Mastercam 2021 helps streamline your entire process, from job setup to job completion. These highlights are only a sample of the developments in Mastercam 2021. 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.

**DESIGN AND VISUALIZATION**

**Detecting and Creating Custom Holes**
Mastercam 2021 has the power to recognize complex hole geometry — including intersecting and non-conventional holes.

**Redefining Surface Flow**
Reflow UV allows you to redefine the flow by specifying a rotation angle or new boundary curves.

**Saving Files as 3D PDFs**
Mastercam 2021 includes an option for you to save all the currently visible entities and toolpaths in your part as a 3D PDF — a dynamic display of an embedded 3D model.

**Display All Chaining Arrows**
A Display all selection arrows button in the Wireframe Chaining and Solid Chaining dialog boxes has replaced the Unselect all button.
Checking Tool and Holder Against Model Geometry
A new function, Check Tool Reach, is available to view where the tool can and cannot reach. The selected geometry is then colored based on the selected preview options.

Skip Pockets Based on Tool Diameter
The Skip Pockets Smaller Than option is available for 2D Dynamic Mill. Additionally, for Dynamic Mill and OptiRough, you have the option to Skip All Pockets.

Customizable Multi-Segment Drill Cycle
Advanced Drill is a customizable multi-segment drill cycle that is useful for spot drilling, deep hole drilling, and back spot facing.

New Way of Machining Chamfer Holes
Mastercam 2021 features a new toolpath, Chamfer Drill. Using tools with a tip angle, the Chamfer Drill toolpath chamfers holes after calculating the correct depth based on the desired chamfer width or depth.

Pre-Machining Corners for Dynamic Mill Toolpath
A new page, Corner Pretreatment, has been added to the Dynamic Mill toolpath. Use this option to set machining parameters on any corners in the selected machining regions before machining the rest of the part.

Multisurface Blend Enhancements
You can now create Equidistant Passes. The 3D option is located in the Project drop-down on the Cut Parameters page. When selected, Mastercam keeps the created passes equidistant in 3D, adding cuts in steep areas.
Enhanced Leads and Transition Functionality
The Linking Parameters page for 3D HST toolpaths includes two new options: Apply transitions and Extension.

New 3+2 Automatic Roughing Toolpath
This new option will automatically make multiple 3-axis toolpaths for roughing by analyzing the model and stock and then creating a roughing toolpath.

Extending Edge Curves for Morph and Parallel Toolpaths
We have added the Extend edge curve option to the Morph toolpath to give you better control over the generated cut pattern results. Using this option, you can create a different toolpath without drawing additional geometry.

Raster Toolpath Enhancements
You now have an option to have Mastercam automatically set different angles to maximize the length of the cut pattern and/or minimize the connecting moves of a Raster toolpath.

Multiaxis Roughing Pocketing
The Multiaxis Roughing toolpath has been enhanced and renamed to Multiaxis Pocketing. It now includes undercut, wall finishing, and floor finishing options.
Machining Custom Thread Forms
Mastercam 2021 introduces a new toolpath, Custom Thread, to support custom thread forms such as Rope, Buttress, Square, and Trapezoidal.

Support for Collets and Collet Chucks
Mastercam Mill-Turn now supports collet chucks and collets as individual component types. This greatly expands the range of machines that can be directly supported by Mill-Turn.

Solutions for Swiss Machining
Mastercam offers solutions for a wide variety of today’s top Swiss machines including Star, Citizen, Tsugami, Swistek, Hanwha, Ganesh, DMG MORI, Nexturn, and more. Speak with your Mastercam representative for details.

For more information, visit
WHATSNEW.MASTERCAM.COM