

### Topics covered in this Lesson:

Line Thickness drawing techniques

In this lesson you'll create the same **chair** by drawing lines and then giving them **thickness**. Think of thickness as the height of the line or how tall it is (like a fence in your yard). This is different from the width of the line that you learned in the **polyline** lesson. This is a quick, simple way of achieving some degree of 3-D feel. Once again, remember that in some instances, simple concepts may do the job. This is also a good technique for AutoCAD LT users, who don't have the option to draw in true 3-D.

Start a new drawing using the acad.dwt template.

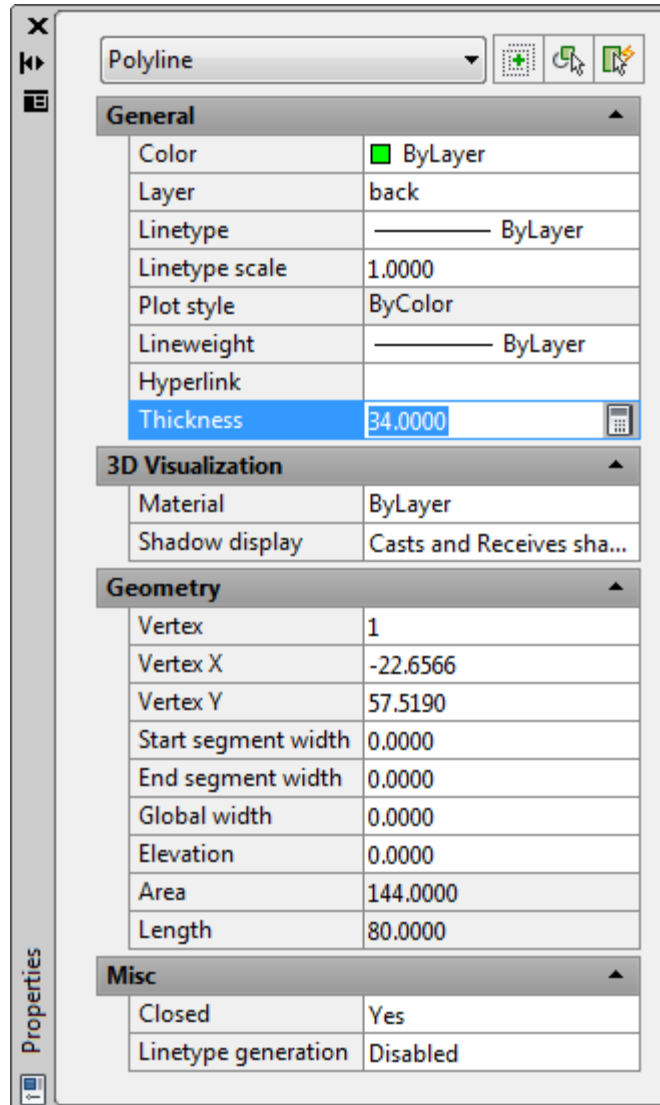
Create 3 layers called **SIDES, SEAT, BACK** and give them different colors. Make back your current layer.

Look at the drawing of the chair in **Lesson 3-5** for dimensions.

Draw rectangles to create the back, sides and seat on their respective layers (as if you were drawing the top view). Do not worry about height, thickness or anything but the basic outline of the top view.

Select one of the rectangles, right click and select "**Properties**". When asked to select an object, select the polyline that will become the back of the chair. Leave the palette open for the rest of this exercise.

You'll see the Modify Polyline dialog box pop up and it should look like the one below.

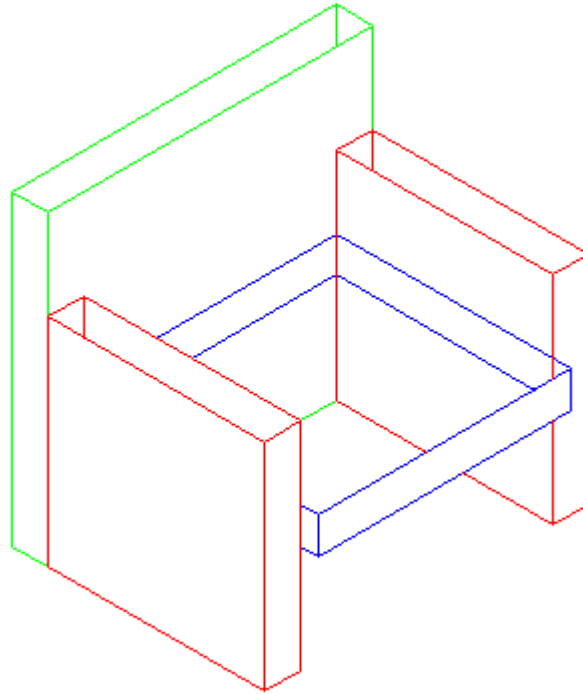


For this lesson, there are two important areas to look at. Make sure that your line is located at and elevation of Zero. From there you want to go into the **Thickness** text box and enter 34. This will give you a polyline that is based where you drew it and will be 34" thick, meaning that it will extend 34" in the positive Z-axis. (Entering a negative number will extend the thickness in the negative Z-axis.)

Change the properties of the sides and give them a thickness of 24".

Give the seat a thickness of 4 inches. The seat should be based on Z=0. To move it up to the correct location, enter the move command and give it a displacement of **@0,0,12**.

Look at your drawing in the SW isometric 3-D view and it should look like the one you drew in the wire-frame exercise. There is one major difference between the two models. As stated earlier, wire-frame models do not allow you to hide lines that you might not see in the real world. With your cursor in the SW isometric viewport, enter the command **HIDE**. You should see that your chair now looks like the one below.



You'll see that it is now starting to look like a chair. It's not perfect yet. You can still see the sides through the seat and the tops of the sides and back are hollow. Once again - think of a fence around your yard.

Save the drawing under the name **chair\_line\_thickness.dwg** in your CAD folder (you'll use it in the next lesson).

So far you have learnt two ways to construct a 3-D-like object and still haven't learnt any new drawing commands. These methods use 2D commands to achieve 3-D appearances. Another advantage of these methods is that they can be used in AutoCAD LT, which doesn't have any true 3-D capabilities at all.

**Extra Practice:** Create a line thickness drawing of **this drawing**.

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