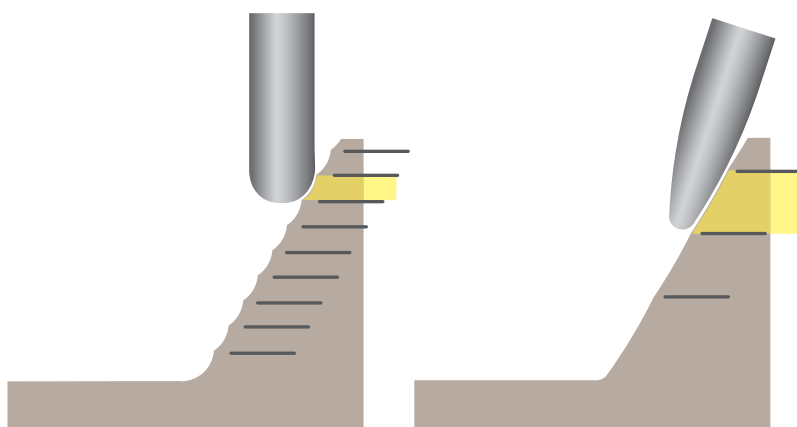
Dynamic Motion maintains conditions across the entire cut by calculating optimum feed rate for a given material, tool, and tool diameter. You will see that chip size never varies. You will hear the difference, too. No chirping, squealing, or chatter. Just fast, consistent, and safe Dynamic Motion.

For more information, visit  
[MastercamDynamic.com](http://MastercamDynamic.com)

## ACCELERATED FINISHING TECHNOLOGY GIVES YOU NEW WAYS TO WORK FASTER.

### The next leap forward in shorter cycle times.

Mastercam's Accelerated Finishing technology, simply called Finish, is the next leap forward in addressing today's innovative profile tools and processes aimed at greater efficiency and higher machining productivity. Collaborating with the industry's smartest tool manufacturers, our software takes full advantage of these new tool designs to dramatically reduce finishing cycle times while actually improving surface finish.



Traditional ball or bullnose endmills require many passes and leaves cusps to be finished later.

Newly designed finishing tools increase contact area. This means fewer passes and shorter cycle times – with equal or better surface finish.

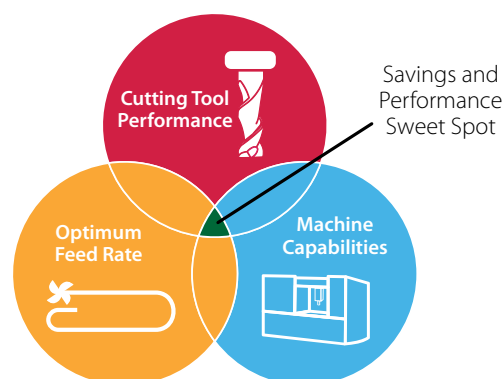
### Fewer passes. Better surface finish.

Leveraging new designs in large-radii tool profiles, Mastercam Accelerated Finishing technology maximizes tool contact area. That means fewer passes, flatter cusps, and a better surface finish.

### Innovations designed for your business.

Mastercam's Dynamic Motion toolpaths cut roughing times by up to 75%. And now with our exclusive Accelerated Finishing technology, total cycle times are again being dramatically reduced.

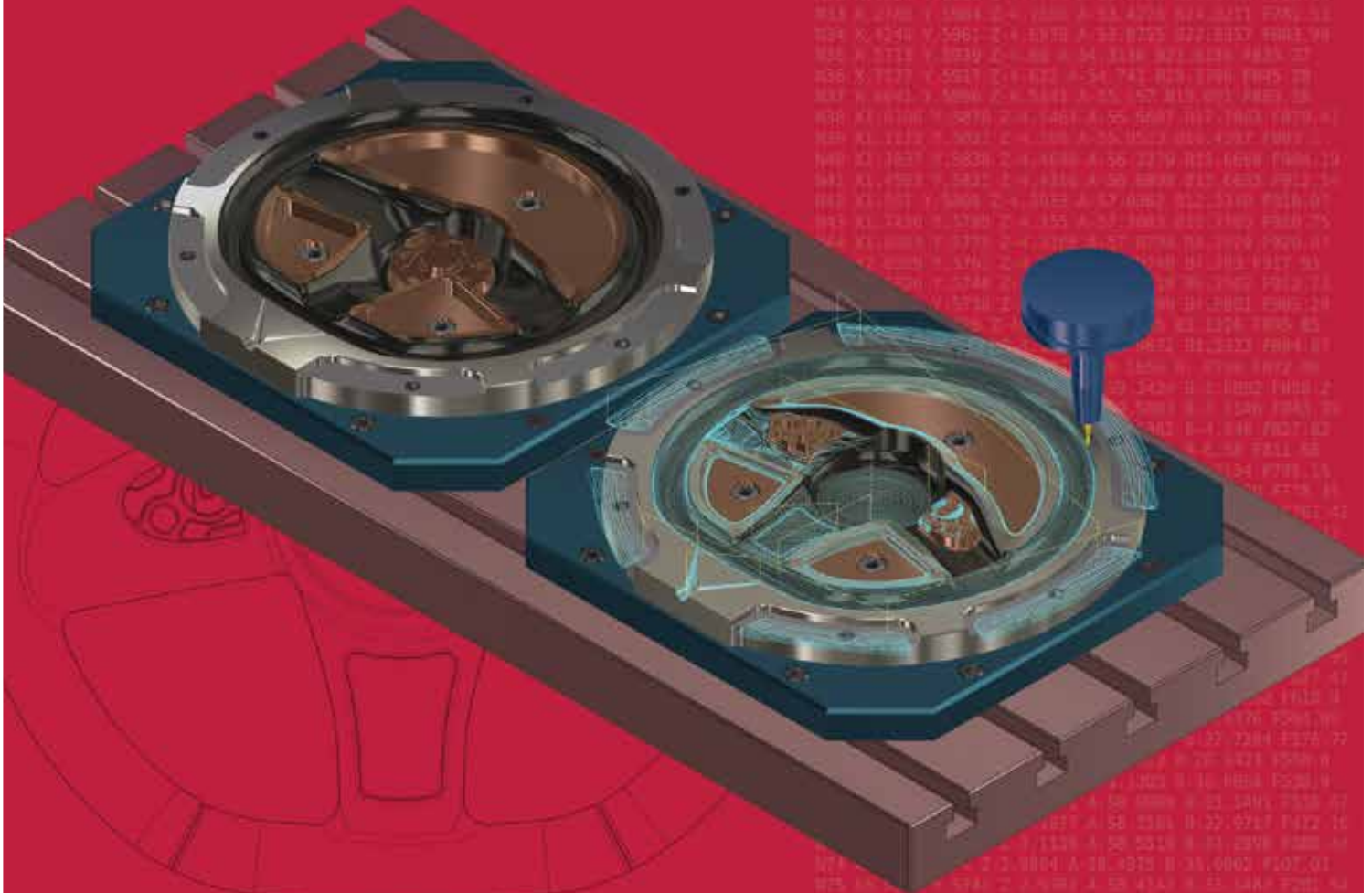
Maximum machining effectiveness is achieved at the intersection of optimal machine capability, maximum cutting tool performance, coupled with optimized toolpath strategies. Mastercam's Dynamic Motion and Accelerated Finishing technologies provide the toolpath performance needed to reach this goal.



