

MacConcept Quickstart

 **File Edit View Window Group Move Cut Line Point**



After you started and personalized MacConcept choose 'Add' from the 'Window' menu and type in any name for a new window, like 'PushPin start'. Select 'OK' and answer 'No' at the next dialog box.

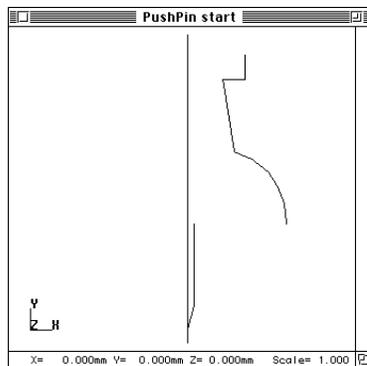
You will be presented with a new window in the 'Plan View' at scale 1. Now select the 'Lines by Cursor' tool  from the toolbox. Use your cursor to select a point in the upper center portion of the window as a first point of a vertical line. Select a point in the bottom portion of the window for a second point of that vertical line. Use the screen pixel resolution to make sure that you have a vertical line. Now click the mouse button outside of the window somewhere to end the line input.

Select the 'Line by Cursor' tool  again and start creating in a similar manner the top and bottom portion of a push pin half section. Use a freehand method and don't forget to end the line input by clicking outside of the window somewhere. When you are done you should have three different lines. One for the vertical rotation axis, one for the upper half section of the push pin and one for the half section of the push pin needle, as shown below.

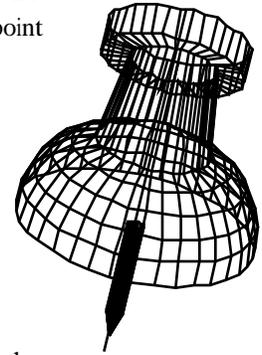
Once that is done you can select the 'Dynamic' cursor  to rotate the art into any rotation. Selecting a point in the right portion of the window will rotate the art to the right, selecting a point in the left portion of the screen will do the opposite. The same thing is true for the up and down rotations.

The distance of the cursor from the center of the window controls the rotation speed.

Once it is in any dynamic rotation select the 'Surface of Revolution' tool  and follow the following steps. Select



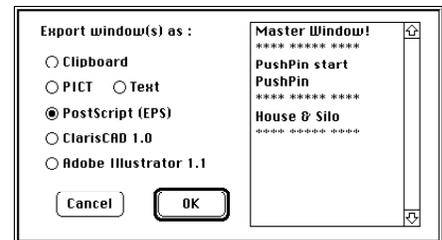
the axis line and the first point on it. Select it again and the second point on it. With this the axis for the rotation is determined in 3D. Then select the top half section of the push pin and it will be rotated around the axis line in 10° increments. The corresponding data points and the rotated sections will be connected by flowlines. Repeat the process for the needle by selecting the 'Surface of Revolution' tool and the axis line over, this time selecting the needle half section to complete the process.



Use the 'Dynamic' cursor  again to rotate your design into the desired final rotation, and store such a rotation by selecting 'Store' from the 'View' menu.

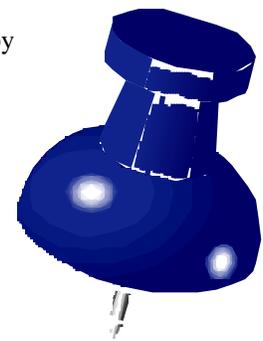
In order to share this design with other applications an export as a PICT, an encapsulated PostScript file or as an Adobe

Illustrator file is necessary. Choose 'Export' from the 'File' menu and select the desired



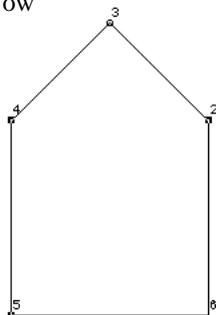
output format. Do not forget to select the export window in the list to the right. Select 'OK'.

The exported file can be used as a template to draw over in any application. Adobe Illustrator files can be opened by Illustrator as well as Aldus FreeHand and there the lines can be separated. Using this capability a dull wireframe can be turned into an attractive PostScript file, as shown on the right, with little effort within minutes.

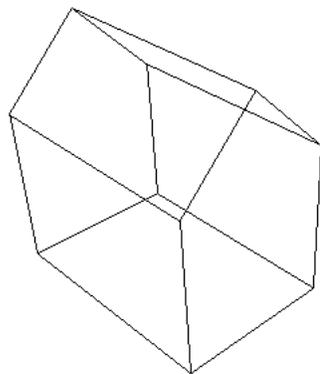


For the second example create a new window by selecting 'Add' from the 'Window' menu. This time call it 'House & Silo' and again select 'No' in the following dialog box. Like in every new window you start out in the plan view at scale '1'. It also may default to the metric system which is demonstrated by the unit 'mm' in the info bar at the bottom of the window.

