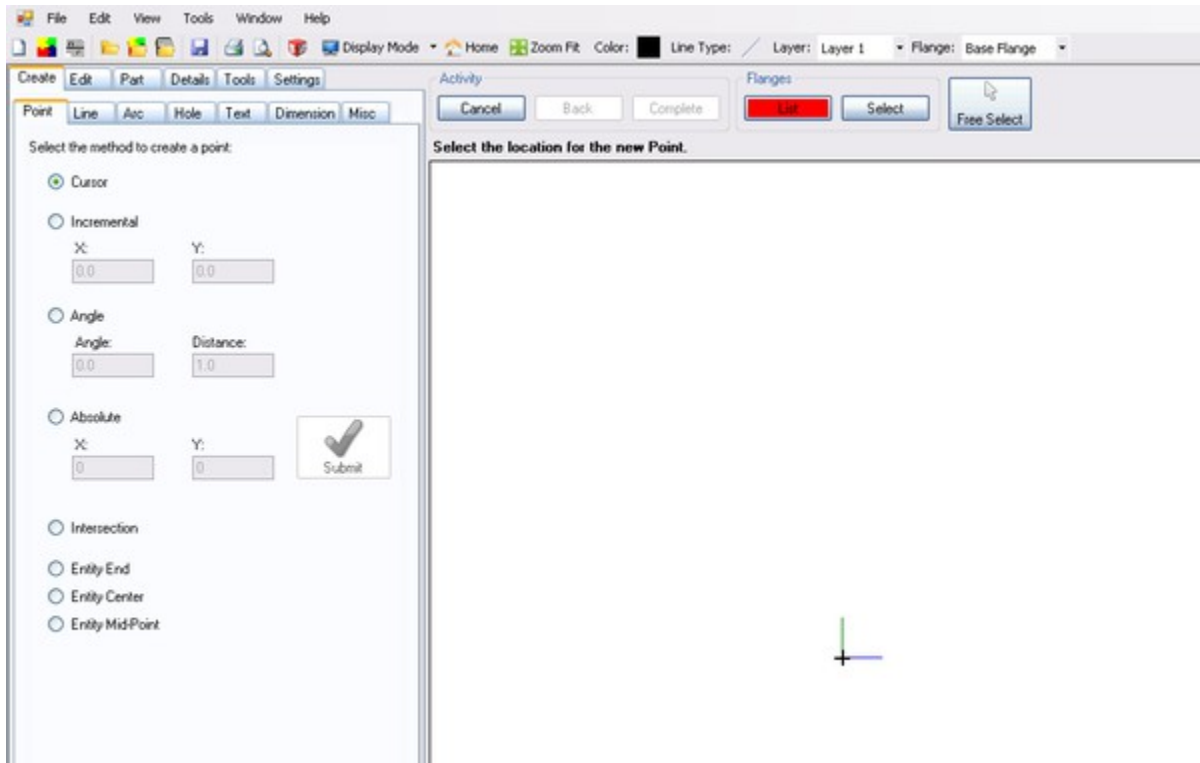


Plate

Current Item: **Plate**



Functions

Create (Plate)

Create

Functions

Point (Plate)

Point Line Arc Hole Text Dimension Misc

Select the method to create a point:

Cursor

Incremental

X: Y:

Angle

Angle: Distance:

Absolute

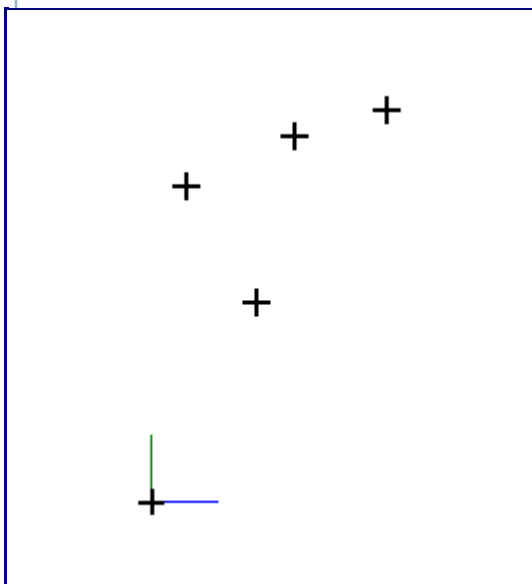
X: Y:

Intersection

Entity End

Entity Center

Entity Mid-Point



Cursor (Point)

Description

Create a point using the cursor.

How-To

Pick anywhere on the screen to place a point. The point will be placed at the exact location of your cursor and will not reference any other entities while being placed.

Incremental (Point)

Incremental



Description

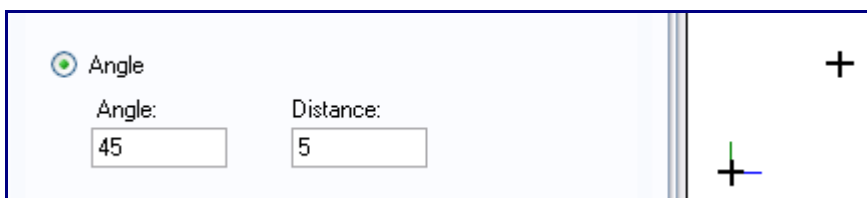
Creates a point based on an X and Y distance from a reference point.

How-To

Provide X and Y values and select a reference point. X is the horizontal distance and Y is the vertical distance. A negative (-) X value will place the point to the left of the reference point. A negative (-) Y value will place the point below the reference point.

Angle (Point)

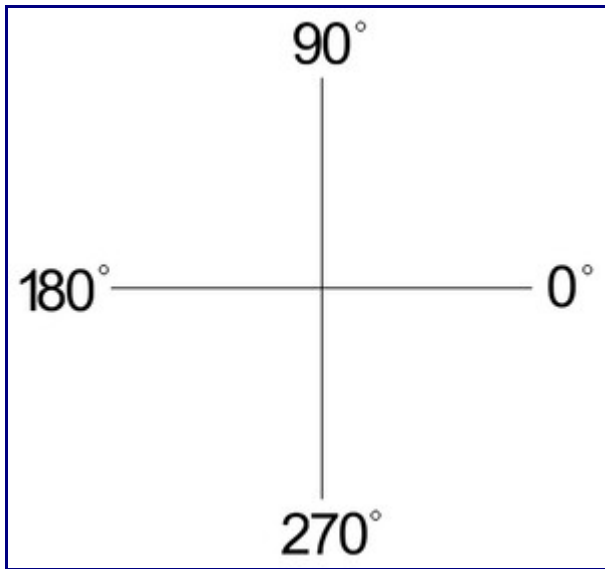
Angle



Description

Creates a point at a set angle and distance from a reference point.




How-To



Select the Angle option under the point tab. Enter the distance from the reference point in the Distance field. Enter an angle in the Angle field. If the Angle field is set to 0° , the new point will be created directly to the right of the reference point. To place the new point, click on a point to use as a reference point.

Absolute (Point)

Absolute

<input checked="" type="radio"/> Absolute				
X:	Y:			
<input type="text" value="3"/>	<input type="text" value="1"/>	Submit		

Description

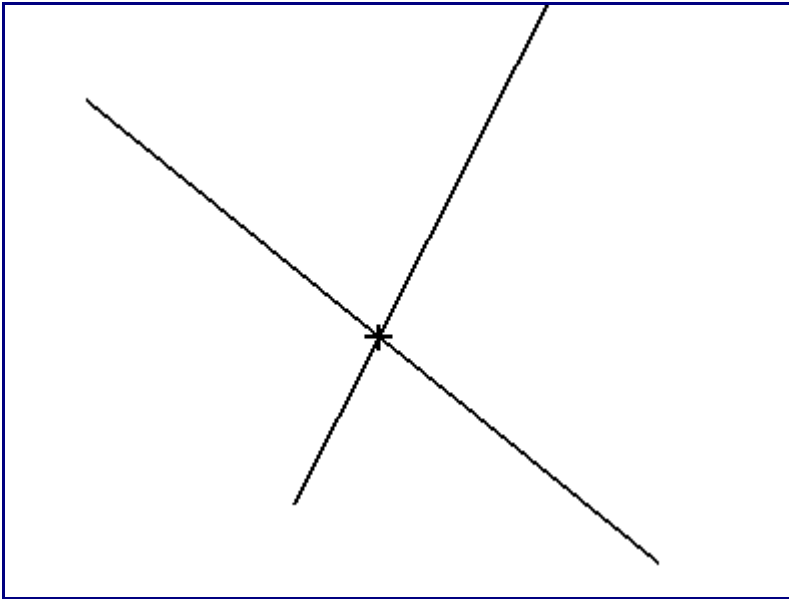
Places a point based on X and Y coordinates.

How-To

Enter X and Y coordinates into the X and Y fields and click submit to place the point. The reference point will always be (0,0).

Intersection (Point)

Intersection



Description

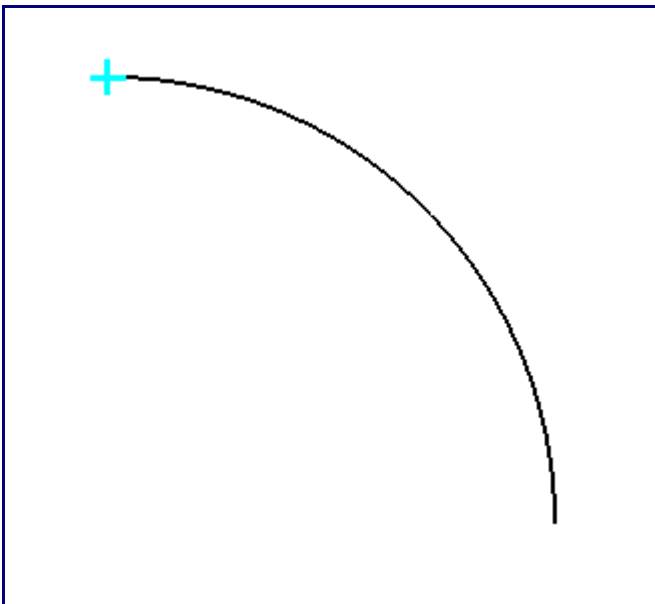
Creates a point at the intersection of two lines.

How-To

Pick a line and a line that intersects it to place a point at the intersection.

Entity End (Point)

Entity End



Description

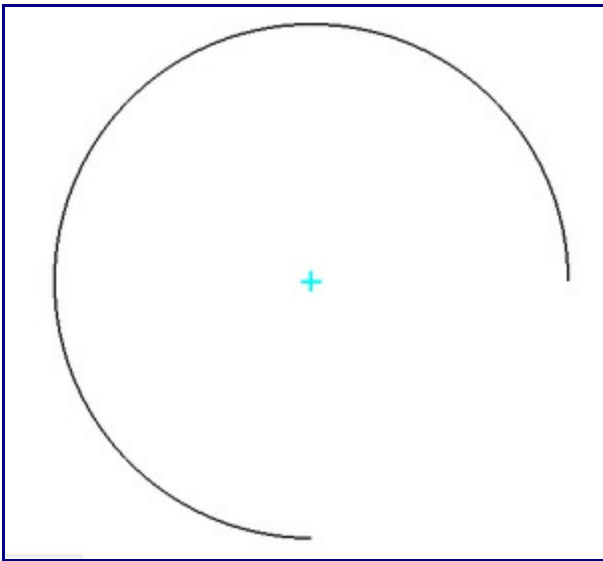
Creates a point at the end of a line or arc.

How-To

Click an entity to place an end point. The point will be placed at the end that you click closest to.

Entity Center (Point)

Entity Center



Description

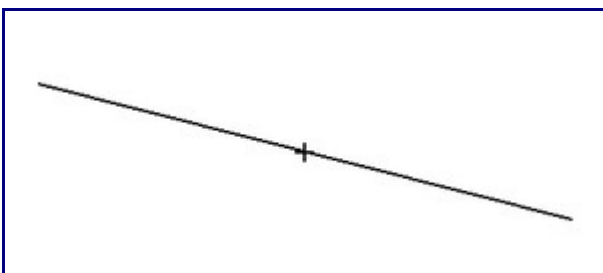
Creates a point at the center of a line or an arc.