Mastercam is designed to help you consistently hit the savings sweet spot of faster run times and less wear on machines and tools.



# TRUST THE LEADER FOR SPEED AND CONFIDENCE.



The most widely-used CAM software in the world is the most dynamic. Mastercam's embedded Dynamic Motion technology dramatically shortens production times while extending the life of your machine and tools. Mastercam Mill is rich in features yet still simple and intuitive to use.

**Mastercam**®

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY

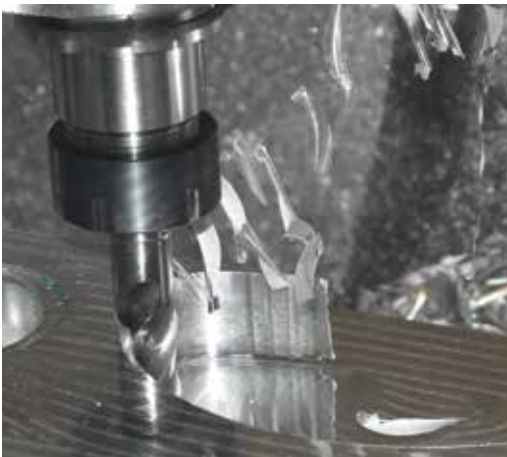




# INTELLIGENT MACHINING SAVES TIME AND MONEY.

## Mastercam's Dynamic Motion and Accelerated Finishing – a powerful combination.

For nearly a decade, Mastercam has been building Dynamic Motion into our software. It carves out massive amounts of material quickly while dramatically extending tool life — which immediately puts more money in your pocket. And with vendor-specific tool support and Mastercam's new Accelerated Finishing, your projects come off the machine faster and finer than ever before.



## MASTERCAM IS MORE WIDELY USED THAN ANY OTHER CAM PROGRAM



Rigorously  
shop tested



More experienced  
programmers



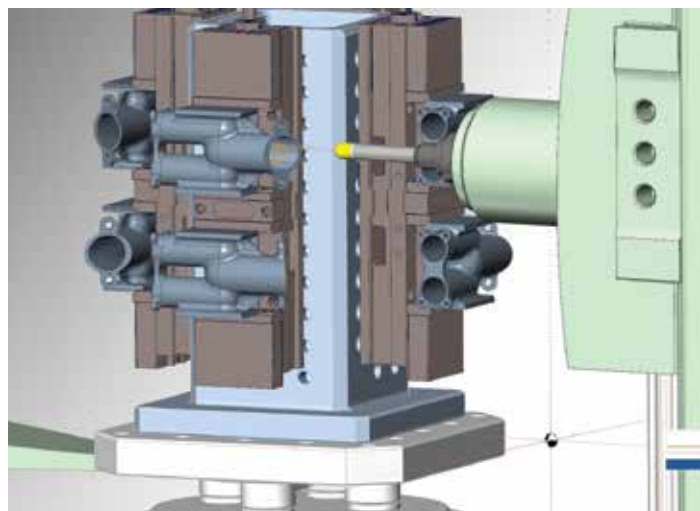
Strong support  
community

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

## Flexible and expandable.

Mastercam's comprehensive design means there's always more than one way to get the job done. Once you program a part, no matter how complex, you can modify any element of the job and immediately get updated toolpaths without starting over.

You can also build a library of your favorite machining strategies. Choose any of your saved operations, apply them to a part, and Mastercam helps adapt them to the new model. Because Mastercam Mill is fully integrated CAD/CAM, it's fast, easy, and productive. The way programming should be.



Mastercam's active Stock Model, Toolpath Verification, and Simulation mean increased confidence on every project. And tool library support including CoroPlus® and MachiningCloud help 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**.

# Mastercam<sup>®</sup> MILL

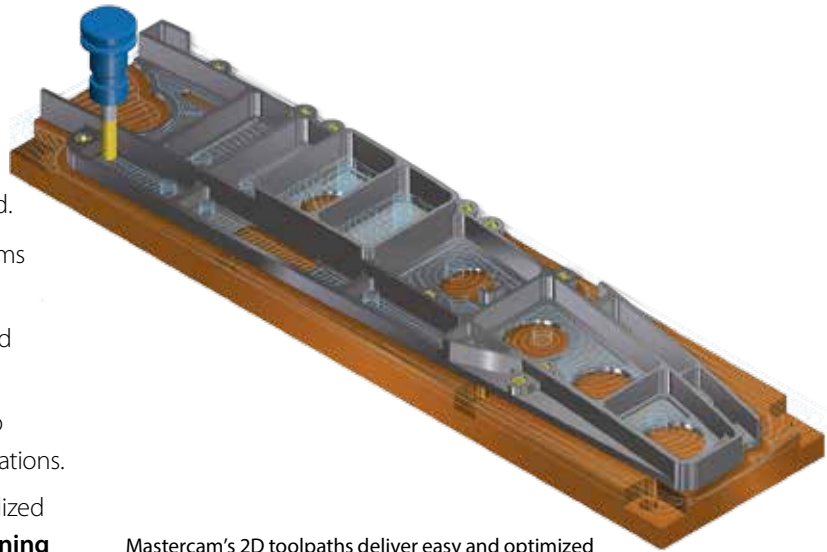
## 2D MACHINING

### Serious 2D capability.

Your daily needs for 2D machining can range from simple to very complex. Mastercam Mill delivers the tools you need.

- **Feature Based Machining (FBM)** automatically programs prismatic solids drill holes, contours, and pockets.
- Complete and easy control of approach, start points, and entry methods.
- **Contour and pocket remachining** use smaller tools to automatically clean out material left from previous operations.
- Precision chip control for a wide set of tools, plus specialized tool support including ISCAR<sup>®</sup>'s **High Efficiency Machining (HEM)** tool set and more.

Dynamic Motion powers much of our 2D suite, constantly adapting to create smoother, safer motion and making better use of the entire tool. Check out [Mastercam.com/dynamic](http://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. Our refined 3D toolpaths give you a smooth, precision finish to please even your toughest customers.

- Cut multiple surfaces, solid models, and STL data.
- **Dramatically efficient roughing** powered by Mastercam's Dynamic Motion technology.
- Constant scallop machining maintains a consistent finish on sloped and flat surfaces alike.
- Constant-Z rest milling (remachining) identifies and machines areas to be cut with a smaller tool.
- **Hybrid finishing** creates a single toolpath that changes cut methods as the slope of the model changes.
- **Pencil tracing** walks a tool along the intersection of surfaces to clean out hard-to-reach areas.





