













































# Mastercam® 2020

## QUICK REFERENCE GUIDE

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

### Map any Mastercam function to a custom keyboard shortcut:

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

### 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  
[blog.mastercam.com](http://blog.mastercam.com)

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

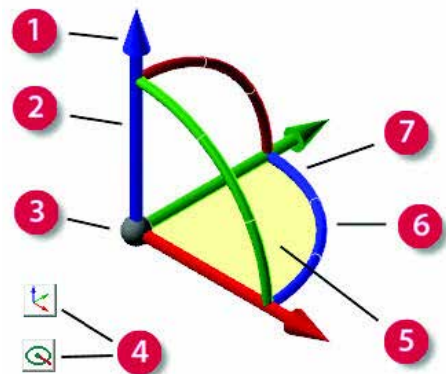
# ON-SCREEN EDITING TOOLS

## 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.

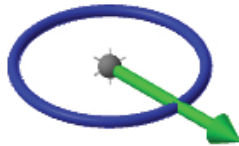
- |   |                            |   |           |
|---|----------------------------|---|-----------|
| 1 | Align                      | 5 | XY Orient |
| 2 | Translate Along            | 6 | 2D Rotate |
| 3 | 3D Translate/Polar         | 7 | 3D Rotate |
| 4 | Gnomon/<br>Geometry Switch |   |     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

See Mastercam Help for more information.



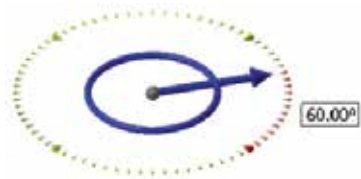
## Polar control

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.



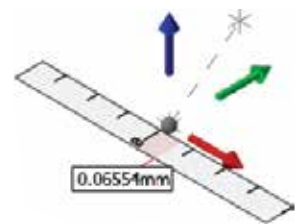
## Rotate control

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.



www.cimquest-inc.com  
866-277-8778



www.mastercam.com