How-To

Click on an entity to create a center point.

Entity Mid-Point (Point)

Entity Mid-Point



Description

Creates a point at the mid-point of an entity.

How-To

Click on an entity to create a point at the mid-point.

Line (Plate)

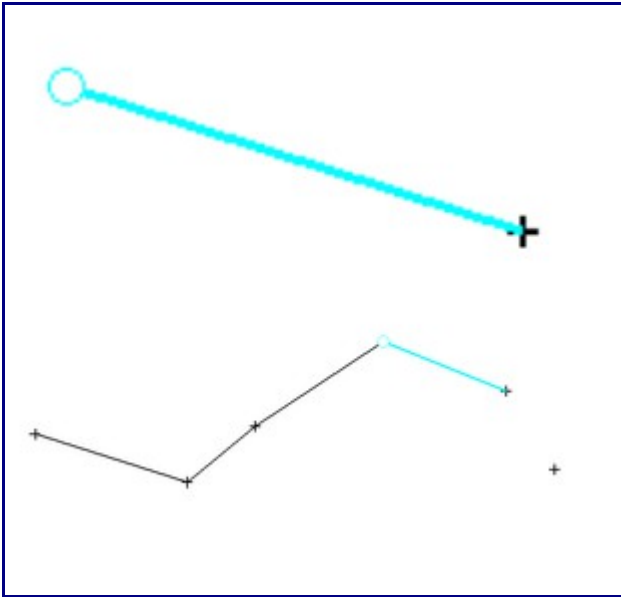
Point Line Arc Hole Text Dimension Misc

Select the method to create a line:

- Two Points Continuous
- Horizontal
- Vertical
- Horizontal and Vertical
- Rectangle (Two Points)
- Parallel Distance: Through Point
- Perpendicular
- Angle Absolute Angle:
- Angle Relative Angle:
- Tangent through Point
- Tangent Two Arcs
- Notches Auto-Trim
 - Chamfer Depth:
 - Corner
 - Edge Width:

Functions

Two Points



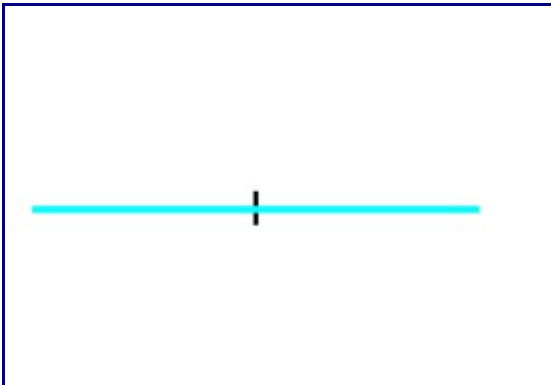
Description

Creates a line between two points.

How-To

Click on a point; it will turn into a blue circle. Now click on a second point to create a line between the two points. Enable Continuous mode by clicking the Continuous checkbox. This will automatically start new lines with the first point set as the end of the last line. To stop drawing lines while in Continuous mode click Cancel in the Activity section.

Horizontal



Description

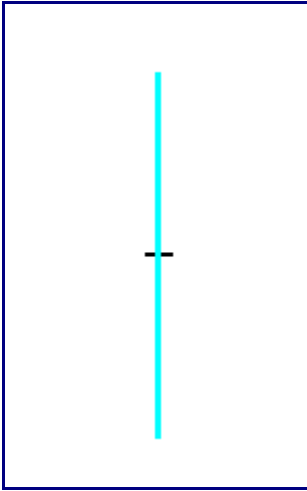
Creates a horizontal line.

How-To

To create a horizontal line, set the length by entering a value in the Line Length field. Place the line by

clicking a point. The mid-point of the line will be centered on the point you select.

Vertical



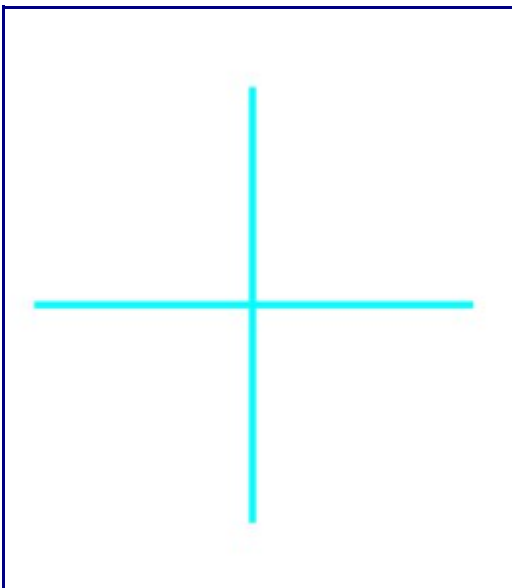
Description

Creates a vertical line.

How-To

To create a vertical line set the length by entering a value in the Line Length field. Place the line by clicking a point. The mid-point of the line will be centered on the point you select.

Horizontal and Vertical



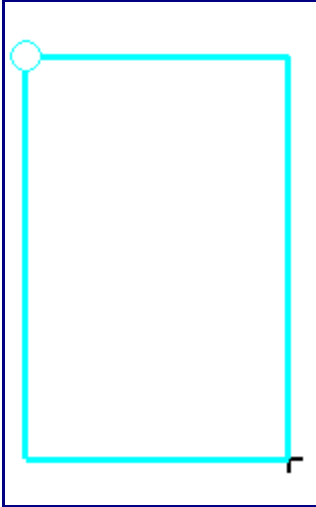
Description

Creates a horizontal line and a vertical line that intersect at a 90 degree angle.

How-To

The length of the horizontal and vertical lines can be set using the Line Length field. Click on a point to place the lines. Both lines will be placed with their mid-points directly over the point you select.

Rectangle (Two Points)



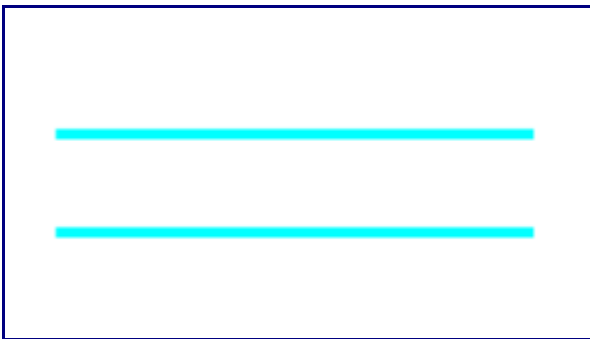
Description

Creates a rectangle based on two points.

How-To

Selecting a point will cause it to turn into a blue circle. A blue rectangle will be drawn between the selected point and the nearest point to the cursor. Move the cursor near the intended second point and make sure the blue rectangle is correct. Click to create the rectangle.

Parallel



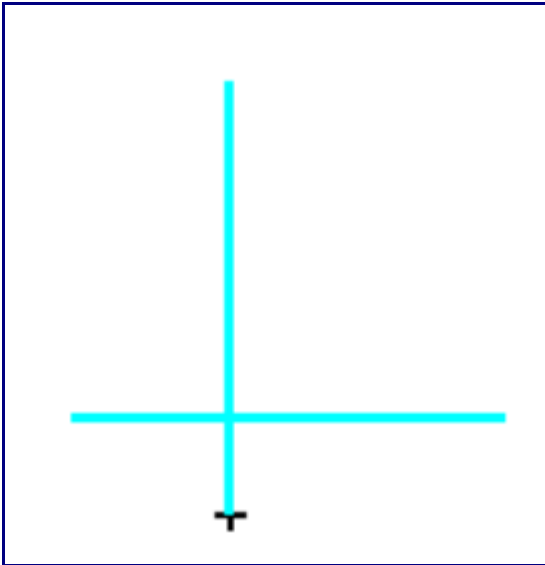
Description

Creates a line that is parallel to a reference line.

How-To

When creating a parallel line you can either enter the distance between the parallel line and the reference line or use the Through Point feature. If a distance is entered and the Through Point checkbox is not selected, click a line to set it as the reference line. After picking the reference line, select which side the parallel line will be placed on by clicking on that side of the reference line. For example, to put a parallel line above a horizontal reference line, click just above the reference line. If the Through Point checkbox is selected you must first select a reference line, followed by a point that the parallel line will pass through.

Perpendicular



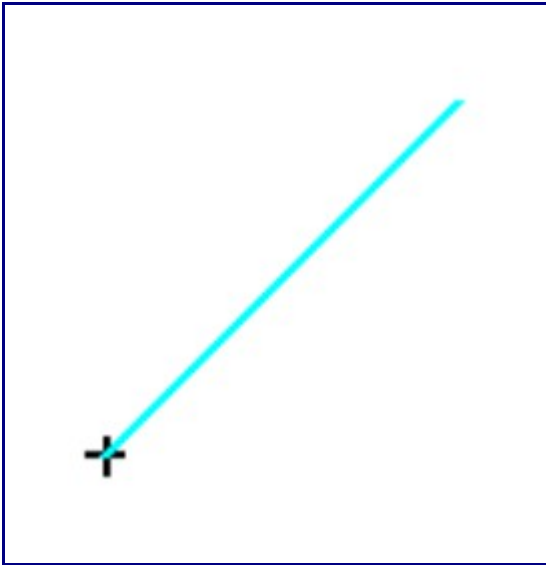
Description

Creates a line that is perpendicular to a reference line.

How-To

To set the length of the perpendicular line use the Line Length field. Click a line to set it as the reference line. The side you click on will determine the direction of the line. Click on any point to place the perpendicular line there.

Angle Absolute



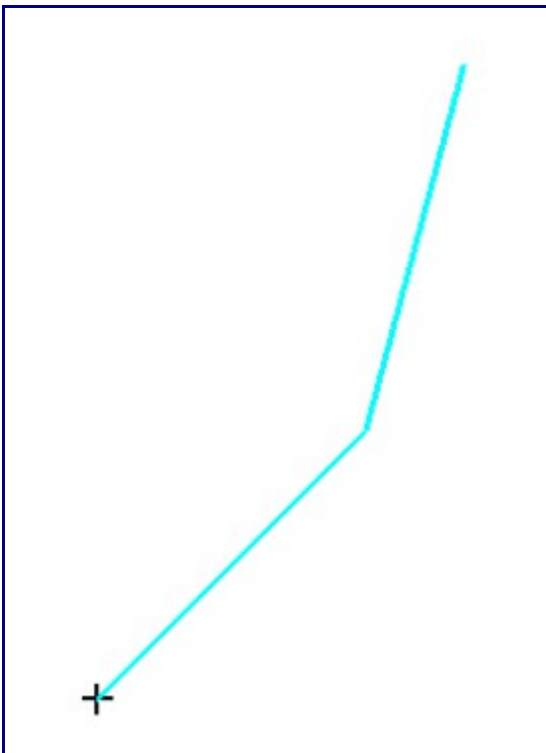
Description

Creates a line at an angle without using a reference line.

How-To

Enter the desired length in the Line Length field and the desired angle in the Angle field. Click on a point to place the Line there.

Angle Relative



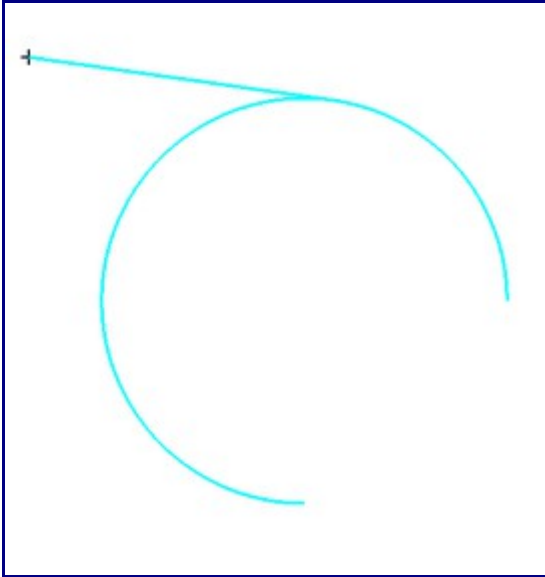
Description

Creates a line at an angle relative to a reference line.