## 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:

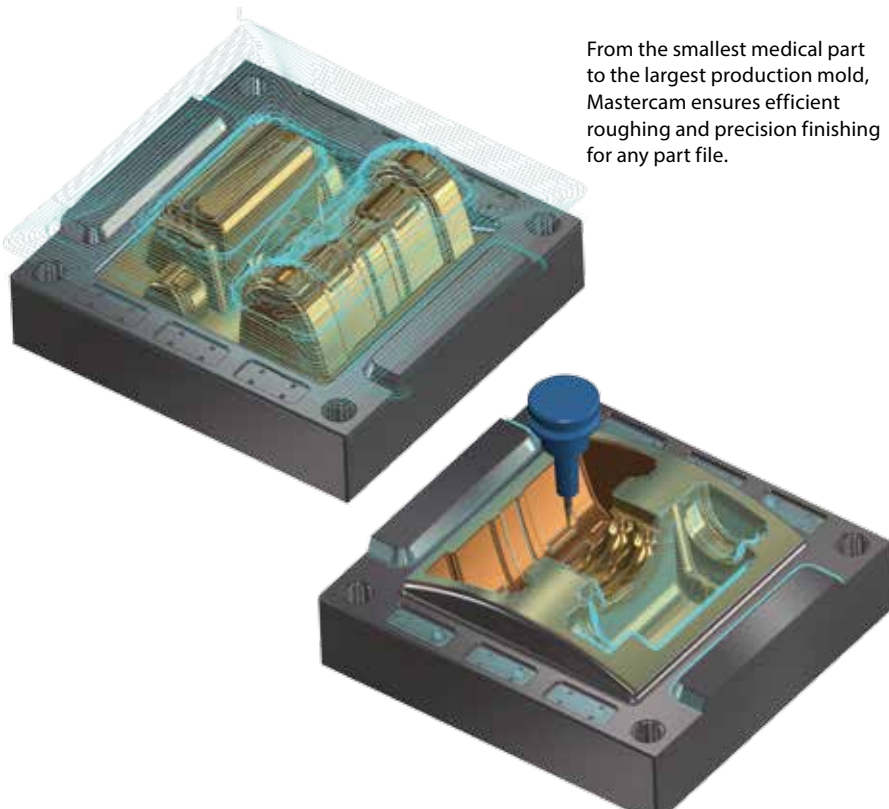
- **Multisurface 5-axis** roughing and finishing (including depth cuts), plunge roughing, and flowline machining.
- Swarf machining over multisurface floors.
- **Advanced gouge checking**, a "safe zone" around the part, and safe linking between operations.
- Fast, simple 5-axis trimming and stock-aware 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 multi-bladed 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.



From the smallest medical part to the largest production mold, Mastercam ensures efficient roughing and precision finishing for any part file.

### TIME AND MONEY

#### 100 Hastelloy parts cut with and without Dynamic toolpaths.

<u>With</u>	<u>Without</u>
40 minutes	5 hours
1.5 inserts per part	12.5 inserts per part
40 min. x \$100/hr. = \$66	5 hr. x \$100/hr. = \$500
1.5 inserts @ \$25 = \$37.50	12.5 inserts @ \$25 = \$312.50
\$103.50 per part x 100 parts = <b>\$10,350</b>	\$812.50 per part x 100 parts = <b>\$81,250</b>

**Real world savings of 87%!**

For more information,  
visit [MastercamMill.com](http://MastercamMill.com)

LATHE

# FAST, EASY, AND PRECISE TURNING.



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

**Mastercam**®

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY





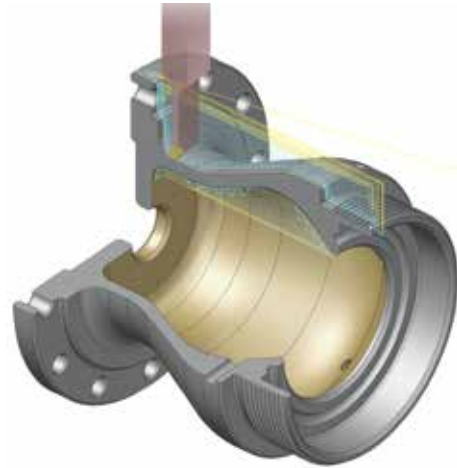
# POWERFUL, FLEXIBLE TOOLS FROM THE MARKET LEADER.

## Mastercam Lathe gives you a set of tools that streamline your entire process.

From accepting any CAD file to Dynamic roughing and precision finishing, Mastercam Lathe gives you a variety of techniques to turn all of your parts exactly as you need them.

### Efficient programming, designed for modern manufacturing.

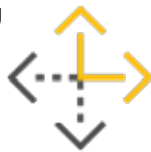
Mastercam Lathe delivers a set of basic and advanced programming tools, with greatly expanded options when paired with Mastercam Mill. Easy rough, finish, thread, groove, bore, and drill routines combine with C/Y-axis machining to cut any job. Dependable toolpath verification ensures your parts are done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



Mastercam Lathe will easily cut your turned parts and let you seamlessly move between operations or even machines with the same part.

## A NEW WAY TO TURN

Partnering with Sandvik Coromant, Mastercam delivers automated toolpaths for the groundbreaking new PrimeTurning™ method and CoroTurn® Prime tools. Mastercam's new toolpath strategy takes full advantage of CoroTurn Prime tool's unique properties, allowing you to perform turning operations in all directions, resulting in unprecedented productivity gains.



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

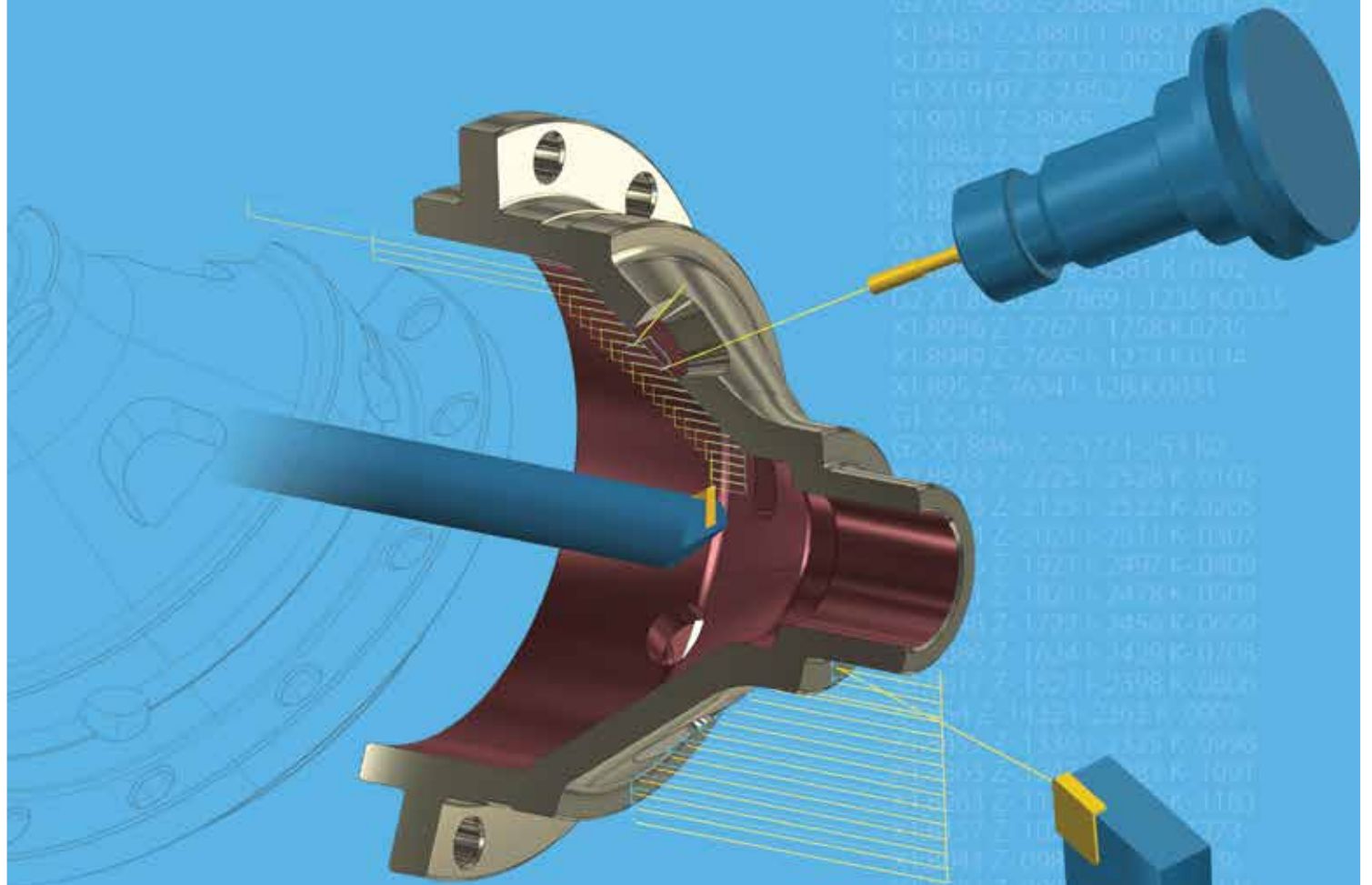
## Key turning features.

