Q. What is General Selection?

A. General Selection refers to the different techniques that you can use to select entities in the graphics window. Mastercam X offers many different tools for selecting entities. All of the General Selection functions are collected on the General Selection ribbon bar, shown above.

Q. What's the difference between “General Selection” and “AutoCursor”?

A. AutoCursor is used for identifying coordinate positions and locations. It is most often used when creating geometry – for example, selecting the endpoints of lines, or the centerpoint of an arc. General Selection is used to select entities that have already been created – for example, when you are selecting entities to trim. AutoCursor will select the endpoints or midpoint of a line; General Selection will select the entire line.

Q. What are the major differences between Version 9 and Mastercam X in terms of General Selection?

A. In Version 9, General Selection was handled with menus that were often the same as those used in chaining. In Mastercam X, all General Selection is handled through the ribbon bar.

Q. Why is the General Selection ribbon bar inactive (grayed out) sometimes?

A. It is only active when Mastercam is ready to accept entity selections.

Q. Even when the ribbon bar is active, many of the individual buttons are inactive (grayed out). Why?

A. Only the buttons that are useful and relevant to the current function are active. For example, if there are no solids in your part, the buttons for selecting solids will be grayed out.

Q. Does Mastercam X support pre-selection? What is pre-selection, anyway?

A. Pre-selection lets you select entities before entering a function. The function that you select automatically operates on the entities that you have selected. A simple example in Mastercam X is to pre-select geometry and then press the [Delete] key. Those of you familiar with Version 9 will remember that you always had to wait for a function to prompt for entities before selecting them.

Q. Can pre-selection be turned off?

A. Yes. Choose Settings, Configuration from the menu. In the Screen properties page, deselect the option to Allow Pre-Selection.

Q. Is pre-selection allowed for every Mastercam function?
A. No. Pre-selection is limited to functions that do not require chaining. Functions like Xform, Delete, and Change Attributes support pre-selection, while functions like Pocket toolpaths, Contour toolpaths, and Solids do not support pre-selection because they require chaining information.

Q. What are Quick Masks and how do I use them?

A. Introduced with Mastercam X2, Quick Masks (QM) are time-saving functions that allow you to select entities by type with a single mouse click, without having to open the Masking All or Only dialog boxes from the General Selection ribbon bar. QM functions include Points, Lines, Arcs, Splines, Surfaces, Solids, Drafting, Wireframe, Surface Curves, Color, Level, Xform Group, and Xform Results. These functions support different right-click and left-click actions.

* Left-clicking sets masking to select all entities of the specified type.
* Right-clicking sets masking for a single selection.

By default, the Quick Masks toolbar is docked vertically, directly below the MRU toolbar along the rightmost edge of the Mastercam window.

You can undock the QM toolbar to reposition it horizontally, or further customize it to meet your requirements. Use the General Selection category in Settings, Customize to add QM functions to toolbars. You can also set up keyboard shortcuts for QM functions by choosing the General Selection category in Settings, Key Mapping.

Q. What’s the difference between a chain selected in General Selection and one selected with the Chaining function?

A. The chaining function used for toolpaths and solids stores the selected entities, and the order of the entities and their direction. This information is important for toolpaths and solids, but is not necessary for other functions such as deletion.

Q. Are there shortcuts for selecting entities?

A. The General Selection ribbon bar lets you select from several different selection methods:

General Selection methods

Many of these selection modes can also be quickly activated from the keyboard:

* Right- and Left-Mouse Selection Methods—If you left-click to choose a selection type in the drop-down list, the type is active for only a single selection. After you make this selection, the standard selection mode is reactivated. If you right-click to choose a selection type, the selection mode stays "locked" until you reset it by choosing the standard selection button.
* Double-click to End Selection—This technique lets you keep your hand on the mouse more often and reduces the number of times you have to press [Enter]. You can start a function like Xform, Translate without doing pre-selection, window the entities you want, and double-click
when you define the second window to complete your selection. Or, for a function like Join Entities where you can select multiple entities, just double-click on the last entity and the join is completed. If you forget to double-click on the last entity you selected, double-click in an empty area of the screen to end your selection.

* Chain Select—Hold the [Shift] key and select anywhere on the blue chain, and all of the contiguous entities are selected. Select a partial chain by pressing [Shift + Click] on the entity you want to end with.
* Window Select—Just pick a place on the screen that is not an entity and drag a window around the entities you want to select.
* Single Select—Select the magenta line by just picking it with the left mouse button.
* Area Select—Hold the [Shift] key and select in an open area of a closed chain (for example, inside a pocket).
* Vector Select—Hold down the [Alt] key and draw a vector through the red lines near the red scissors. Any entity the vector passes through is selected.

General Selection examples

Q. How are entities unselected?

A. Simply select entities that have already been selected. You can also click the Cancel button on the General Selection ribbon bar to deselect all selected entities.

Q. What do the colors mean when I am selecting?

A. The white color is Auto-Highlighting. As the cursor moves near an entity, it will highlight to show that if you select at that point, that entity will be selected. Once an entity is selected, it turns yellow. These colors are configurable in by selecting Settings, Configuration from the menu and choosing the Colors page.

Q. What does Verify Select do?

A. When active, Verify Select lets you sort through entities that are close to each other so that you can make sure you select the correct one. Click the arrows until the desired entity is highlighted, and then click OK.

Verify Select mode

Q. Is General Selection used for selecting all entities in all functions?

A. General Selection is used only to select entities. It is not the same thing as chaining used for toolpaths. However, General Selection is used to select surfaces and solids for 3D machining.