How-To

Enter the length of the line in the Line Length field and the relative angle in the Angle field. Click on a line to use as a reference line and click on a point to use as a starting point for the new line. The angle of the line will be the sum of the angle of the reference line and the value entered in the Angle field.

Tangent through Point



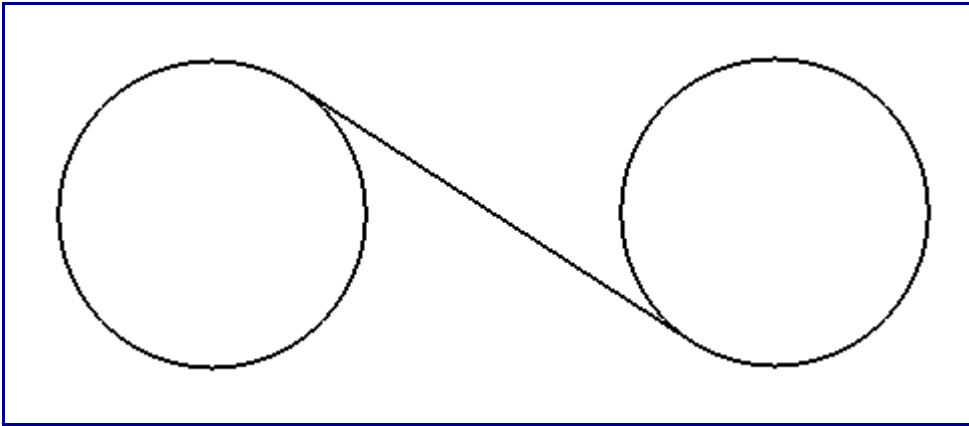
Description

Creates a tangent line between a point and an arc.

How-To

Select an arc by clicking near the side of the arc that the line will be drawn to. Click on a point to create the line.

Tangent Two Arcs



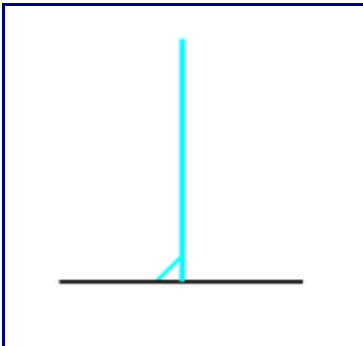
Description

Creates a tangent line between two arcs.

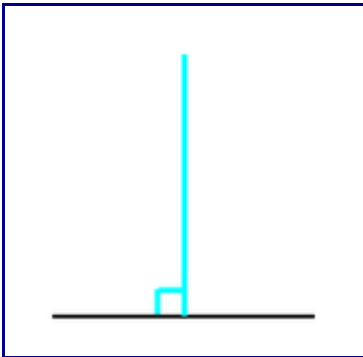
How-To

Select an arc by clicking near the side that the line will be drawn to. Select a side of a second arc to create a tangent line.

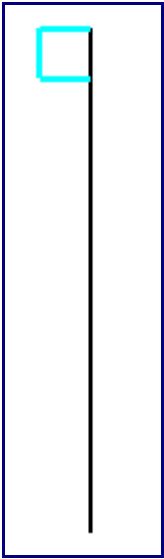
Notches



Chamfer



Corner



Edge

Description

Adds a chamfer, corner, or edge to a line or pair of lines.

How-To

Select which type of notch you would like to add by clicking either Chamfer, Corner, or Edge. If adding a Chamfer or Corner, input the desired depth into the Depth field. To add the notch, click on a line and another line that you want the notch to connect to. On the second line, where you click determines which direction the notch faces. Click on the end closest to the direction you want it to face. To add an Edge, you need to input both the Depth and Width. This will create a rectangle with the depth and width that you selected which can be added to the edge of a line. The edge will be added to the closest line and will be placed on the nearest end. An edge can be added to either side of the end of a line by clicking on that side. Check the Auto-Trim box to automatically cut off any part of a line that extends past a notch.

Arc (Plate)

Functions

The image shows a software interface for creating an arc. The 'Arc' tab is selected, and the 'Fillet' option is chosen. The 'Auto-Trim' checkbox is checked, and the 'Radius' is set to 1.0. Other options include 'Values', 'Tangent - Three Lines', 'Three Points', 'Arc - Center and End Points', and 'Circle - Center and Edge Points'. The 'Values' option has a 'Full Circle' checkbox, and the 'Tangent - Three Lines' option has 'Start Angle' and 'End Angle' fields set to 0.0 and 360, respectively.

Create Edit Part Details Tools Settings

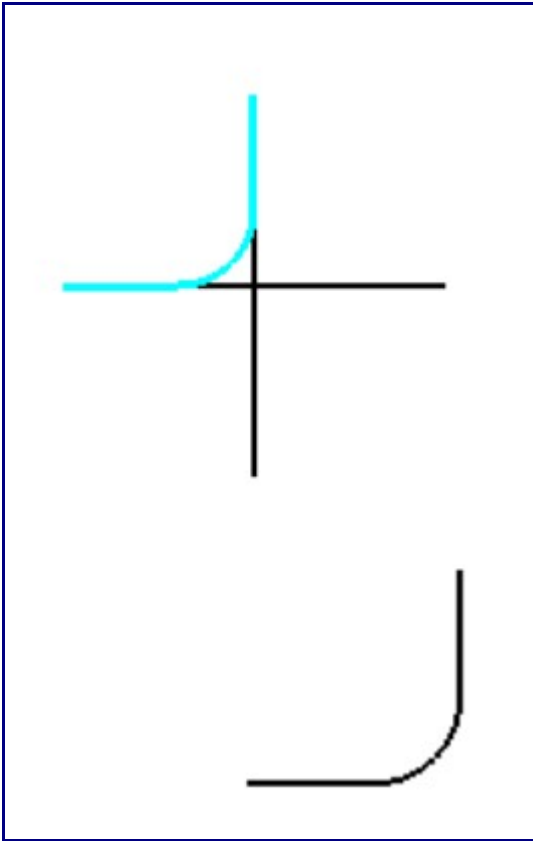
Point Line Arc Hole Text Dimension Misc

Select the method to create a line:

- Fillet Auto-Trim
Radius: 1.0
- Values Full Circle
Radius: 1.0
Start Angle: 0
End Angle: 360
- Tangent - Three Lines
Start Angle: 0.0
End Angle: 360
- Three Points
- Arc - Center and End Points
- Circle - Center and Edge Points

Fillet (Arc)

Fillet



Description

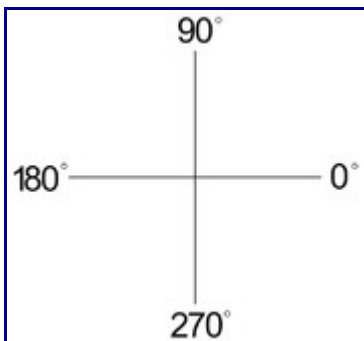
Adds a partial arc in order to round interior corners.

How-To

Input the desired radius of the fillet arc into the Radius field. Click on the first line, which will turn blue. A blue arc will come off the first line and connect with whatever line is nearest to the cursor. Change the direction of the fillet by moving the cursor to the other side of the first line. Click to place the fillet. If Auto-Trim is checked, any part of either line that extends past the fillet will be cut off.

Values (Arc)

Values



0° is to the right, rather than up.

Description

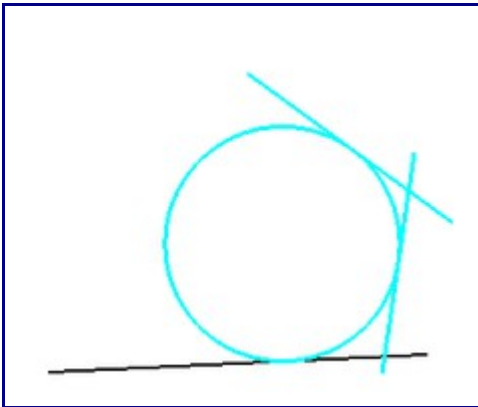
Creates an arc based on start angle, end angle, and radius.

How-To

Input the radius, start angle, and end angle of the arc into their respective fields. Click on a point to place the arc with its center directly over that point. Check the Full Circle checkbox to automatically set the start angle at 0 and the end angle at 360, creating a full circle.

Tangent - Three Lines (Arc)

Tangent - Three Lines



Description

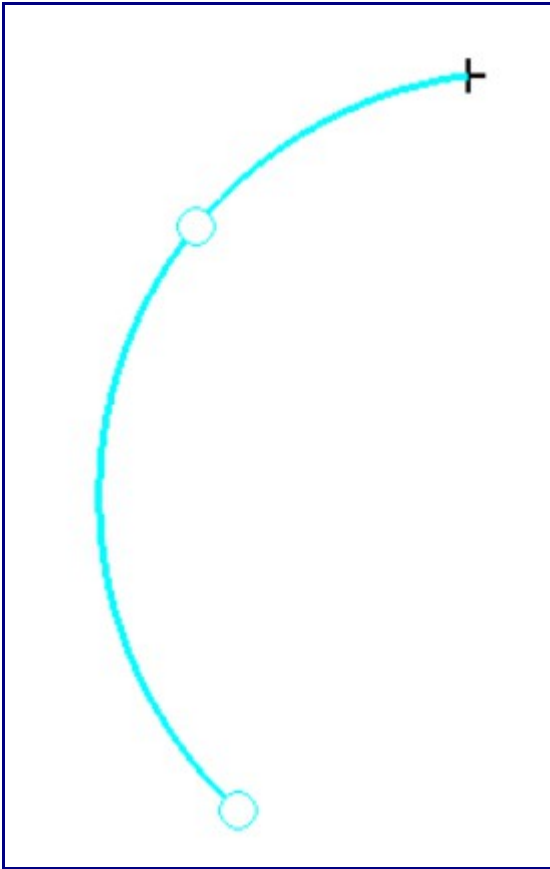
Creates an arc by using three lines and using them as tangents of the arc.

How-To

Set the start and end angle of the arc using the Start Angle and End Angle fields. Click on three lines, in any order, to create an arc that uses those three lines as tangent lines.

Three Points (Arc)

Three Points



Description

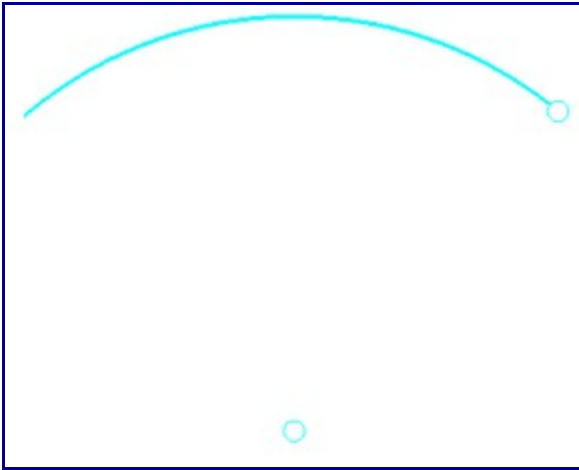
Creates an arc based on three user selected points that lie within the arc.

How-To

Pick three points that lie within the desired arc. The first and third points will be end-points. The second point will be on the arc. If the first and third points are the same point, a circle will be drawn between the first and second point.

Arc - Center and End Points (Arc)

Arc - Center and End Points



Description

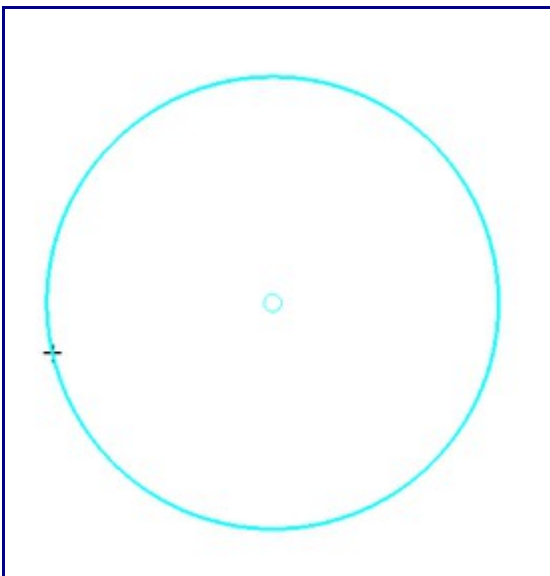
Creates an arc by allowing the user to select the center and end points of the arc.