- **Quick Toolpaths** let you program in a few clicks.
- Intelligent ID and OD roughing.
- **Dynamic Motion** roughing extends insert life.
- Rough parts in sections or over the entire model.
- Fast facing including roughing and finishing.
- Grooving with multiple depth cuts, including peck motion and full-radius plunge turning.
- Complete and easy threading.
- Easily control chip breaks on stringy material.
- **Automatic gouge checking** on the tool's front and back.
- Chuck, part, steady rest, and tailstock detection.
- Open, quickly align, and directly machine a solid model.
- Quick-turned profiles for uniform and non-uniform parts.
- **Full milling support available** for machines with live tooling for G- and Y- axes.

For more information, visit [MastercamLathe.com](http://MastercamLathe.com)

MILL-TURN

# RUN WITH CONFIDENCE. RUN WITH PRIDE.



The most widely-used CAD/CAM software in the world gives you the confidence to automate your complex programs on today's high-powered, multi-streamed, multitasking machining centers. Program it right the first time, every time.

**Mastercam**®

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY





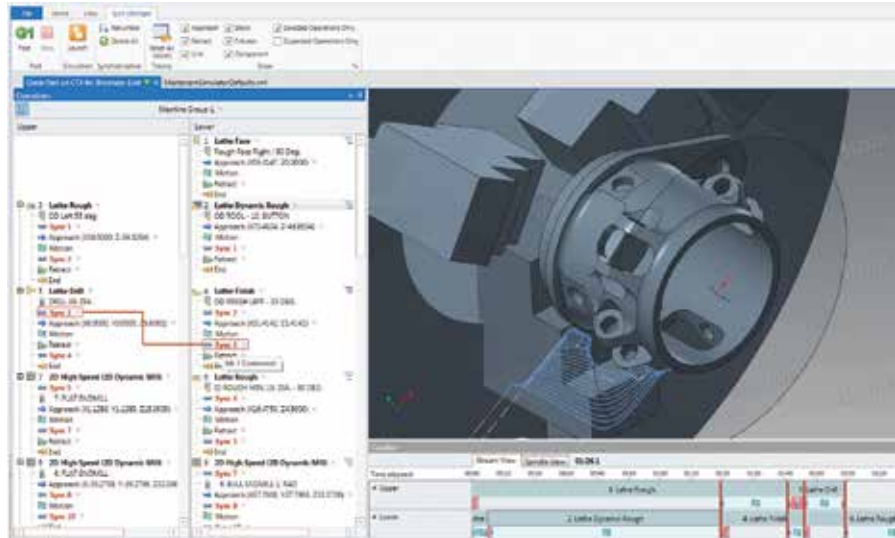


# MASTERCAM MILL-TURN SIMPLIFIES YOUR MOST COMPLICATED PROJECTS.

**Mastercam Mill-Turn simplifies today's high-powered, multi-stream machining centers.**

Mill-Turn delivers the best in shop-tested cutting techniques combined with the latest in machine and toolpath management and verification.

Your workflow is easy. Choose your machine and Mastercam Mill-Turn automates part transfers, toolplanes, stock definition, and setup. Then apply your toolpaths and syncing, verify your project with simulation, and post your code. Changes along the way are fast and easy — the way programming should be.

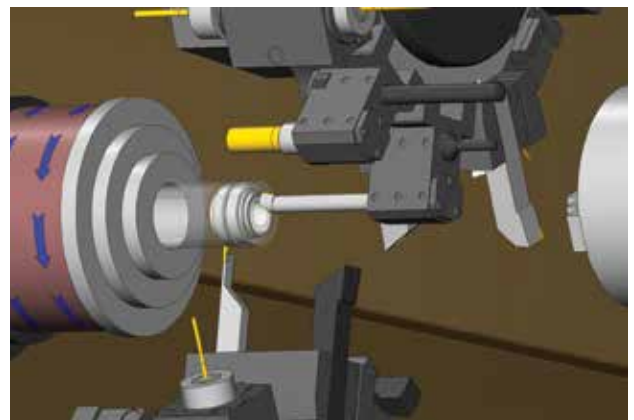


## Get the most out of your machines with Sync Manager.

Mill-Turn's Sync Manager is a user-friendly way to optimize part cycle times and avoid collisions before your part ever reaches the machine. Easily navigate our Gantt-style timeline and vertical stream interface to coordinate operations and track cycle time estimates.

## See it's right. Know it's right.

All of your machine's components and your project's machined stock 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 tailstock, and explore ways to optimize your processes with simulation. Also, you will be able to view all streams and statistics of the entire machining process, and have the capability to jump to any point in the machining process with the click of a button.



Get the most from your machine with multi-station and half-index tool support.

For more information, visit [MastercamMillTurn.com](http://MastercamMillTurn.com)



# ROBUST EDM TOOLS DELIVER EVERYTHING YOU NEED.



Mastercam gives your shop the best possible foundation for fast, efficient wire EDM cutting. Mastercam Wire delivers powerful comprehensive wirepaths in a streamlined, easy-to-use interface.

**Mastercam**<sup>®</sup>



## THE MASTERCAM DIFFERENCE.

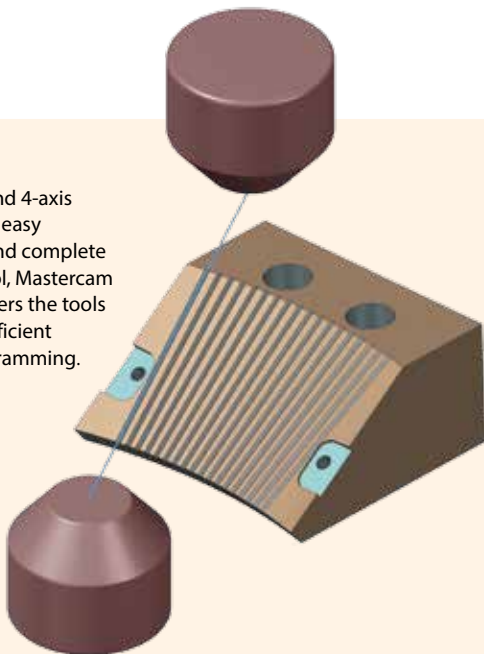
### Having the best software is only one ingredient for success.

