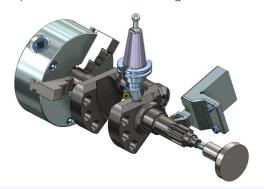


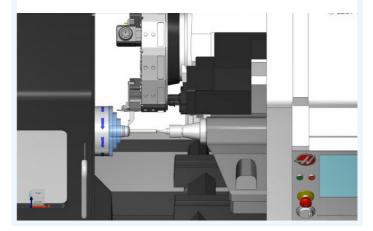
#### **3D Tooling Enhancements**

Mastercam's new Insert Design and Holder Designer help you quickly build your own assemblies for custom tooling or elements not in your library. 3D tool management is more convenient, with better visualization and selection options and the ability to "stop on contact" when mating inserts to holders.



#### **Machine Simulation**

Select lathes now have full machine simulation, giving a more precise understanding of the machine's interaction with the tooling and part.



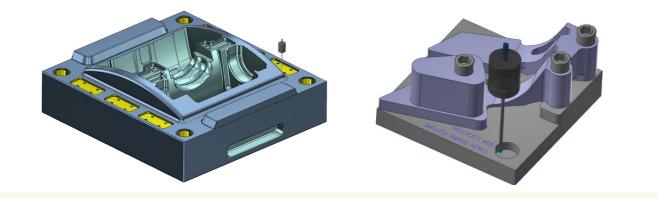
#### **Streamlined Mill-Turn**

The component library lets you save items such as chucks and jaws for quick use from one job to another. Improved machine configuration workflow in Mill-Turn speeds up and simplifies the product throughout.



#### **Productivity+™ Probing**

With Mastercam 2020, you no longer need special post processors or Renishaw machine files to post probing code. You can use the default Mill machine, making it much easier for any user to access Productivity+.



#### For more information, visit WHATSNEW.MASTERCAM.COM

**CNC Software**, Inc. 671 Old Post Road Tolland, CT 06084



Mastercam

# Mastercam, 2020 **HIGHLIGHTS**

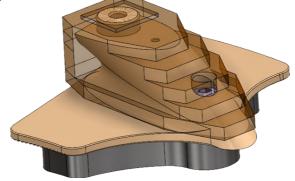
### Mastercam 2020 helps streamline your entire process, from job setup to job completion.

This highlight list is only a sample of the developments in Mastercam 2020. The latest version of our CAD/CAM software offers many new features, advancements, and time-saving innovations. Since different tools are important to different shops, you can visit whatsnew.mastercam.com for a more in-depth presentation of the latest improvements in Mastercam.



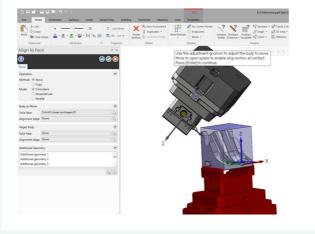
#### Translucency

You can now change the opacity level when Translucency (on the View tab) is toggled on. Use the Opacity slider under Translucent view on the Shading page to make adjustments.



#### Modeling and Geometry Control

Easily align merging geometry with target geometry as it comes in and have Mastercam separate and autonumber your merged layers. Easier solid face alignment, enhanced surface control, and expanded wireframe curve-from-entity controls also streamline modeling.



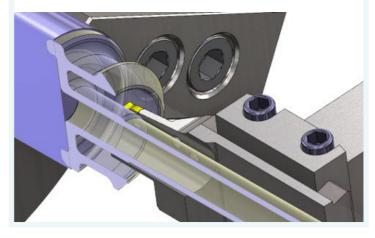
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## **DESIGN AND VISUALIZATION**

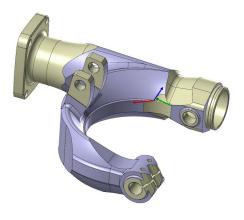
#### Section View

Improvements in material display deliver a more crisp and realistic view of your sectioned parts.



#### Faster, Easier Solid Chaining

Chain selection can be set to see only bosses or cavities on a solid face. Multiple, unconnected chains can be created in the same chaining session. New shortcuts let you select similar fillets, holes, or features for chaining.



MASTERCAM 2020 HIGHLIGHTS for 🚺 MILL, 🛛 🔁 ROUTER and 🚺 MASTERCAM for SOLIDWORKS®

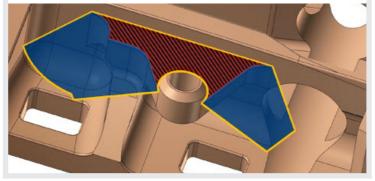
#### **Toolpath Hole Definition**

Hole making is easier with Toolpath Hole Definition now supporting the selection of solid features and lines, in addition to arcs, points, and AutoCursor positions. You can also pick all or some matching diameters and vectors.



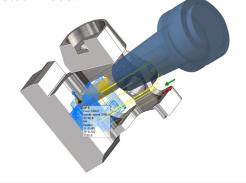
#### Multiple Air Regions

You can now have multiple air region chains, instead of only one per machining region for Dynamic Mill and Area Mill toolpaths, defining different safe regions in which the tool can travel.



#### **Rest Roughing with Holder Checking**

New for 2020, you do not have to define both a maximum and minimum value for rest roughing. Minimum depth can be determined automatically by the stock model.



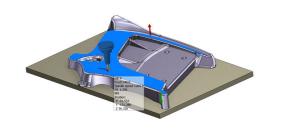
#### **Dynamic Motion**<sup>™</sup>

Mastercam's signature Dynamic Motion toolpath has been updated to streamline performance and increase programming speed.



#### **Advanced Tool Containment**

New options deliver additional ways to ensure the cutter stays precisely where you want it. New "Silhouette Boundary" automatically adds a full silhouette machining boundary to any boundaries you already have selected. Tool offset options and tip/contact point control are expanded across a variety of toolpaths.



#### Multisurface Blend

This new finishing toolpath quickly blends different boundaries together, delivering superior surface guality with full control over stock and holder checking.



#### **Multiaxis Deburr**

You now have the benefit of fast, automated part deburring using climb or conventional cutting, with more controls for selecting which area of your part to deburr.



#### **Accelerated Finishing**<sup>™</sup>

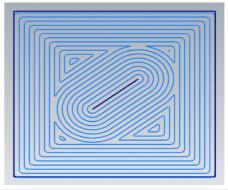
New support for oval form and lens barrel form tools delivers faster, smoother finishes on select surfaces.



#### **Optimized Equal Scallop Machining**

Mastercam's Equal Scallop toolpath delivers a consistent finish across sloped, curved, and flat surfaces. Now tool tip containment and "Closed" or "Trimmed" toolpath offsets deliver optimal finishes for different types of complex shapes.





#### **Port Expert Rest Material**

Port Expert is now material-aware, allowing automated programming of remaining stock.



#### **Faster Toolpaths**

Several milling strategies have been given a speed boost including 2D Dynamic Motion, 3D high speed linking, and 5-Axis Curve machining.