How-To

Click on the point that lies in the center of the intended arc. Click on another point to create the first end point. A blue arc will be drawn from the first end point to the point on the arc closest to the cursor. Move the cursor until the second end point is in the desired location and click to place the arc.

Circle - Center and Edge Points (Arc)

Circle - Center and Edge Points



Description

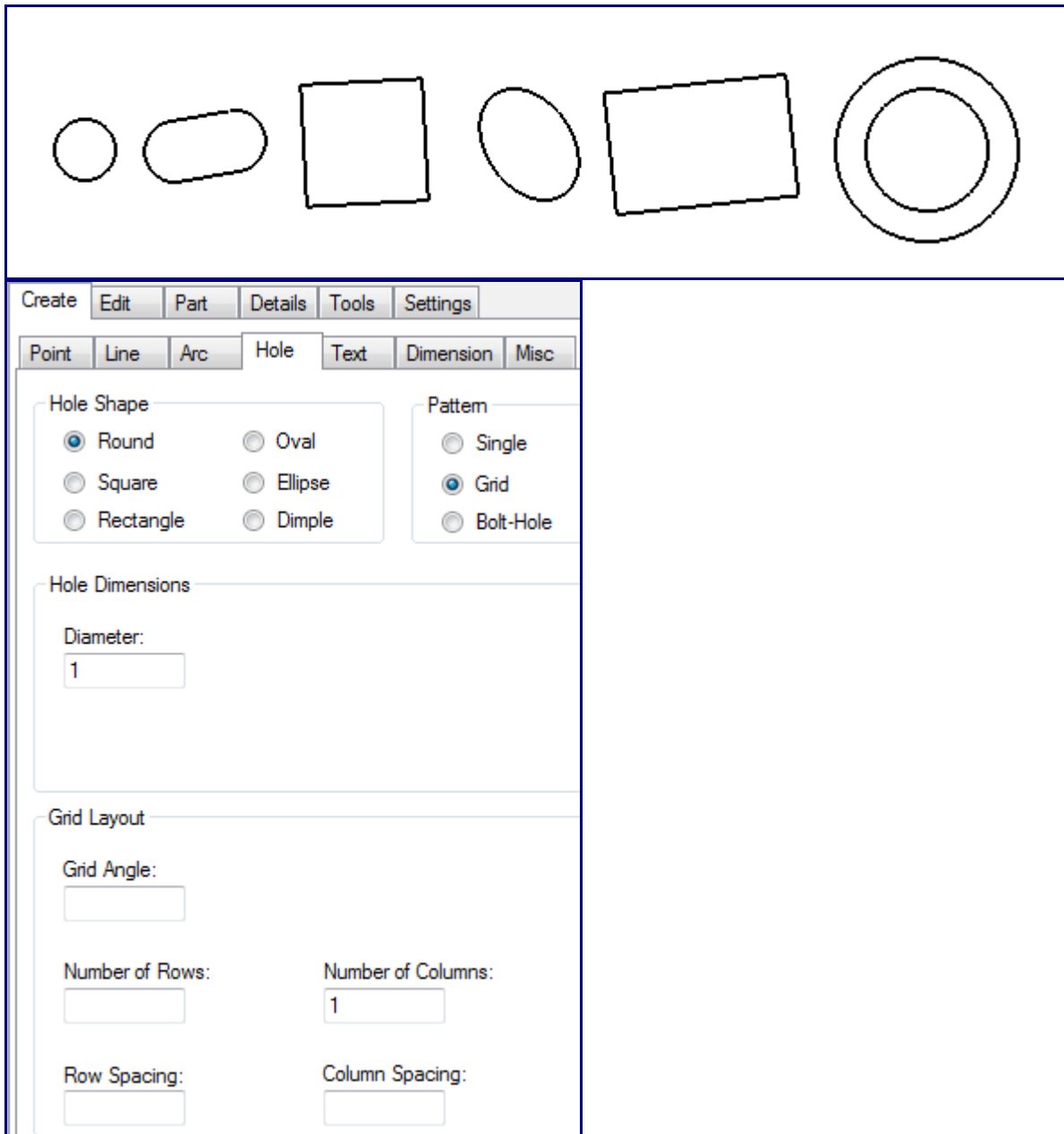
Creates a circle based on a center point and an edge point.

How-To

Click on a point to set it as the center point. A blue circle will be drawn with a radius equal to the distance to the point nearest to the cursor. Move the cursor to the desired point and click to place the circle.

Hole (Plate)

Hole



Description

Allows placement of holes in a plate.

Hole Shape

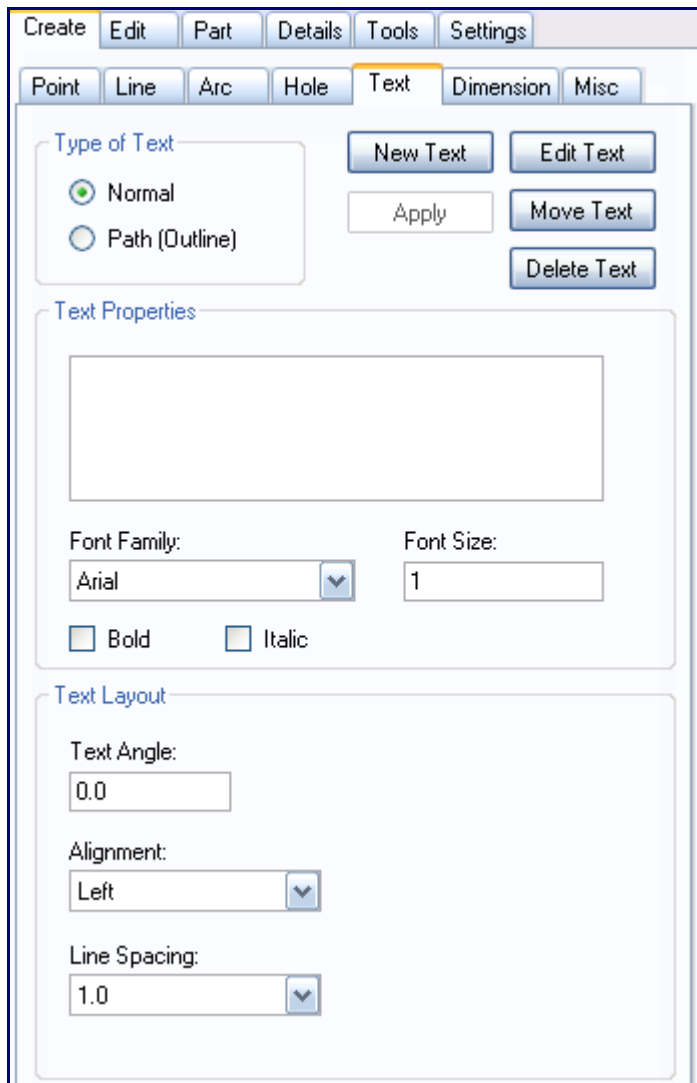
- **Round:** Select Round, enter a diameter in the Diameter field, and click on a flange to place a round hole at that point.
- **Oval:** Select Oval, enter a width and length in the Width and Length field, and enter an angle for the hole in the Angle field. Click on a PickPoint or endpoint to place an oval hole at that point.
- **Square:** Select Square, enter a width in the width field, and enter an angle for the hole in the Angle field. If you want to automatically round the corners of the square, you can enter a value in the Corner Radius field. Entering 0 in the Corner Radius field will result in square corners. Click on a PickPoint or endpoint to place an oval hole at that point.
- **Ellipse:** Select Ellipse and click on the Length button. A window will appear with a diagram of a cylinder going through a plate. You must enter the width and angle of this cylinder in the Diameter of Cylinder and Angle of Cylinder fields. The length of the hole will be calculated automatically. Click the Copy button, close the window, and paste the value into the Length field by clicking in the field and hitting the Control key and the "V" key at the same time. Enter the same width and angle that you used before and click on a point to place an elliptical hole at that location.
- **Rectangle:** Select Rectangle and enter a width and height in the Width and Height fields. Enter an angle in the Angle field and click on a point to place a rectangular hole at that location.
- **Dimple:** A dimple is a round hole that is slightly raised, so that the plate around the edges of the hole slope up towards the hole. The Inner Diameter is the section that will actually be cut out of the plate. The Outer Diameter is the area of plate surrounding the hole that slants up towards the hole. Enter an inner and outer diameter and a height in the respective fields. Select Up or Down in order to set whether the dimple is raised or pressed into the plate. Click on a point to place a dimple at that location.

Pattern

- **Single:** To place a single hole at the location that you click, select Simple.
- **Grid:** To place a grid of holes, select grid. You can place the grid at an angle by entering a value in the Angle field. Enter the number of rows and columns in the grid in the Number of Rows and Number of Columns fields. Enter the spacing between each row in the Row Spacing field and enter the spacing between each column in the Column Spacing field.
- **Bolt-Hole:** To create a series of holes along an arc, select Bolt-Hole. Enter the radius of the arc in the Radius field. Enter the angle where the series of holes will start in the Start Angle field. To rotate holes as they are placed check the Holes rotate with sweep checkbox. Enter the angular distance between each hole in the Spacing Angle field. Enter the number of holes that you want to place in the Number of Holes field. Click on a point to place the center of the arc at that location.

Text (Plate)

Text



Description

The Text tab contains tools related to placing and editing text.

Creating Text

- **Normal:** Click the New Text button and type the text that you want to place in the empty field in the Text Properties area. Select a font using the Font Family drop down menu and enter a size factor in the Font Size field. Enter the angle that the text will be placed at in the Text Angle field. Use the Alignment drop down menu to set the text alignment and use the Line Spacing drop down menu to set the spacing between lines of text.
- **Path (Outline):** When using Path (Outline) to create text, any text you place will be constructed out of lines and arcs which can be used as if they were user placed lines and arcs. The Text Properties area is the same as if you were creating normal text, however the Text Layout area is different. In the Text Angle field enter an angle for the text to be placed at. Enter the spacing between each letter in the Letter Spacing field. To Stretch the string of text horizontally, enter an amount to stretch by in the Horizontal Stretch field. Use the Style drop down menu to choose whether the text is straight or curved. If it is curved up or down, you can enter the radius of the

arc that the text is curved around in the Arc Radius field. Use the Precision drop down menu to select the level of detail that the text is drawn with. If you want to create curved but keep each individual letter upright, check the Static Letter Angles checkbox.

Editing Text

- **Edit:** To edit an existing string of text, click on the Edit button and click on a previously placed piece of text. Make any changes to the Text Properties and Text Layout areas and click the Apply button.
- **Move:** To move text, click the move button and click on a string of text. Click on a point to place the text at that location.
- **Delete:** To delete text, click on the Delete button and click on a string of text.

Dimension (Plate)

Current Item: [Plate](#) -- [Create](#) -- Dimension

Create

- [Horizontal](#)
- [Vertical](#)
- [Linear](#)
- [Hole](#)
- [Diameter](#)
- [Radius](#)
- [Angle](#)

Edit

- [Move](#)
- [Delete](#)
- [Edit Value](#)
- [Properties](#)
- [Apply](#)
- [Apply All](#)
- **Show Number of Holes:** Click on this checkbox to display the number of similar holes when creating hole dimensions.
- **Display Feet:** Click on this checkbox to display feet and inches rather than exclusively inches.