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



Support for Agie EDM with Agievision controls.

From 2- and 4-axis cutting to easy syncing and complete tab control, Mastercam Wire delivers the tools for fast, efficient wire programming.



### 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.
- Wirepath filtering to significantly reduce file sizes.

### Mastercam Wire makes it easy to expand your shop's capabilities.

From basic 2-axis contouring to complex 4-axis motion, Mastercam ensures that you're 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.



For more information, visit [MastercamWire.com](http://MastercamWire.com)

# SIMPLE OR COMPLEX, WE MAKE ROUTER MACHINING EASY.



The most widely-used CAD/CAM software in the world is now the most dynamic. Mastercam's embedded Dynamic Motion technology dramatically shortens production times while extending the life of your machine and tools. Mastercam Router is rich in features yet still simple and intuitive to use.

**Mastercam**<sup>®</sup>

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY



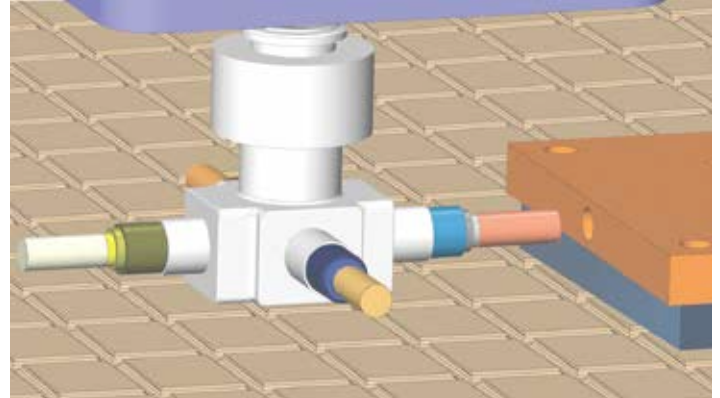


## FLEXIBLE AND EXPANDABLE.

Mastercam Router offers solutions for all your shop's wood or composite challenges — 2D, 3D, or multiaxis.

Once you program a part, no matter how complex, you can modify any element of the job and immediately 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. **Automatic Toolpathing** brings in parts from today's top design packages to help speed flat panel work.



Mastercam Router streamlines multiple tool programming including block drills and aggregate heads.

### A comprehensive package of powerful tools.

2D machining can range from simple to very complex. Mastercam Router delivers powerful 2D tools from 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 interface gives you complete control over the three crucial elements of multiaxis machining: cut pattern, tool axis control, and collision avoidance.



Part and toolpath nesting increase project yields and profitability.

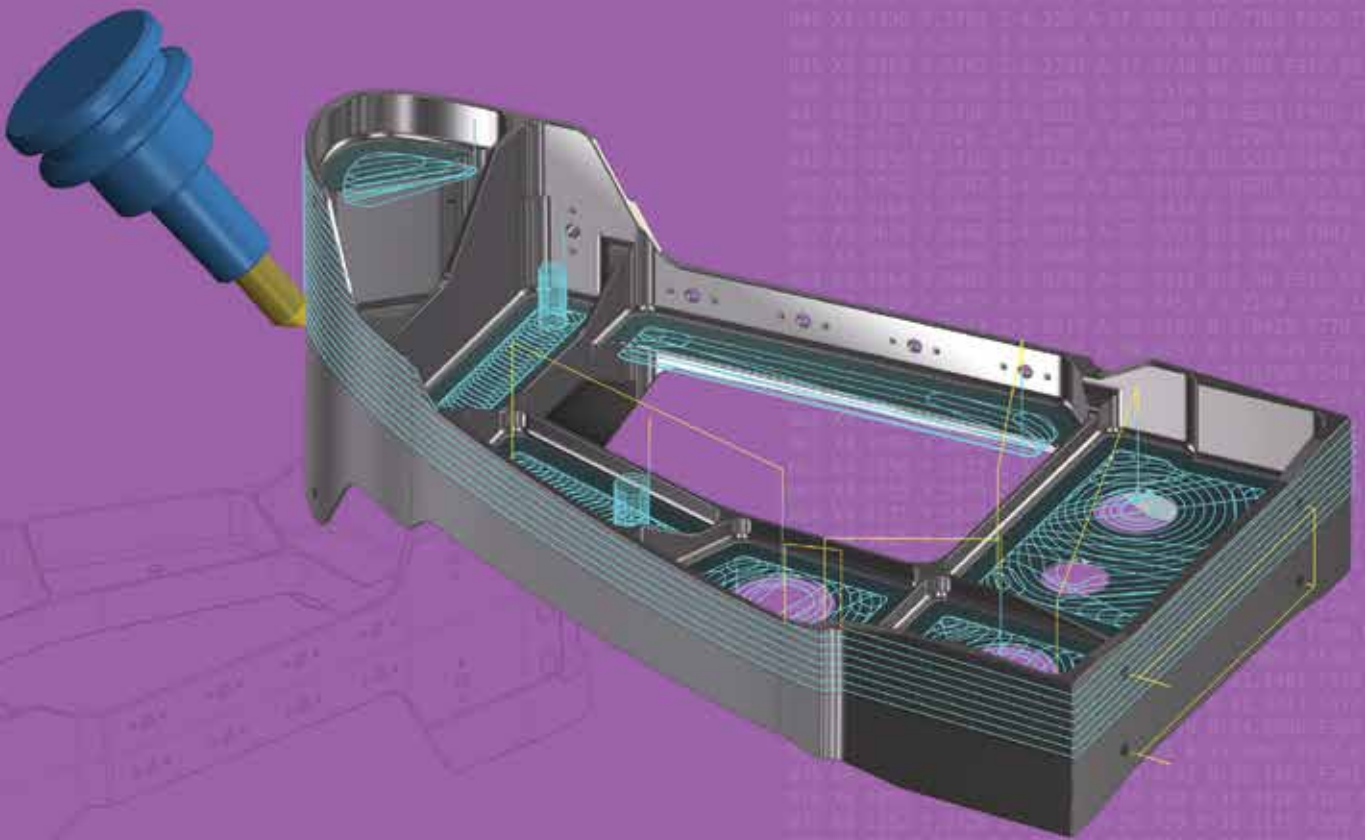


With your standalone license of **Mastercam Router**, you now have the option of also running the corresponding version of **Mastercam for SOLIDWORKS**.

For more information, visit [MastercamRouter.com](http://MastercamRouter.com)



# THE BEST OF BOTH WORLDS.



SOLIDWORKS users will feel at ease with the Mastercam machining tree, which delivers quick access to any point in the machining process. Mastercam users will recognize the shop-tested parameter screens and options with which they are already familiar.

