



**Receive New Releases First**  
**Exclusive Updates**  
**Maintenance-only Perks**

Mastercam's Maintenance Program is a software support plan providing software upgrades as soon as they become available, technical support, Maintenance-only perks, and much more.

Whether you are a designer, engineer, machinist, or business manager, you benefit from Mastercam's Maintenance Program. You have access to the latest versions of Mastercam before anyone else. And you get the newest technology available along with exceptional support to protect your investment and ensure continuous productivity improvements. The Mastercam Maintenance Program makes it so easy to budget by streamlining costs.

***"Being on Mastercam Maintenance enables me to have access to the latest tools in order to stay competitive. The new high speed toolpaths have allowed me to decrease cycle times and increase tool life while providing a superior part finish."***

Tony Johnson  
United Machine & Metal Fab, Inc.  
Conover, NC

# **Mastercam<sup>®</sup>**

## **Software Maintenance**

Subscribers to the Mastercam Maintenance Program receive these great services:

- Access to updates for the most recent Mastercam software.
- Access to a free Maintenance Enhancements class on Mastercam University.
- Prioritized telephone and e-mail support.
- Quarterly *Shop Talk* newsletter that focuses on technical news and solutions.

### **Updates and Enhancements**

Get access to the most current Mastercam release. The Mastercam development team is always working on improving Mastercam products and implementing requests from customers.

### **Mastercam University™**

Come up to speed fast with the "What's New" online class, free to Maintenance customers. This Mastercam University class is an overview of some of the new features in each new release. It includes videos and a written overview. The class also provides sample files so you can practice what the videos teach.

### **The Mastercam Quarterly *Shop Talk* Newsletter**

*Shop Talk* ensures our Maintenance customers are up to date with the latest technical news and solutions from Mastercam. *Shop Talk* is packed with tech tips and other hot topics. It is delivered to Maintenance customers every quarter through e-mail.

### **Support and Services**

Resellers around the world offer their Maintenance customers many perks, such as priority technical support, webcasts, training, discounts on training, post processors, and more. Contact your local Mastercam Reseller to see what is being offered in your area.

### **Enhancement Request Privileges**

You can provide input on adding functions in Mastercam to make your job easier. Customer requests help us determine which features to add to future releases.

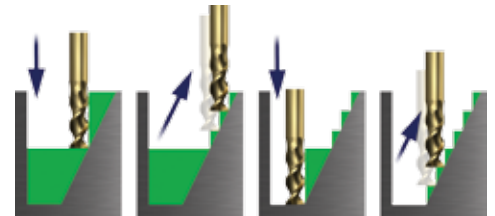
# Mastercam

## CAD/CAM SYSTEMS

### Just a few of the Mastercam Maintenance benefits

#### Dynamic Mill and OptiRough Toolpaths – Maximize Your Potential

The Dynamic Mill toolpath is specially designed to utilize the full length of the cutter, often eliminating the need for multiple depth cuts. The OptiRough toolpath takes advantage of this new technology and removes large amounts of material quickly by utilizing smaller “step-up” cuts. Both toolpaths provide more consistent cutting conditions, allow use of the entire tool flute length, and remove more material, saving both time and money.



**Result: Time and money savings**

#### Traditional (Zigzag) Machining vs Dynamic Mill

POCKET TYPE	CYCLE TIMES	PARTS PER SHIFT
Dynamic Pocket	00:02:45	174
Zigzag Pocket	00:06:12	77

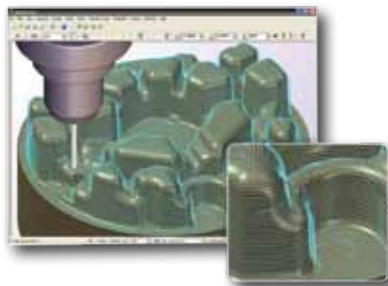
#### Traditional Machining vs OptiRough

POCKET TYPE	CUTTERS	TOOLPATHS	TIME
OptiRough	1	1	00:05:17
Zigzag Pocket	3	3	00:14:53

#### Smart Hybrid Finishing

Hybrid finishing intelligently blends two efficient cutting techniques (Constant Z cutting and Constant Scallop) into a single toolpath. The end result is a dramatically finer finish with less work.

**Result: Finer finish**



#### New Lathe Plunge Turn Toolpath

Designed in partnership with ISCAR Metals, Inc., this toolpath consists of custom roughing and finishing strategies specifically for ISCAR Cut Grip inserts. This toolpath strategy is highly efficient, achieving a high degree of accuracy with tight tolerances.

**Result: More efficiency & higher accuracy**

#### High Efficiency Machining (HEM)

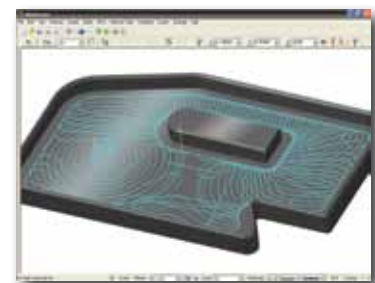
Selected 2D and 3D toolpaths now support ISCAR HEM and RCTF (Radial Chip Thinning Factor) speed and feed calculations. This generates cycle time improvements, more even tool wear, and a more consistent toolpath.

**Result: Improved cycle times & longer tool life**

#### High Speed Toolpaths—Dramatic Benefits, Even Without a High Speed Machine

High speed toolpaths create smooth, efficient motion that eliminates sharp angular moves. The benefits are faster cuts, smoother finishes, and less machine and tool wear, even with a conventional machine.

**Result: Faster cuts & smooth finish**



#### Enhancements from previous Mastercam Maintenance releases:

**Toolpath Refinement** - Some toolpaths can leave visual marks as the tool changes direction in a similar spot on each pass. Mastercam's 3D toolpath refinement solves this issue. **Result: Smoother finish**

**Multi-threading** - Gives you the power to segment complex tasks in a multi-core computer. Provides faster processing and the ability to continue working even while processing a toolpath. **Result: Faster processing speed**

**Feature Based Machining** - Delivers automated feature recognition and faster toolpath generation for mill and drill solid models. **Result: Dramatic time savings**

For a comprehensive list of all the features and benefits the Maintenance Program has delivered, visit [www.mastercam.com/value](http://www.mastercam.com/value).