Settings

- [Standoff](#)

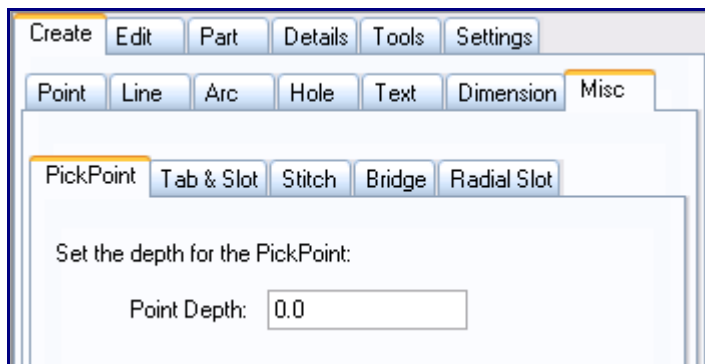
- [Offset](#)
- [Text Size](#)
- [Arrow Width](#)
- [Arrow Height](#)
- [Arrow Type](#)
- [Distance Tolerance](#)
- [Angle Tolerance](#)
- [Dim Color](#)
- [Ext Color](#)
- [Text Color](#)

Misc (Plate)

Functions

PickPoint (Misc)

PickPoint



Description

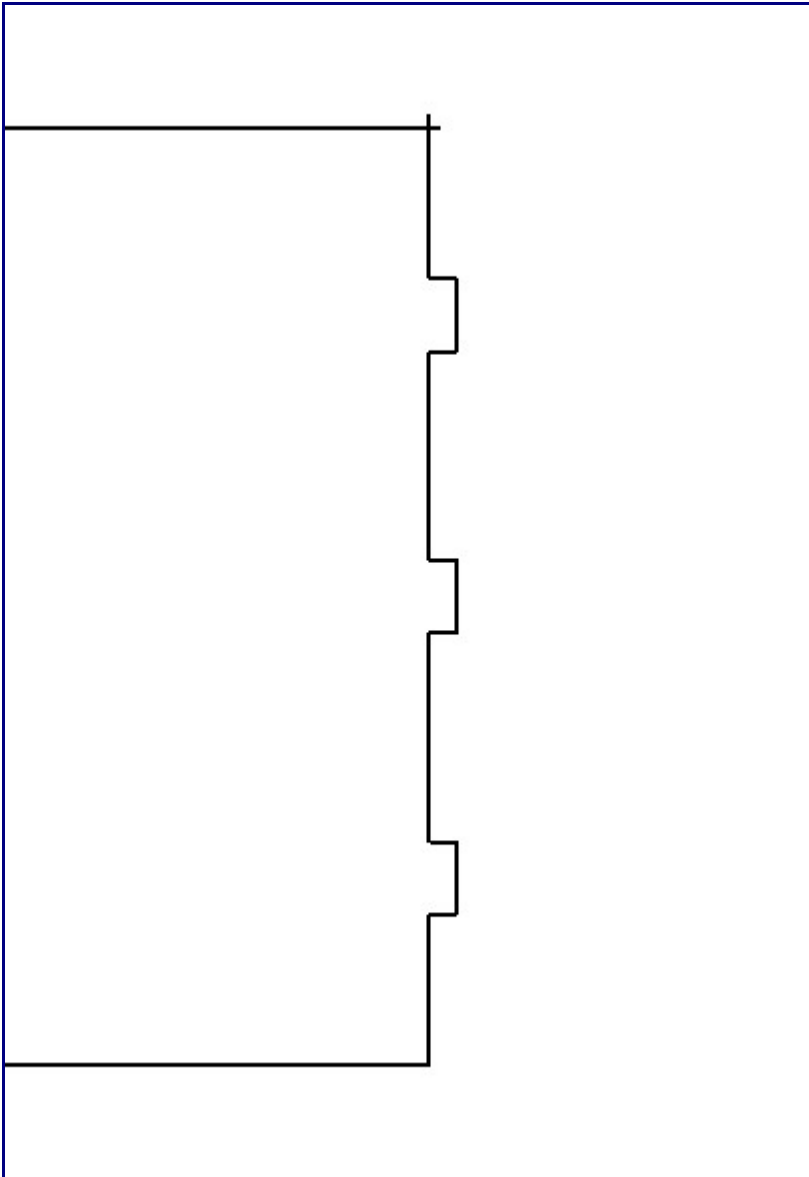
Plates can be loaded into an assembly project. If you want to place PickPoints on a plate so that they appear in assembly, you will need to use the PickPoint function in the Misc tab.

How-To

Enter a depth in the Depth field. The Depth is the distance on the Z axis from the plate. Click a point to place the PickPoint at the X and Y coordinates of that point.

Tab & Slot (Misc)

Tab & Slot



Description

Creates tabs and slots in flanges.

How-To

Select the feature that you would like to create in the Type area. In the Layout area, select Single to create a single tab or slot, String Symmetrical to create an evenly spaced series of tabs or slots along a line, or String Incremental to place a series of tabs or slots starting at one end of a line and spaced incrementally by a user selected amount. Enter the width of the tabs or slots in the Width field and enter their depth in the Depth field. Enter the amount that tabs will be undersized and slots will be oversized in the Fit Adjustment field. If you are creating an external slot, enter the width of the humps used to create the slots in the Hump Width field. Enter the distance from the end of the line to the first tab or slot in the Location from End field. If you are using String Symmetrical or String Incremental, enter the number of tabs or slots you want to create in the Quantity field. If you are using String Incremental,

enter the spacing between each tab or slot in the Spacing field. Use the Auto-Trim checkbox to toggle automatic trimming when creating tabs and slots.

Stitch (Misc)

Stitch



Description

Creates slots along a bent section of plate.

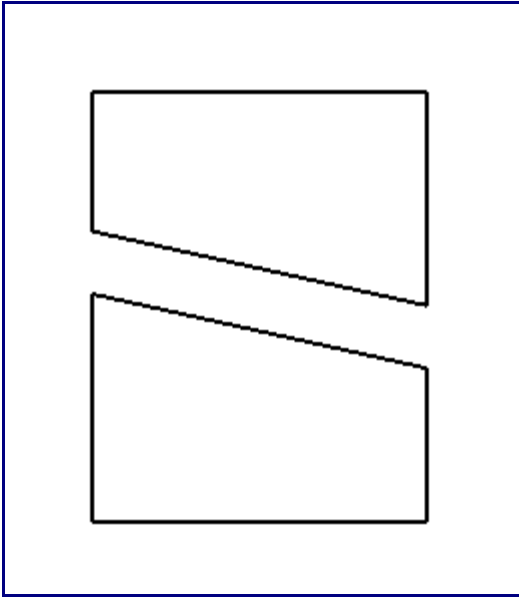
How-To

Select either Center of Current Bend or Along Line (Cursor Select). If you select Center of Current Bend, you must have a bend selected as the current flange. Enter the width of the bridges and the depth of each stitch in the Bridge Width and Stitch Depth fields. Select Incremental, Incremental - Towards Center, or Symmetrical in the Layout area. If Incremental is selected, enter the number of bridges and spacing between each bridge in the Number of Bridges and Spacing fields. Enter the distance from the edge of the plate to the first stitch in the Indent from End field. Incremental - Towards Center works exactly like Incremental, except that the stitches will start at each end and move towards the center. If you are using Symmetrical, the stitches will be evenly spaced along the bend. Enter the number of bridges in the Number of Bridges field. Enter the distance between the edge of the plate and the first

stitch in the Indent from End field.

Bridge (Misc)

Bridge



Description

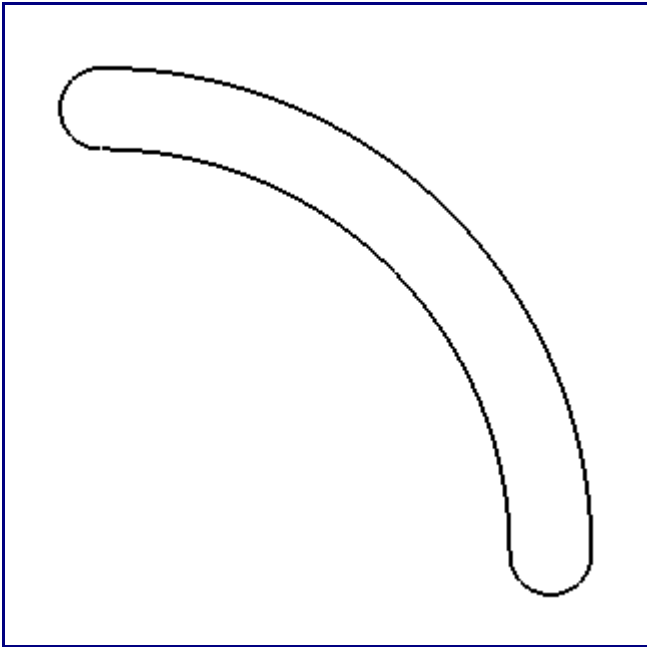
Creates a bridge of open space and automatically trims all features that it passes through.

How-To

If Two Point Select is selected, enter a width in the Width field. Click the start and end points of the bridge to create it. To turn off automatic trimming, uncheck the Auto-Trim checkbox. To manually enter the distance and angle of the end point of the bridge, uncheck the Two Point Select checkbox and enter the values in the Length and Angle fields. Click a point to set it as the start point. Bridges can be made through any line, including lines from path text.

Radial Slot (Misc)

Radial Slot



Description

Creates an arc shaped slot in a plate.

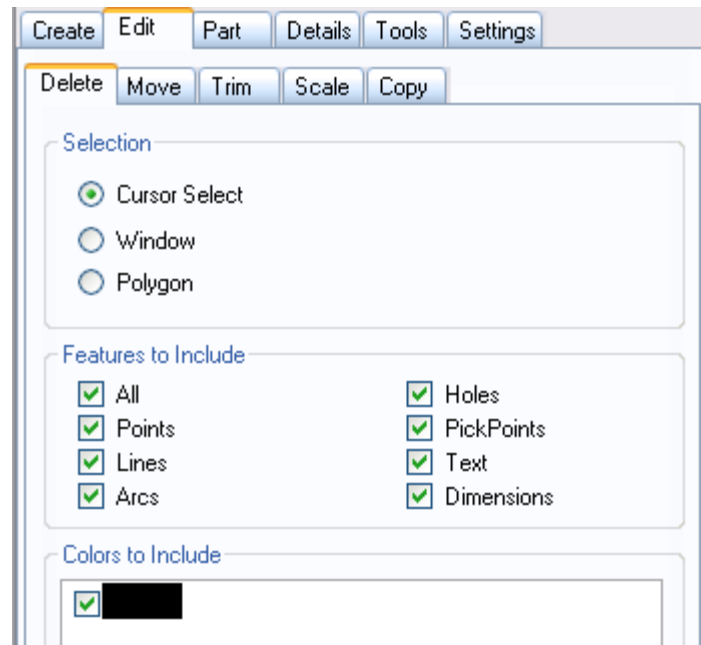
How-To

Enter the radius of the arc in the Radius field. Select whether the radius is being measured from the center, inside, or outside in the Radius Type area. Enter the width of the slot in the Width field. To determine the length of the slot, select either Start & End Angles or Center & Sweep Angles from the Layout area.

- **Start & End Angles:** Enter a start and end angle for the radial slot in the Start Angle and End Angle fields. Click a point to place the center of the arc at that location. Alternatively, you may check the Select Angles with Cursor checkbox and manually select the center and end points of the arc. To do so, check the Select Angles with Cursor checkbox, click a point to set it as the center of the arc, click a point to set it as the beginning of the arc, and move the cursor until the slot is drawn correctly. Click to place the slot.
- **Center & Sweep Angles:** Enter the angle that will be used as the center of the radial slot in the Center Angle field. Enter the total angular length of the slot in the Sweep Angle field. If Select Angles with Cursor is checked, click a point to set it as the center of the arc. Click another point to set it as the center of the slot. Move the cursor until the slot looks correct and click to place the radial slot.