**Mastercam**®

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY





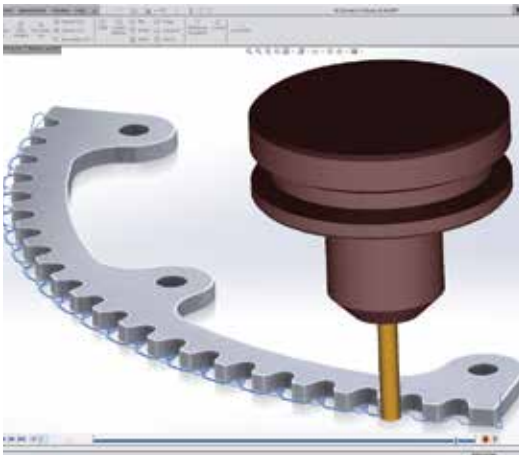


# MASTERCAM IS A SOLIDWORKS GOLD PARTNER.



**Mastercam for SOLIDWORKS combines the world's leading modeling software with the world's most widely-used CAM software.**

With Mastercam toolpaths integrated directly within the SOLIDWORKS environment, the toolpaths are applied directly to the part or assembly. And intelligent use of Design Tables and multiple Configurations makes working with families of parts easy.



## MASTERCAM IS MORE WIDELY USED THAN ANY OTHER CAM PROGRAM



Rigorously shop tested



More experienced programmers

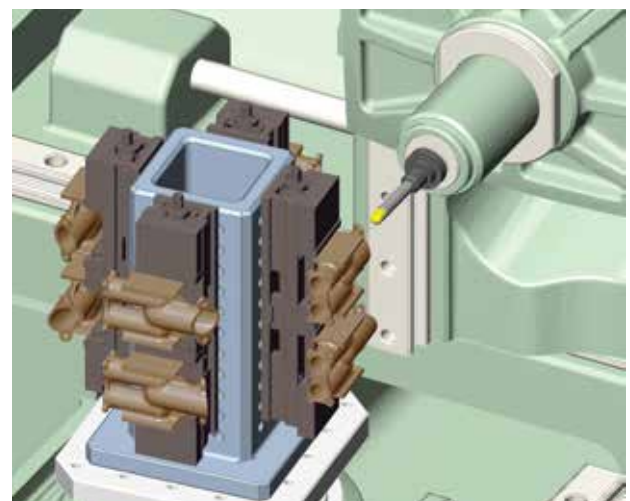


Strong support community

As a Certified Gold Partner product, Mastercam for SOLIDWORKS delivers the absolute best in 2- through 5-axis milling and turning CAD/CAM integration.

## Flexible and expandable.

Once you program a part, no matter how complex, you can modify any element of the job, and immediately get updated toolpaths. You can also build a library of your favorite machining strategies, apply them to a part, and Mastercam helps adapt them to the new model. Because Mastercam for SOLIDWORKS is a fully integrated SOLIDWORKS Certified Gold Partner, it's fast, easy, and productive. The way programming should be.



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



You can choose to buy **Mastercam for SOLIDWORKS** alone, or you can purchase a standalone license of **Mastercam Mill, Lathe, or Router** and have the option of also running the corresponding version of **Mastercam for SOLIDWORKS**.

# Mastercam<sup>®</sup> for SOLIDWORKS

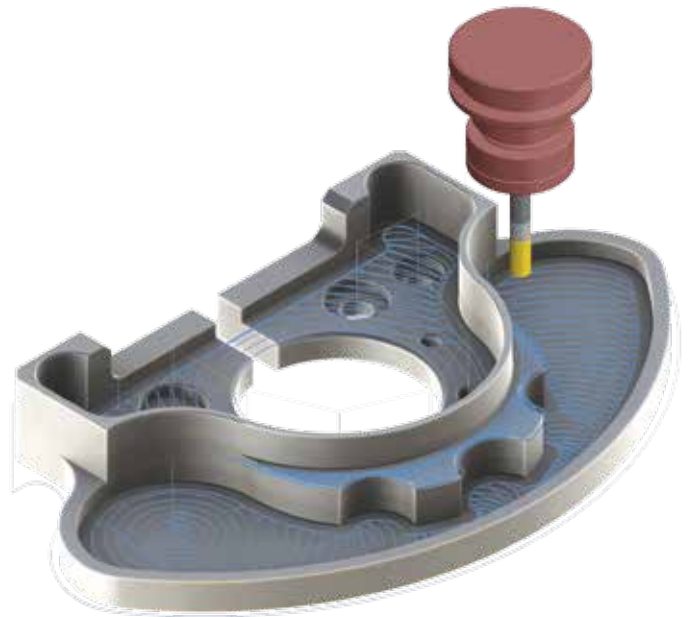
## 2D MACHINING

### Serious 2D capability.

Your daily needs for 2D machining can range from simple to very complex. Mastercam for SOLIDWORKS delivers the tools you need.

- **Feature Based Machining (FBM)** automatically programs prismatic solid model pockets, contours, and drilling routines.
- **Contour and pocket remachining** use smaller tools to automatically clean out material left from previous operations.

Dynamic Motion powers much of our 2D suite, constantly adapting to create smoother, safer motion.



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

## 3D MACHINING

### Our finish is more finished.

Mastercam delivers superior finishes and optimized cycle times. Our smart hybrid finishing creates a single toolpath that changes cut methods as the slope of the model changes. And our refined 3D toolpaths give you the smooth, precision finish to please even your toughest customers.

From the smallest medical part to the largest automotive mold, Mastercam for SOLIDWORKS ensures efficient roughing and precision finishing for any product.



- **Dramatically efficient roughing** powered by Mastercam's Dynamic Motion technology.
- Constant scallop machining maintains a consistent finish on sloped and flat surfaces alike.
- Constant-Z rest milling (remachining) identifies and machines areas that need to be cut with a smaller tool.
- **Pencil tracing** walks a tool along intersections to clean out hard-to-reach areas, such as internal fillets.

### TIME AND MONEY

"Mastercam for SOLIDWORKS is making my job easier. I've been using Dynamic toolpaths to get better finishes. It works so well that I'm getting work done in half the time."

Nolan Farmer, Owner  
Farmer Plastics & Machining, Inc., Jamestown, CO



## MULTIAXIS MACHINING

### Complexity simplified.

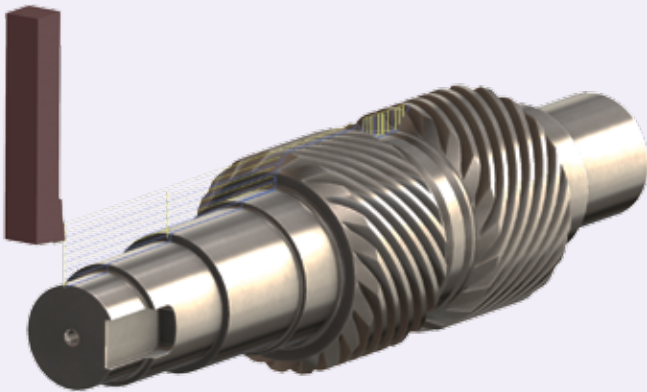
Mastercam for SOLIDWORKS gives you streamlined control over the three crucial elements of multiaxis machining: cut pattern, tool axis control, and collision avoidance. From 4-axis rotary and roll die cutting to multiblade impellers with tight internal cuts, Mastercam helps simplify even the most complex 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** and a 5-axis “safe zone” around the work piece.
- Fast, simple 5-axis trimming and stock-aware drilling.
- Create full 5-axis motion from a 3-axis toolpath.



