

# Chapter 12

## Preparing a Drawing to Print

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**This chapter will cover:**

- 1. The Place Text Tool**
- 2. Creating a Notes Cell**
- 3. Placing a Border/Titleblock Cell**
- 4. Preparing a Drawing to Print**
- 5. Printing a Drawing**

## Using the Place Text Tool to Place Text in the Drawing

First, select the Hidden level from the level drop box. Next, to place text on the drawing, select the Place Text tool from the Text toolbox and the Place Text window will appear. Make sure that the height and width is set to 0.1.

A

In the Text Editor – Word Processor window, make sure that INTL\_ENGINEERING is the selected font. Also, set the color to ByLevel. Now you are ready to type the notes that you see below, using Enter to start a new line. Use the Insert Symbol tool to add the plus/minus and the degrees symbols.

Notes:

1. Material:
2. Remove all sharp edges and burrs.
3. Corrosion Protection:
4. Tolerances unless otherwise specified:
  - 1 decimal:  $\pm 0.06$
  - 2 decimal:  $\pm 0.010$
  - 3 decimal:  $\pm 0.003$
  - Angular:  $\pm 0.5^\circ$

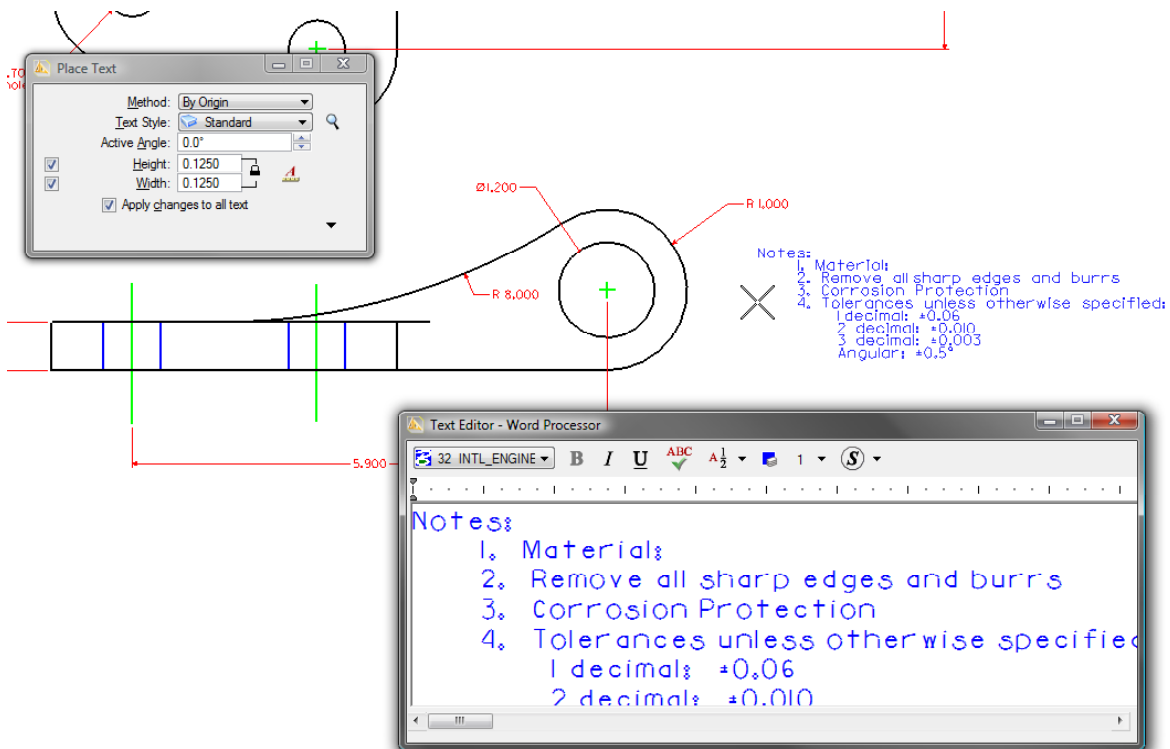


Figure 12.1 – Placing Notes

Place the notes to the right of the side view. To check your spelling, select the Spell Checker tool from the Text toolbox. Select the notes to check them for errors. If you have any, a dialogue box will appear to help you fix them.

## Creating a Mechanical Notes Cell

Notice that you did not add the Material or Corrosion Protection to the notes. Notes for mechanical drawings contain many similar segments, so to save time, you can save this set of notes as a cell. Once saved as a cell, the notes can be easily dropped into any drawing to be tweaked with little effort.

To save the notes as a cell, first select the notes using the Element Selection tool. Then select the Define Cell Origin tool from the Cells toolbox and select the top left corner of the notes as the Cell Origin. Next, select Element from the menu bar and then select Cells. When the Cell Library window appears, open the cell library you created during the Borders and Titleblock chapter, titled “cells”. You should see the A, B, C, and D borders in the library, as well as the Titleblock. To add your notes to this library, select Create. Type Mechanical Notes for the Name, and Select Graphic as the type of cell. Hit create to save the cell.