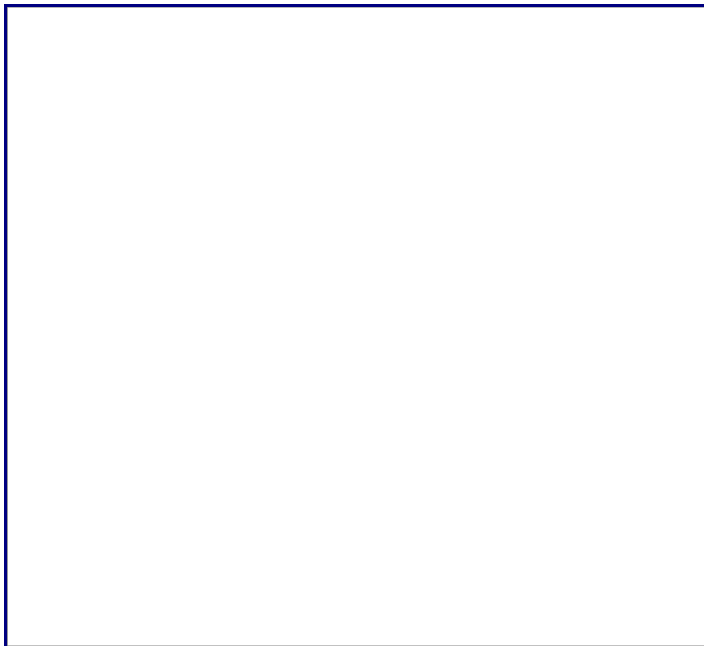
Edit (Plate)

Functions



Delete (Plate)

Current Item: [Plate](#) -- [Edit](#) -- Delete



Description

Deletes entities.

Selection

Use the Selection tools to select an entity or multiple entities and delete them. Items will be deleted instantly upon selection. See the [Selection](#) page for information about the Selection tools.

Features to Include

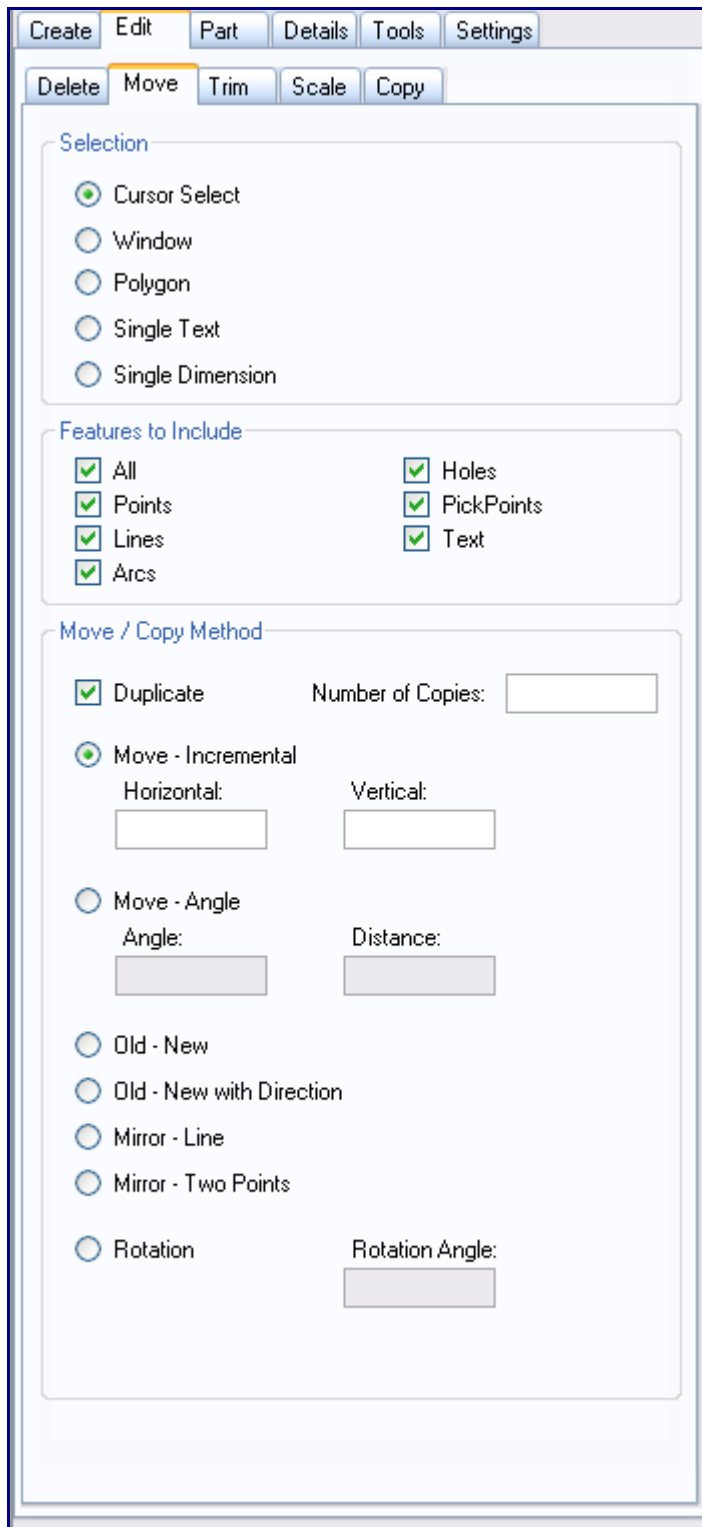
Select which features to include. When selecting multiple entities with a Window or Polygon selection, groups of entities can be unselected to prevent them from being deleted. See the [Features to Include](#) page for more information.

Colors to Include

Select which colors to include. A color can be unselected in order to prevent all entities of that color from being deleted. See the [Colors to Include](#) page for more information.

Move (Plate)

Move



Description

Moves Entities using various methods.

Selection

Select entities using the Selection tools. For more information on selection see the [Selection](#) page.

Features to Include

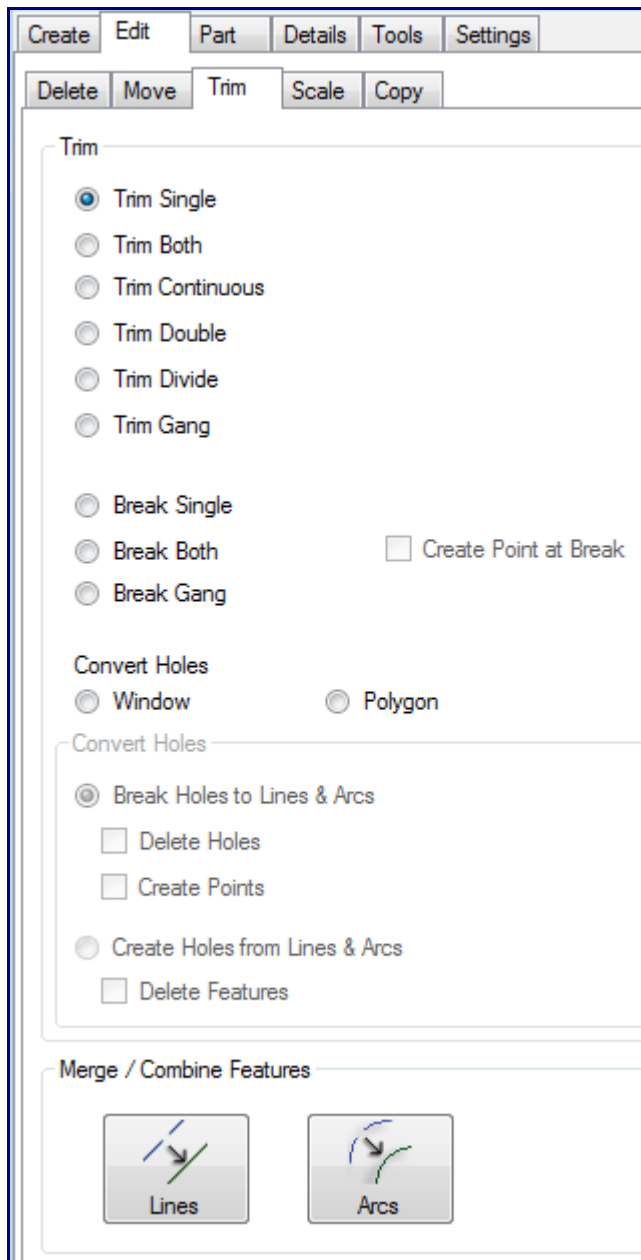
Click on a checkbox to unselect that feature. All entities of that type will be prevented from being moved. For more information on Features to Include see the [Features to Include](#) page.

Move / Copy Method

- [Duplicate](#)
- [Move - Incremental](#)
- [Move - Angle](#)
- [Old - New](#)
- [Old - New with Direction](#)
- [Mirror - Line](#)
- [Mirror - Two Points](#)
- [Rotation](#)

Trim (Plate)

Trim



Functions

- [Trim Single](#)
- [Trim Both](#)
- [Trim Continuous](#)
- [Trim Double](#)
- [Trim Divide](#)
- [Trim Gang](#)
- [Break Single](#)
- [Break Both](#)
- [Break Gang](#)
- [Convert Holes](#) Scale (Plate)

-
- [Merge / Combine Features](#)

Scale (Plate)

Scale

Description

The screenshot shows the 'Scale' tool dialog box. It features a menu bar at the top with 'Create', 'Edit', 'Part', 'Details', 'Tools', and 'Settings'. Below the menu bar are buttons for 'Delete', 'Move', 'Trim', 'Scale', and 'Copy'. The 'Scale' button is highlighted. The dialog is organized into sections: 'Selection' with radio buttons for 'Cursor Select' (selected), 'Window', and 'Polygon'; 'Features to Include' with checkboxes for 'All', 'Points', 'Lines', 'Arcs', 'Holes', 'PickPoints', and 'Text'; 'Scale Factor' with a text input field and a checked 'Scale Text Size' checkbox; and 'Colors to Include' with a checked checkbox and a red color swatch.

Scales an entity or group of entities.

Selection

This area contains the methods for selecting entities. See the [Selection](#) page for information on the various selection methods available.

Features to Include

Allows the exclusion of certain types of entities from being scaled. For more information on this area see the [Features to Include](#) page.

Scale Factor

Enter a value to multiply the size of selected entities by that factor. To scale items down, use decimals. For example, to half the size of an entity enter 0.5. Negative numbers cannot be used in the Scale

Factor field. If the Scale Text Size box is checked, text will be included in the scaling.

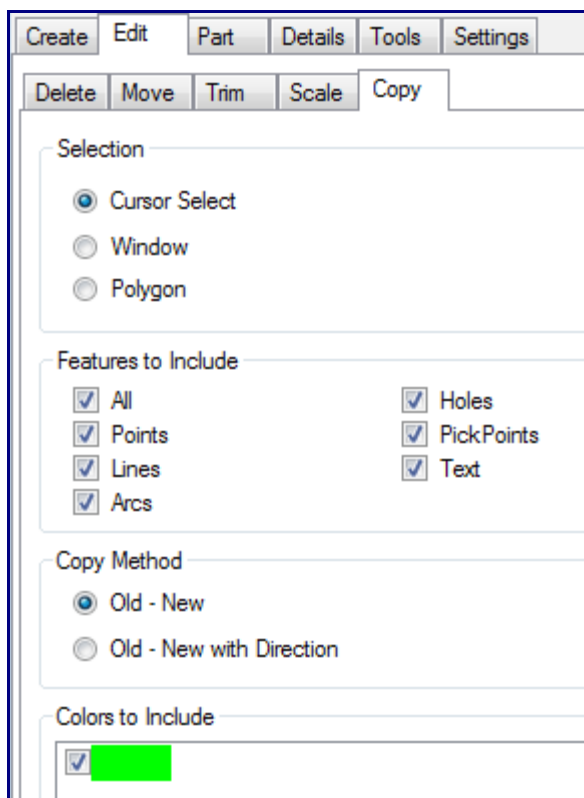
Colors to Include

Prevents any entity that is not a selected color from being scaled. All entity colors are selected by default. For more information on this area see the [Colors to Include](#) page.

Copy (Plate)

Copy

Description



Moves an entity while leaving a copy behind.

Selection

This area contains the methods available for selecting entities. For more information on selection see the [Selection](#) page.

Features to Include

Prevents any type of entity that isn't selected from being copied. See the [Features to Include](#) page for more information.

Copy Methods

- [Old - New](#)
- [Old - New with Direction](#)

Colors to Include

Prevents any entity color that isn't selected from being copied. See the [Colors to Include](#) page for more information.