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



For more information, visit  
[MastercamForSOLIDWORKS.com](http://MastercamForSOLIDWORKS.com)

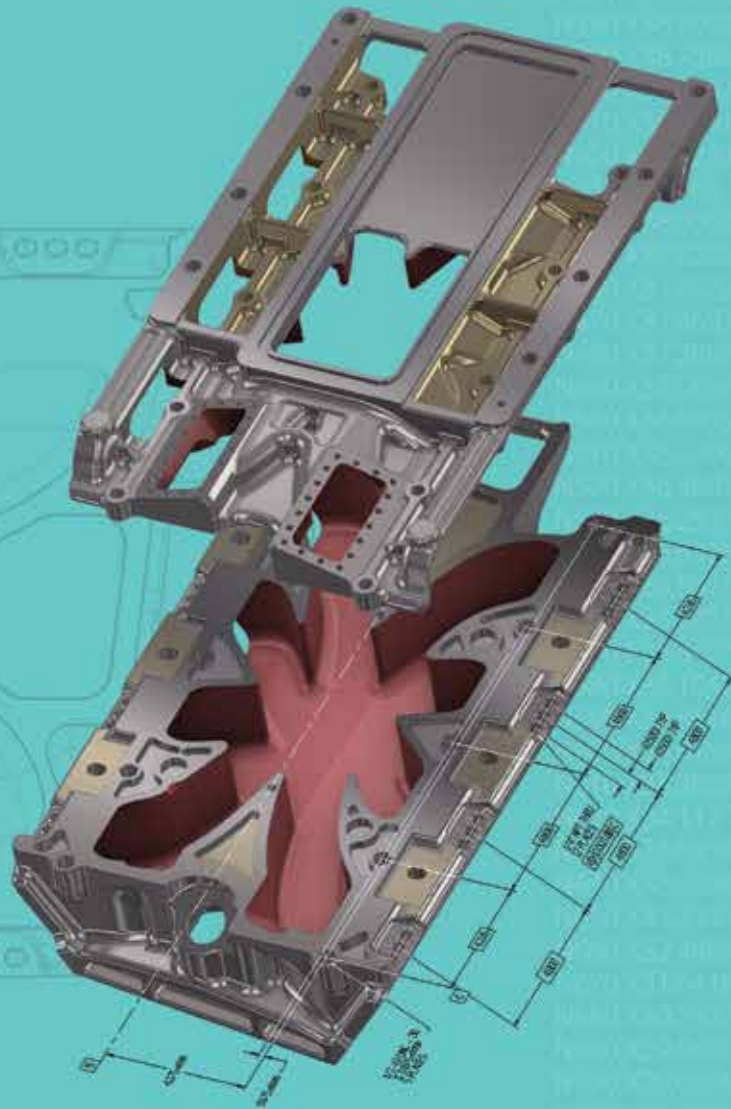
## TURNING

### Fully integrated turning for SOLIDWORKS.

Mastercam for SOLIDWORKS' powerful turning strategies complement our milling toolpaths, giving you a complete toolkit from basic finishing, to face and cross contour and drilling, and more. Toolpath verification helps you run the most complex toolpaths on your machine, and Machine and Control Definition ensure your parts are done right the first time.

- Easy roughing, finishing, threading, grooving, boring, drilling, and cut off.
- **Dynamic Motion** roughing extends insert life.
- Intelligent ID and OD roughing, including roughing to a boundary for castings.
- Tool Inspection lets you automatically stop machining, allowing you to check the insert during your roughing, finishing, and grooving operations.

# CAD TOOLS FOR CAM PROGRAMMERS.



Mastercam's streamlined CAD makes design work easier than ever. Each piece of geometry is 'live,' letting you quickly make modifications until it's exactly what you want.

**Mastercam**®

POWERED BY MASTERCAM'S  
DYNAMIC MOTION™ TECHNOLOGY

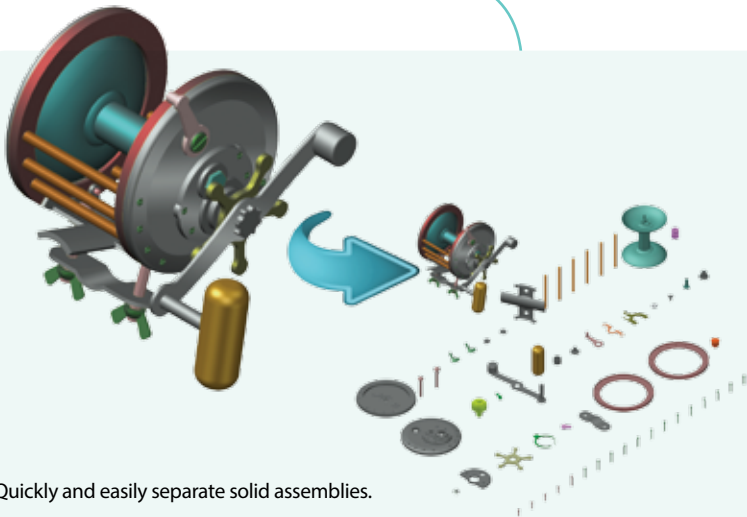






# MASTERCAM'S MODELING AND PREP TOOLS GET YOUR PARTS ON AND OFF THE MACHINE QUICKLY.

Whether you're bringing in a file from an outside CAD package or designing one yourself, Mastercam's powerful CAD engine gives you control over the final details of even the most complex jobs.



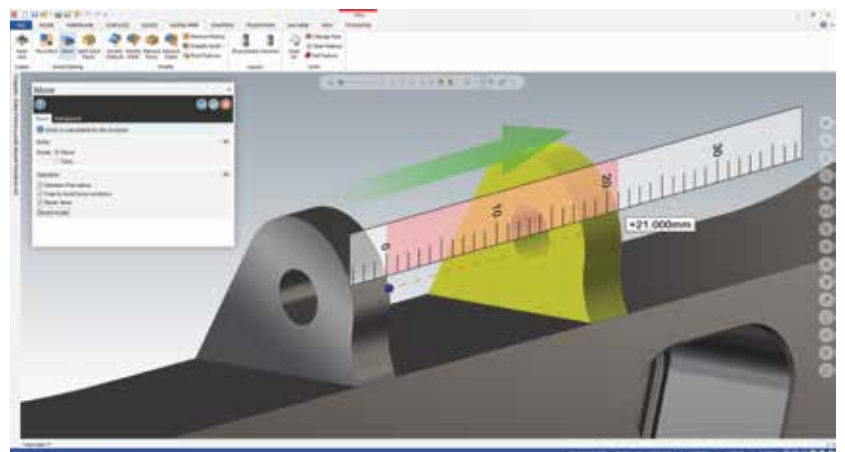
Quickly and easily separate solid assemblies.

## Accept files from virtually any source.

Mastercam accepts file formats from whatever system you need, including 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 an area, create an electrode, or just make sure your fixtures are represented on the part. Mastercam includes a powerful set of prep tools to make sure the process goes smoothly. From robust surface creation and editing to "push-pull" solid model editing, Mastercam gives you the tools to bring a part from the designer's desk to your machine, fast.



Push, pull, remove, and directly edit features on imported solids, even if they have no history.