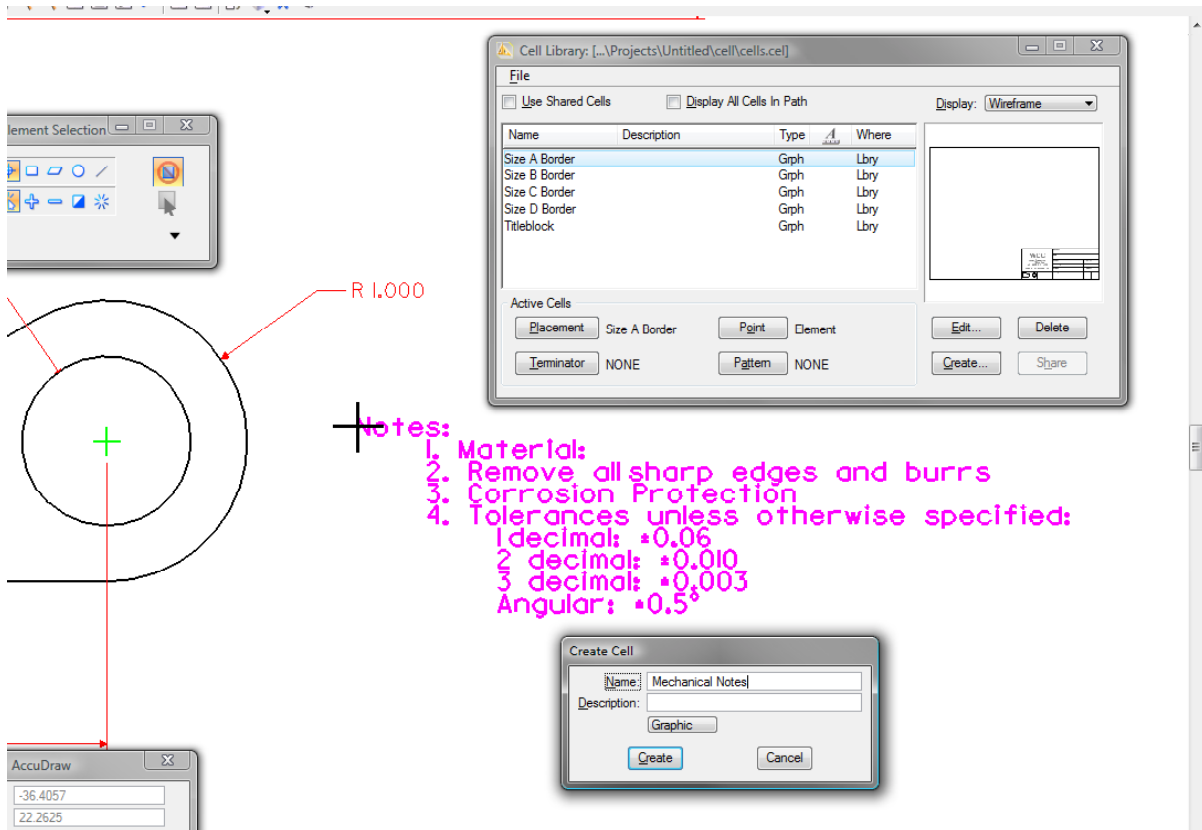
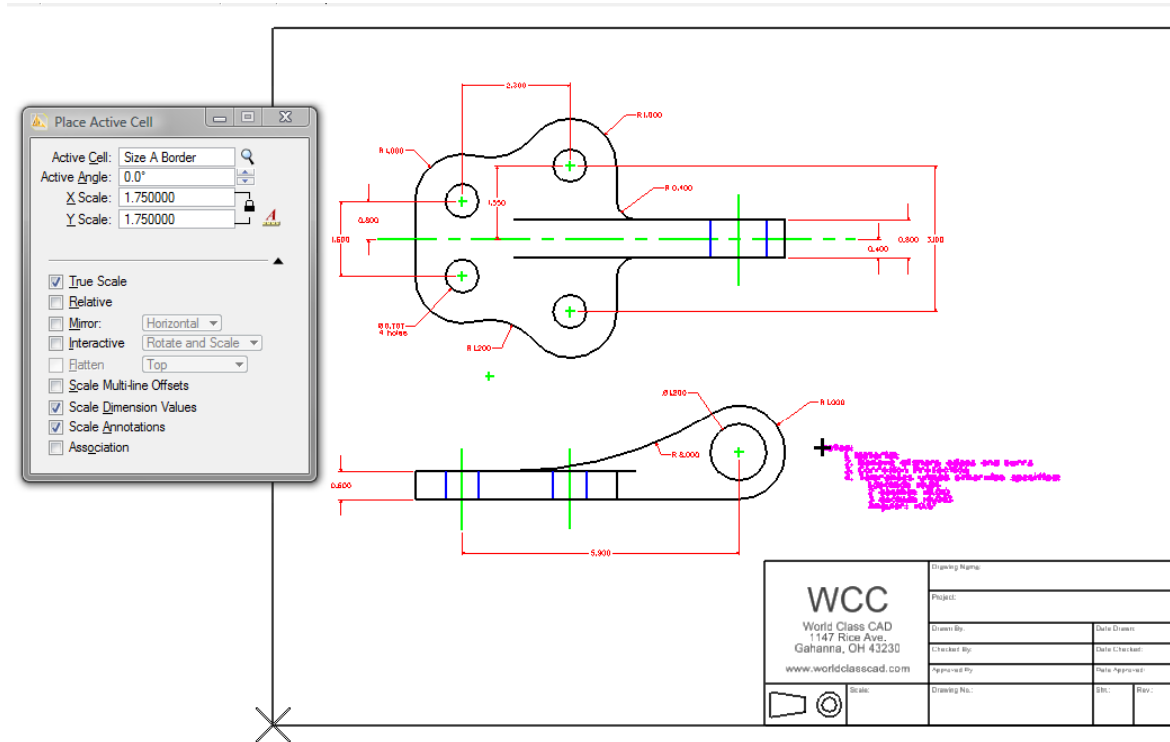