Part (Plate)

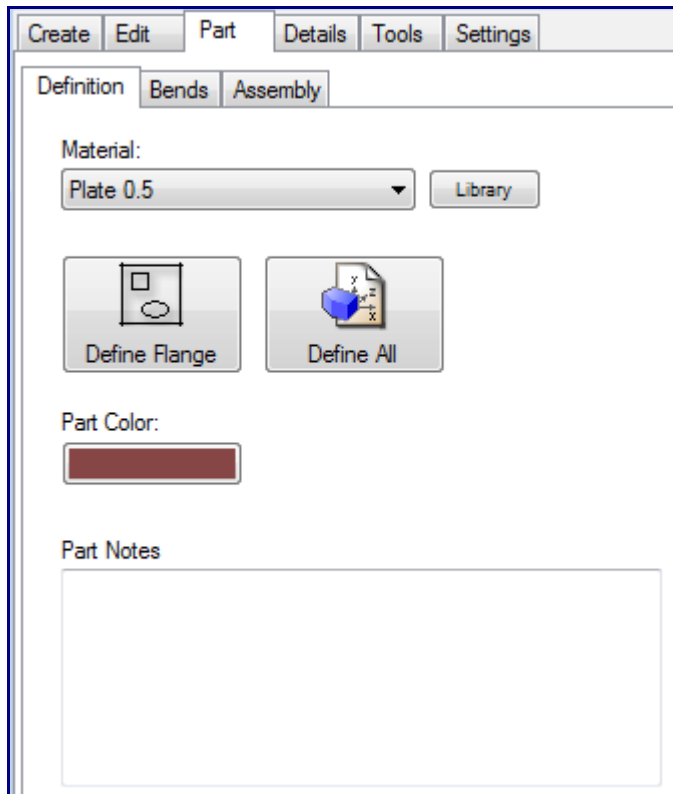
Part

Functions

Definition (Part)

Definition

Description



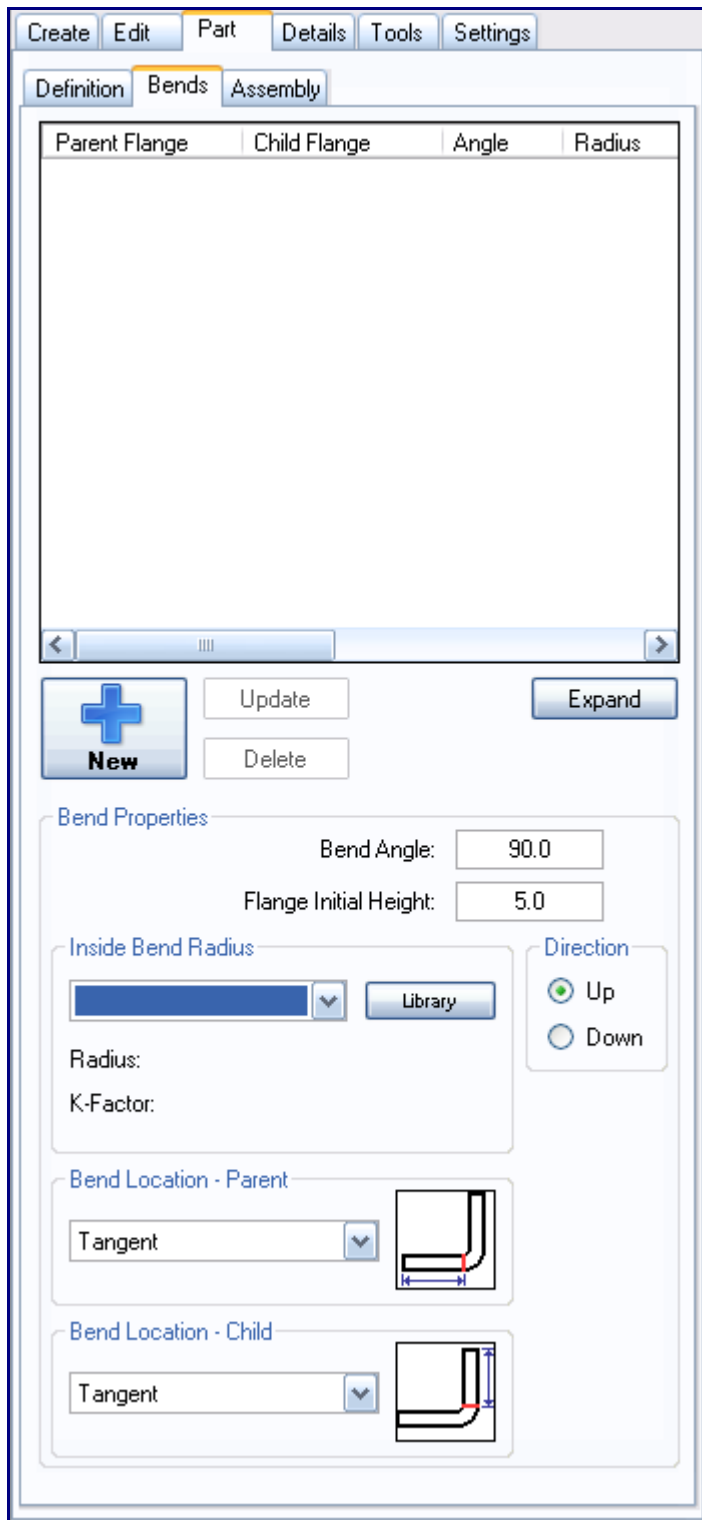
The Definition tab contains the tools necessary for defining flanges.

How-To

Select a material from the Material drop down menu. The Library button can be used to open the Material Library. To change the color of a flange, click the Part Color button and use the [Color](#) tool to pick a color. If desired, you can use the Part Notes field to enter notes about a part. Click the Define Flange button and click on a flange to define it. If you click the Define All button, the software will attempt to define all flanges with the current settings.

Bends (Part)

Bends



Description

The Bends tab contains a list of all bends in the current project and contains tools for adding bends.

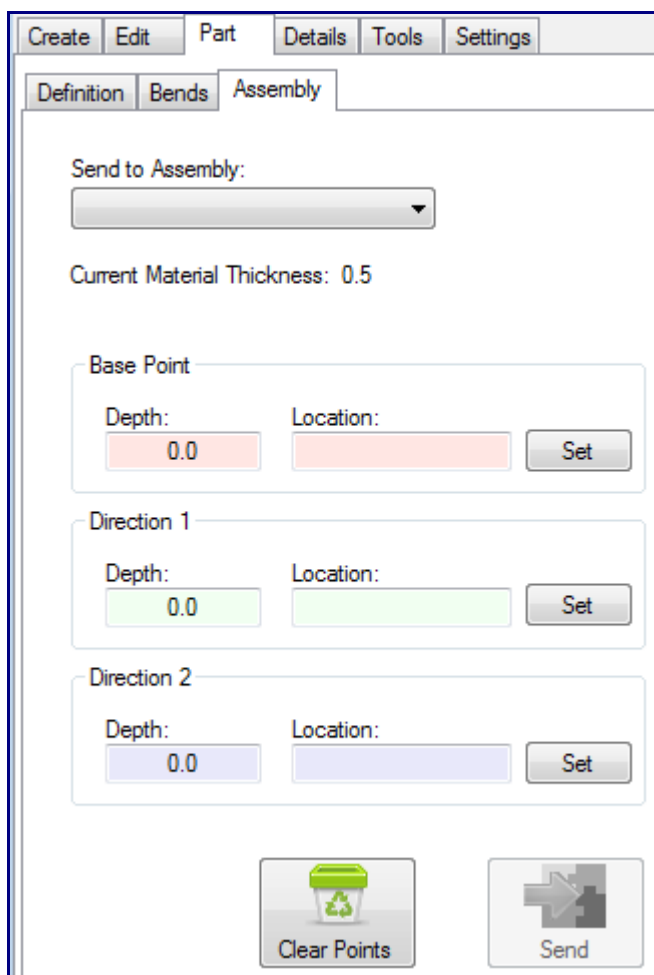
How-To

Use the drop down menu in the Inside Bend Radius area to select a radius for the bend. To open the Material Library, click the Library button. Select if the bend should bend up or down in the Direction area. Select the Parent and Child bend locations using their respective drop down menus. Enter a bend angle and initial flange height in the Bend Angle and Flange Initial Height fields. Click the New button and click a line on a flange to place the bend there.

Assembly (Part)

Assembly

Description



The screenshot shows a software interface with a top menu bar containing 'Create', 'Edit', 'Part', 'Details', 'Tools', and 'Settings'. Below this is a sub-menu bar with 'Definition', 'Bends', and 'Assembly'. The 'Assembly' tab is active, displaying a 'Send to Assembly:' dropdown menu. Below this, it shows 'Current Material Thickness: 0.5'. There are three sections for defining bend directions: 'Base Point', 'Direction 1', and 'Direction 2'. Each section has a 'Depth' field (with a value of 0.0) and a 'Location' field, both with a 'Set' button. At the bottom, there are two buttons: 'Clear Points' (with a trash icon) and 'Send' (with a plus icon).

The Assembly tab allows a plate to be set up so that it can be exported into an Assembly project.

How-To

Select an Assembly project to send the plate to by using the Send to Assembly drop down menu. To create a new Assembly project with the plate select New Assembly. Click Set in the Base Point area and click on a point to make it the base point of the plate. The next two points that you select will be

the forward and up direction points. Select the points by clicking on them. Use the Depth fields to set each points Z axis position. To reset all of the direction points click the Clear Points button. To send the plate to the specified Assembly project, click the Send button.

Details (Plate)

Details

Functions

Features (Details)

Features



Description

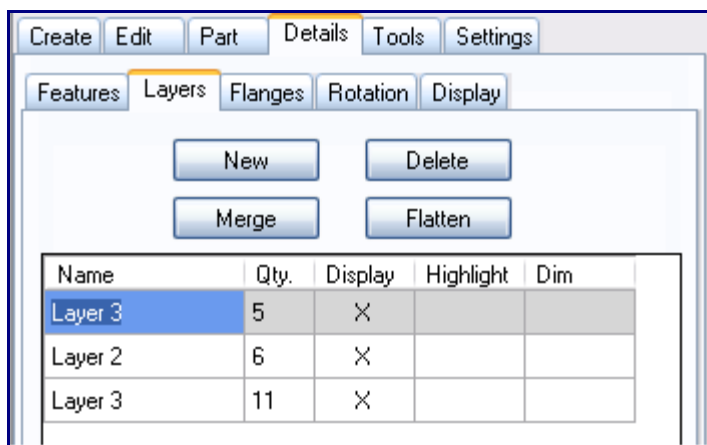
The Features tab contains a list of every feature in the current Plate project.

How-To

Click the Expand button to see the Features list in a different window. Use the Tolerance drop down menu to set the display tolerance of decimals. Click the Display Feet and Inches checkbox to display feet and inches, instead of just inches. In the Features list, you can edit a few aspects of each feature. To change a features color, click the colored box in the Color column and use the [Color](#) tool to select a new color. To toggle the display of the feature, click the box in the Display column. To change a features layer, use the drop down menu in the Layer column. When certain types of features are selected, additional options and information may appear for that feature below the Features list.

Layers (Details)

Layers



Description

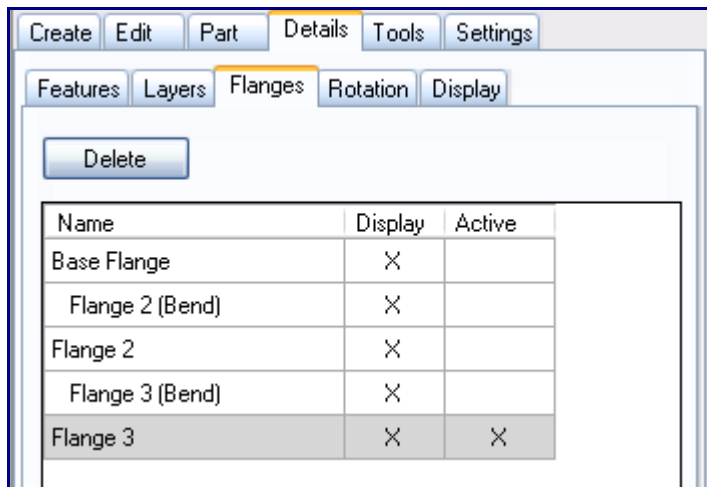
The Layers tab contains tools related to creating and editing layers.