## ...or building your own 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 and surface modeling to history-based solid modeling. A true hybrid modeling system, Mastercam lets you create, combine, and machine whichever CAD geometry suits you best.

For more information, visit  
[MastercamDesign.com](http://MastercamDesign.com)



# MASTERCAM'S SPECIALIZED APPS

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, there's a Mastercam app available.



## Port Expert

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



## Blade Expert

Highly-efficient toolpaths for multi-bladed parts, delivering superior blades, splitters, floors, and fillets.



## ProDrill

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



## 5-Axis Swarf Cutting

One of the most popular multiaxis techniques, 5-axis swarf machining expands the types of jobs you can do and can be easily upgraded to the full Multiaxis product.



## File Translators

Specialty data translators for UG/NX, Pro/E, and CATIA ensure you can read and use the files you need.



## 5-axis Drilling and 5-axis Curve Machining

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



## Mastercam Productivity+™

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

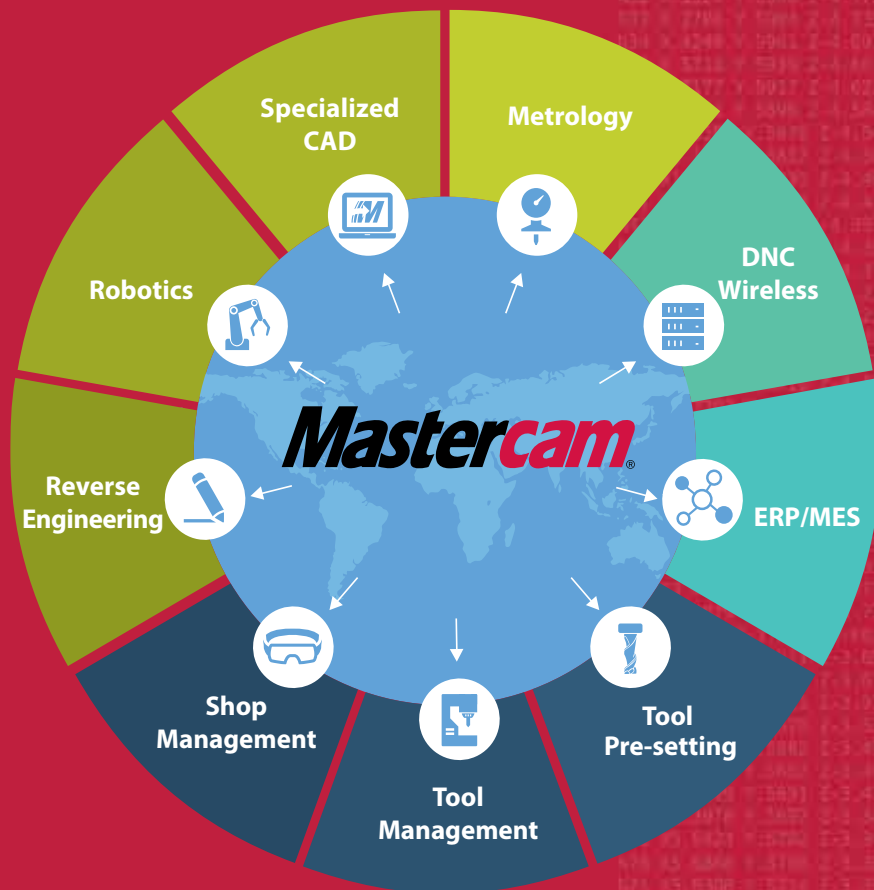


## Art

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,  
visit [Mastercam.com](https://www.mastercam.com)**

# MAXIMIZE YOUR PRODUCTIVITY



**Mastercam works with industry leaders to streamline your shop from start to finish.**

Mastercam is supported by an array of best-in-class vertical solution integrators whose specialized applications boost production across the entire shop floor and production process. Whether it's robotics, metrology, tool management and pre-setting, DNC, process/document management software, toolpath verification, or specialized post processors, our partnership with these top industry solution providers helps ensure you are achieving maximum production for your investment.

# TOOLS TO MAKE YOURSELF COMPETITIVE



## Mastercam University

Online, video-based training that is developed exclusively by CNC Software, Inc. Sharpen your skills on your own schedule, use it to bolster your resume, and get started on the path to Mastercam Certification with the same training used by corporate staffers and Resellers. Mastercam U is easy to use, gives you real-world training applications, and covers all levels of Mastercam skills from basic to advanced.

[mastercamu.com](http://mastercamu.com)



## Mastercam Certification

If you're looking to set yourself apart as a skilled Mastercam programmer in the increasingly competitive job market, Mastercam Certification is the answer. Our Mastercam Associate Level Certification is acquired by achieving scores of 80% or above in select Mastercam U courses, and our Mastercam Professional Level Certification is a proctored test administered by a Certified Mastercam Instructor. Both will give you the competitive advantage you're looking for.





# Mastercam<sup>™</sup>

MANUFACTURING LAB<sup>™</sup>



## WE'RE BREAKING TOOLS SO YOU DON'T HAVE TO.

The Mastercam Manufacturing Lab<sup>™</sup> is an essential testing ground for immediate and hands-on feedback. We run toolpaths and prove-out new techniques in the same conditions you face everyday. We regularly cycle through new equipment so we can replicate a variety of shop conditions and capabilities.

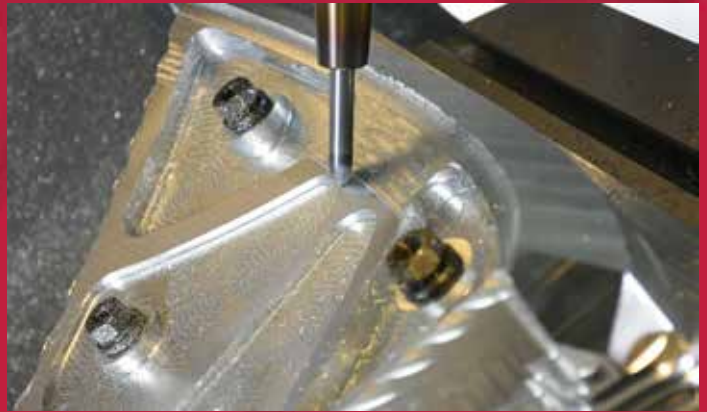
We work with other industry leaders to test their new technology, too. Our goal is to make sure that Mastercam delivers the best in programming and powerful support for every element of your shop.

We may break a few tools as we test the limits of new innovations. But our relentless testing and pushing of limits will give you the confidence to know that with Mastercam you can remain on the cutting edge.



## Shop tested. User approved.

Whether it's proving out new techniques in our Manufacturing Lab or working with shops to stress-test toolpaths, Mastercam is rigorously tested in real-world conditions before it ever reaches your shop.



*Shown here: Mastercam offers valuable insight to Emuge by testing their new "circle segment endmills" on a precision space station docking ring.*

### About Us

CNC Software, Inc. is dedicated to providing state-of-the-art software tools for CAD/CAM manufacturing markets. Our single focus is to provide superior software products based on our users' needs to solve simple to complex design and machining problems.

#### CNC Software, Inc.

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POWERED BY MASTERCAM'S  
**DYNAMIC MOTION™** TECHNOLOGY



# Mastercam®

Be Dynamic.