
















# Mastercam® 2021

## QUICK REFERENCE GUIDE

ICON	FUNCTION	SHORTCUT	ICON	FUNCTION	SHORTCUT
	About Mastercam	Alt+V		Pan	Arrow keys
	Analyze Entity	F4		Paste	Ctrl+V
	AutoSave	Alt+A		Planes Manager	Alt+L
	Configure Mastercam	Alt+F8		Redo	Ctrl+Y
	Copy to clipboard	Ctrl+C		Rotate	Alt+Arrow keys
	Cut to clipboard	Ctrl+X		Rotate Position	Alt+F12
	Delete Entities	F5		Run Add-In	Alt+C
	Divide	Shift+D		Save	Ctrl+S
	Drafting Options	Alt+D		Save As	Ctrl+Shift+S
	Exit Mastercam	Alt+F4		Select All	Ctrl+A
	Fit	Alt+F1		Set From Entity	Alt+X
	Grid Settings	Alt+G		Shading toggle	Alt+S
	Gview-Back	Alt+3		Shading Translucency toggle	Ctrl+T
	Gview-Bottom	Alt+4		Show Axes	F9
	Gview-Front	Alt+2		Show Gnomons	Alt+F9
	Gview-Isometric	Alt+7		Show/hide displayed toolpaths	Alt+T
	Gview-Left	Alt+6		Solids Manager	Alt+I
	Gview-Previous View	Alt+P		Toolpaths Manager	Alt+O
	Gview-Right	Alt+5		Trim to Entities	Shift+T
	Gview-Top	Alt+1		Trim to Point	Shift+P
	Help	Alt+H		Unzoom 80%	Alt+F2
	Hide/Unhide	Alt+E		Unzoom Previous/50%	F2
	Levels Manager	Alt+Z		Undo	Ctrl+Z
	Modify Length	Shift+E		Window	F1
	Multi-Threading Manager	Alt+M			

### Map the above Mastercam functions to a custom keyboard shortcut:

Choose **File, Options, Customize Ribbon**. Then click the **Customize** button to open the **Customize Keyboard** dialog box.

Disable gnomon selection G

Snap to view toggle S

### Navigate to these websites to get more out of your Mastercam experience:

Mastercam Reseller Locator  
[mastercam.com/Resellers](http://mastercam.com/Resellers)

Online Mastercam Training  
[University.Mastercam.com](http://University.Mastercam.com)

Masters of CAM  
[mastersofCAM.com](http://mastersofCAM.com)

Mastercam Blog  
[mastercam.com/news/blog](http://mastercam.com/news/blog)

Mastercam Forum  
[forum.mastercam.com](http://forum.mastercam.com)

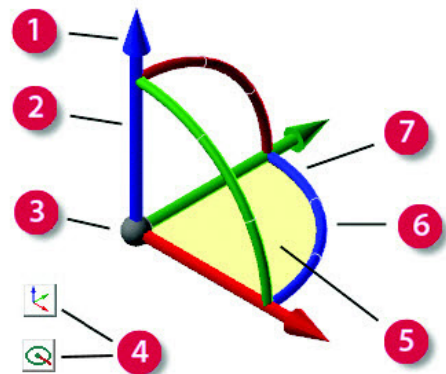
# ON-SCREEN EDITING TOOLS

## Dynamic Gnomon

The Dynamic Gnomon helps you manipulate geometry and planes interactively. The gnomon comprises three axes connected at an origin sphere. Choose from the selection points listed here to apply different types of transformations to either the gnomon or your selected geometry.

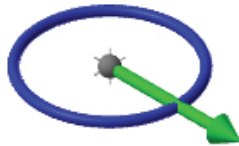
- |   |                            |   |           |
|---|----------------------------|---|-----------|
| 1 | Align                      | 5 | XY Orient |
| 2 | Translate Along            | 6 | 2D Rotate |
| 3 | 3D Translate/Polar         | 7 | 3D Rotate |
| 4 | Gnomon/<br>Geometry Switch |   |           |

See Mastercam Help for more information.



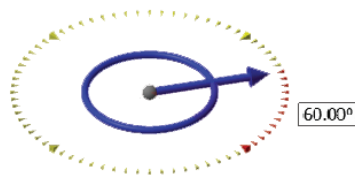
## Polar control

The Polar control consists of the origin sphere, a rotation compass, and a green single-axis arrow. It can rotate as well as edit the position of entities in the graphics window.



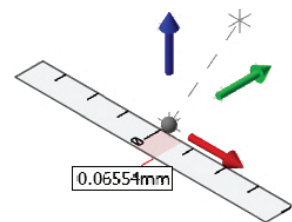
## Rotate control

The Rotate control can only rotate on-screen entities within the current Cplane. It consists of the origin sphere and a rotation compass.



## Delta control

The Delta control consists of the origin sphere and three single-axis arrows that can be manipulated independently.



Hover over any single-axis arrow until it highlights. Click and drag the arrow to a new position using the ruler to guide your placement.

**To rotate entities on screen**, hover over the blue circle until the rotation compass appears. Rotate the control or enter a value in the on-screen field. Rotating from inside the compass allows you to snap to angular increments. Manipulating either control outside the compass ignores the snap control.

## Quick Masks

Quick Masks let you control entity masking with a single mouse click. Each Quick Mask button has two functions, depending on whether you click the left half or right half of the button. Hover your mouse over each button half to view its function.

- Click the left half of a Quick Mask button to immediately select all instances of the entity type.
- Click the right half of the same button to limit your individual selections to only the specific entity type.
- Use the **Select All Advanced/Select Only Advanced** Quick Mask button to open the **Select All** dialog box or the **Select Only** dialog box to filter selections by entity attributes.
- The right half of the **Clear All Masking** button clears all selection criteria from both the **Select All** and the **Select Only** dialog boxes.