How-To

To create a new layer, click the New button. To delete a layer, select it from the list of layers and click the Delete button. To merge two layers, make you sure you are on the layer that you want to keep, and select the layer that you want to merge into the current layer. Click the Merge button to merge the two layers. To merge all layers together into a single layer, click the Flatten button.

Flanges (Details)

Flanges



Description

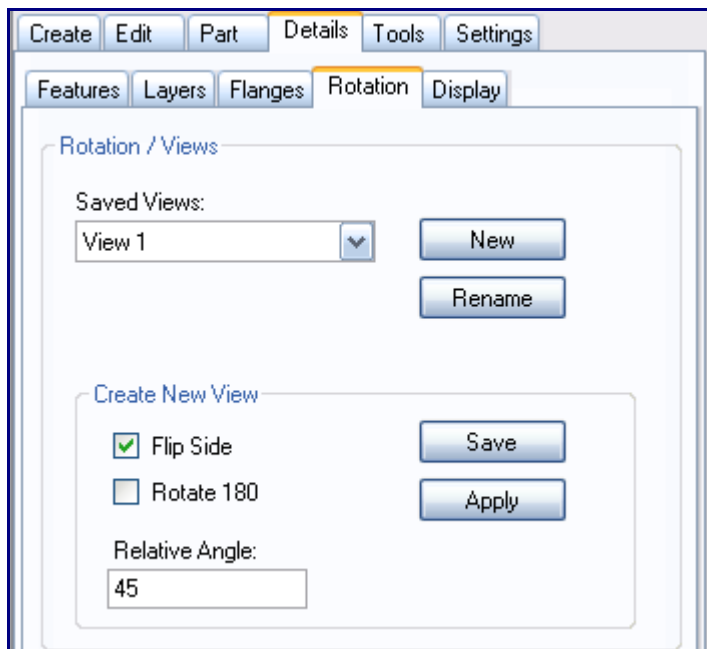
The Flanges tab allows you to delete, hide, display, and switch between the available flanges in the current project.

How-To

To Delete a flange, select it in the list of flanges and click the Delete button. To toggle the display of a flange, use the checkboxes in the Display column. To switch between active flanges, click on the boxes in the Active column.

Rotation (Details)

Rotation



Description

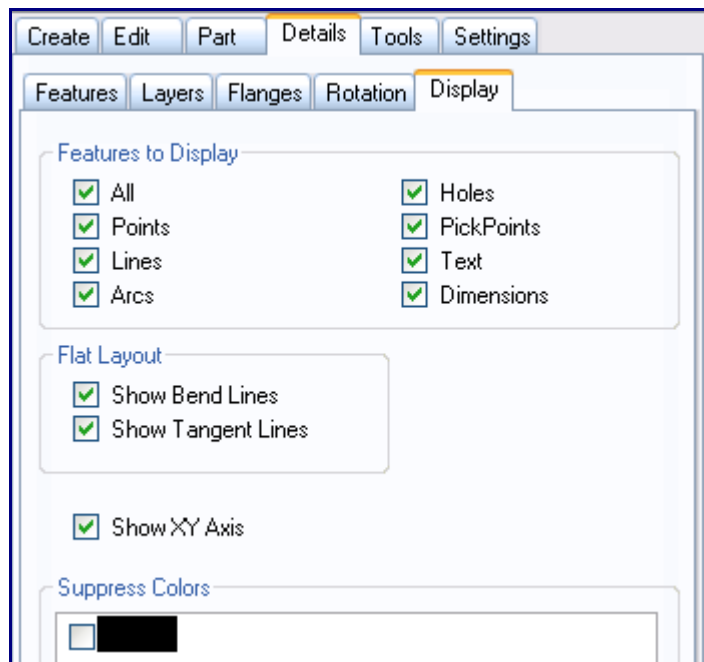
The Rotation tab allows you to rotate the display and switch between saved rotated views.

How-To

Click the New button and click two points to create a reference line. That line will be considered a 0° angle. In the Relative Angle field, enter a relative angle to tilt the display by in relation to the reference line you selected. To view the other side of the part, check the Flip Side checkbox. To rotate the display 180°, click the Rotate 180 checkbox. Click the Apply button to apply the rotation to the display. To save the current rotated view, click the Save button, name the view, and click the OK button. You can return to this view by selecting it from the Saved Views drop down menu.

Display (Details)

Display



Description

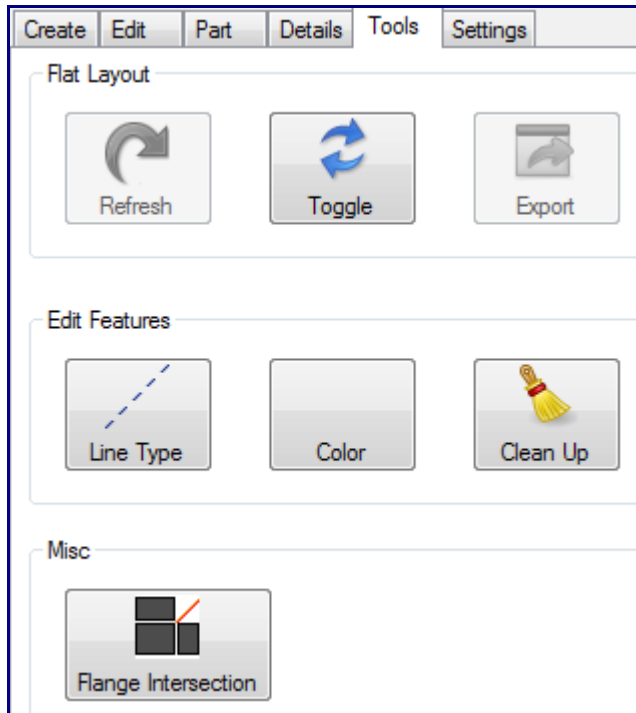
The Display tab contains tools that can be used to hide or display certain features.

How-To

To hide all instances of a specific type of feature, uncheck the box next to the name of the feature. In the Flat Layout area you can toggle the display of bend lines and tangent lines while using Flat Layout. Use the Show XY Axis checkbox to toggle the display of the XY axis. To hide all features of a certain color, check the box next to that color in the Suppress Colors area.

Tools (Plate)

Current Item: [Plate](#) – Tools -- Description



Using the tools tab, you can change the line type and color of features in both the Design View and the Flat Layout. There are a few other features in the Tools tab as well.

How-To

- **Refresh:** Refreshes the Flat Layout. If the Flat Layout is refreshed, any changes that you have made to it using the Tools tab will be lost.
- **Toggle:** Switches between the Design View and the Flat Layout.
- **Export:** Exports the Flat Layout as a .DXF file.
- **Line Type:** Select a line type in the [Tool Bar](#) and click the Line Type button in the Tools tab. Select a line to change its type. For information on selection, see the [Selection](#) and [Features to Include](#) pages.
- **Color:** Select a color in the [Tool Bar](#). Click the Color button in the Tools tab and use a [Selection](#) feature of your choosing. If desired, you may also use the [Features to Include](#) function.
- **Clean Up:** Deletes any duplicate features or zero-length features.
- **Flange Intersection:** Click on the Flange Intersection button and click on two intersecting flanges.

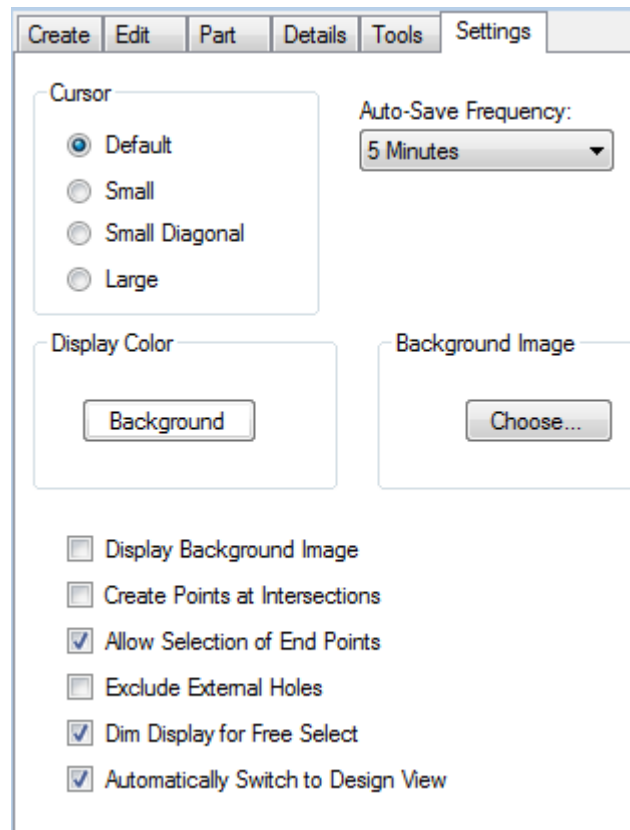
Settings (Plate)

Description

The Settings tab contains various options that can be used to customize interface.

Settings

- **Cursor:** Select either Default, Small, Small Diagonal, or Large to change the look of the cursor. Select each one and move the cursor over the display window to see what it looks like.
- **Display Color:** Click the Background button to change the background color of the display window using the [Color](#) menu.
- **Background Image:** To display an image in the background of the display window, click the Choose button and find a picture by using the windows file browser.
- **Display Background Image:** Toggles the display of a background image in the display window.
- **Create Points at Intersections:** Toggles the automatic creation of points at intersections between entities.
- **Allow Selection of End Points:** If this box is checked, end points of lines and arcs can be used as points for the placement of other features.
- **Exclude External Holes:** If this box is checked, holes that are not on a flange will be ignored.
- **Dim Display for Free Select:** Toggles the dimming of the display window when Free Select mode is active.
- **Automatically Switch to Design View:** Toggles the automatic switching to the Design View that occurs whenever the Design View is necessary for a function.



Tool Bar (Plate)



Description

The Tool Bar is the row of buttons just below the Main Menu Bar.

How-To

- **New Part:** Opens a new part file.
- **New Assembly:** Opens a new Assembly file.
- **New Plate:** Opens a new plate (sheet metal) file.
- **Open Part:** Opens a browser where an existing part file can be selected and opened.
- **Open Assembly:** Opens a browser where an existing Assembly project can be selected and opened.
- **Open Plate:** Opens a browser where an existing plate file can be selected and opened.
- **Save:** Saves the current project.
- **Print:** Prints the display window.
- **Print Preview:** Shows a preview of the display window.
- **Import a part from Solidworks:** Opens the Import Part screen, where a part can be imported from Solidworks and defined.
- **Display Mode:** Display Mode can either be clicked like a button to toggle between line, wireframe, and shaded versions of the Assembly project, or a Display Mode can be selected from the drop down menu by clicking the down arrow to the right of the Display Mode button.
- **PickPoint Display:** Click PickPoint Display to toggle the display of PickPoints on or off.
- **Projections:** Click on the Projections button to reveal the Projections window. Each button in the Planar and Isometric areas represents a predefined viewing angle that you can switch to. To save the current view so that you can switch back to it later, Click one of the Click to Set buttons in the Custom area. To clear a Custom view Click Clear and click on the custom button that you want to clear, or click Clear All to clear all custom views.
- **Home:** Returns the display window to the home view.
- **Zoom Fit:** Zooms the display in or out to fit the current project.
- **Color:** Opens the [Color](#) menu, where the color of new features can be selected.
- **Line Type:** Any new lines that are placed will be the type of line that is selected in the Line Type drop down menu. Click the small picture of a line to the right of the phrase "Line Type" to open the Line Type drop down menu.
- **Layer:** Use the Layer drop down menu to select a layer. You can only work on the currently selected layer.
- **Flange:** To switch the active flange, use the Flange drop down menu.