Get into a front view by selecting 'Front' from the 'Standard' submenu in the 'View' menu. So you will start with the design of the front face of the house. You like to input the data in the unit 'feet' therefore select 'Preference' from the 'Edit menu and select the 'feet' button followed by 'OK'. Select the 'Rectangle' tool  and input front face dimensions of '24 by 24' feet. Since you are at scale 1, you are looking into the middle of a 24 by 24 feet square which is far too large for your screen. That's why you can only see it if you select the 'Scale' tool  and select 'fill 2D' followed by 'OK'. That will change the scale to the largest possible for your screen and still show the entire square. You like to add to the design and need more room so scale it down further with the 'Scale' tool  to scale '0.01'. You like to add the peak of the roof. Select the square which highlights the 'Line' and the 'Point' menu and select 'Midpoint' from the 'Point' menu. Select point #3 and then point #2 which will add a midpoint. To raise that point, to form the peak, for a given dimension select  to switch from cursor to numerical input . Now select 'Move' from the 'Point' menu followed by selecting point #3 and change the 'Z' location of this point from '12' to '24' feet which will raise the point by 12 feet. Select the 'Return' tool  to store the new data for this line. Change the scale again if you need to see more of the design and select 'Store' from the 'View' menu to store the current view for future retrieval.

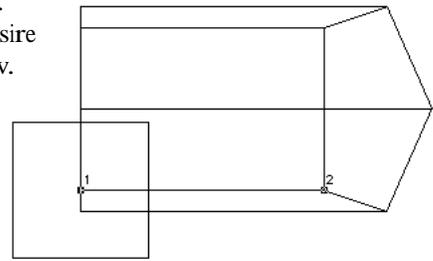


With the 'Dynamic' tool  you can see that we have already a 3D design even that it is flat for now. Select 'Restore' from the 'View' menu to be ready for the next operation. Go back to cursor input, so select the numerical button  to switch back to it . In order to turn the design into a full 3D object you like to extrude the current shape. Select the 'Extrude' tool  and then the house front. Input an extrusion value of '-36' feet to extrude away from us. Use the 'Dynamic' tool again to see the 3D house. Use the 'Move' button 



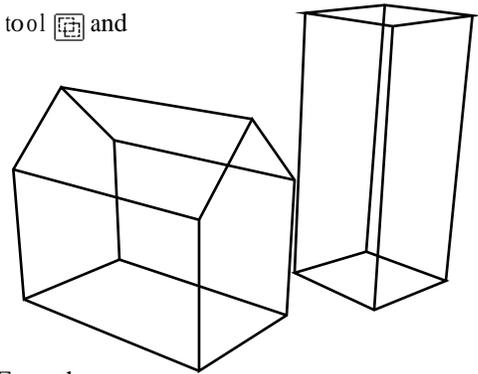
to change the scale. A cursor position in the top half of the screen will move you closer to the design a button half position will move you away.

Let's look at the house from a perspective view. Select 'Perspective' from the 'View' menu and select the top right pictorial. The house is moved into a standard perspective but has no vanishing points yet, so it is just a rotation. Select the 'Perspective' button  and follow up with the 'Eye Point Distance' button  where you input a distance of '100' feet. Now you see a true 3 three vanishing point perspective. Rescale if you desire and store the view.



It is now time to design the silo. That is best done in the plan view which you find in the 'View/Standard' submenu. Use the 'Rectangle' tool  and enter a silo dimension of '20 by 20' feet. This time select the 'Center/Data point' option. Now MacConcept needs a data point for the center of the rectangle. Select one on a line of the bottom of the house like shown above.

Let's move and rotate that silo bottom. You need to group the line first. Select the 'Grouping' tool  and then the silo line. Finish the selection by clicking somewhere outside of the window. Select  to undo the perspective momentarily. From the 'Move' menu select 'Arbitrary' and move the silo line down and away from the house. Now select 'Rock' from the 'Move' menu and select the top left point of the silo line and key in '-15°'. Release the group with the 'Return' tool . Now extrude  the silo for '48' feet. Turn the perspective  back on. Use 'Dynamic'  or the 'Rotation' tools  to find a pleasing perspective.



Store your view and export to your favorite illustration application for the final touches. Use  to select other windows in your file.