Figure 12.2 – Creating a Mechanical Notes Cell

Now you can add mechanical notes to any drawing just like adding a cell. To finish editing the notes in this drawing, type “25 mm cold rolled steel” for the Material and “zinc plate” for the Corrosion Protection. Use the Edit Text tool from the Text toolbox.

## Placing a Border and Titleblock Cell

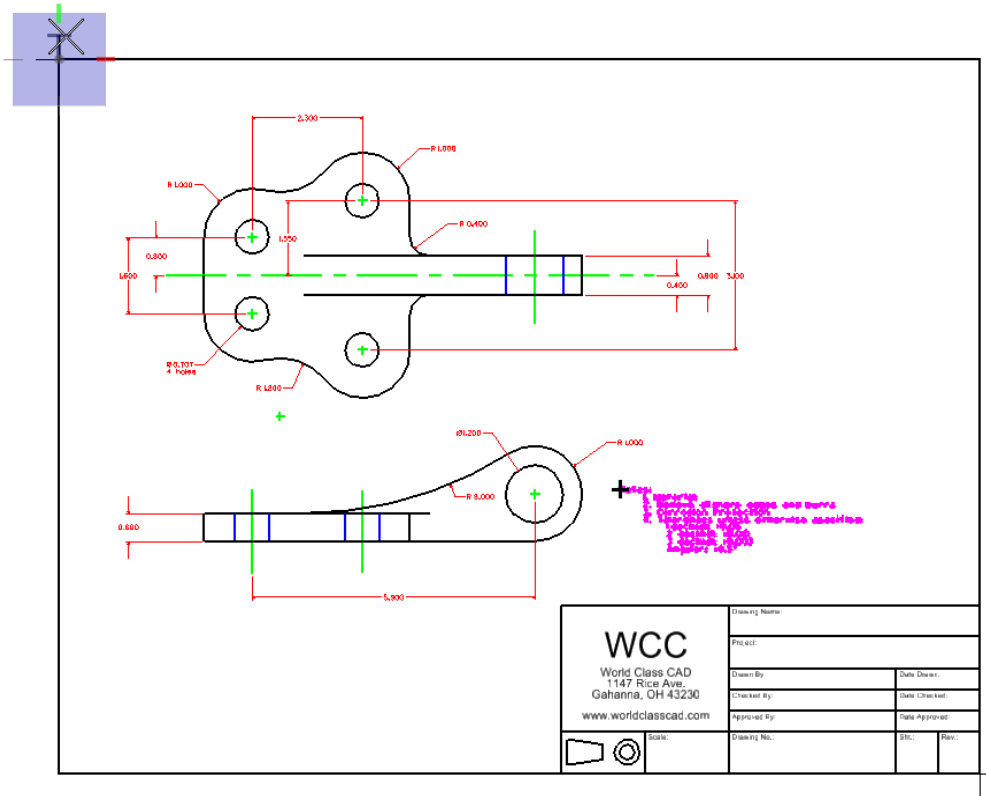
Now you are almost ready to print, but first you need to add a titleblock and border. You saved these as cells in a previous chapter, so this will be simple. Select the Place Active Cell tool from the Cells toolbox and the Place Active Cell window will appear. Select the Size A Border as the Active cell, and set the scale to 1.75. Place the border around your drawing.



**Figure 12.3 – Placing a Size A Border**

The Size A border is set the ratio of an 8.5” x 11” sheet of paper. If you are printing on another size of paper, use another border.

You will need to add some construction lines to ensure that the border stays in the printable area. Add a 0.5” horizontal and vertical line off of the top left and bottom right corner of the border.



**Figure 12.4 – Adding Construction Lines Outside the Border**

Now you are ready to print. Select File from the menu bar and then select Print. When the Print window appears, change Area to Fit All. This will automatically maximize the paper size you have selected, in this case, letter size. You can select the Preview tool to see the printout before you print. As you can see, the construction lines you placed on the outside of the border keep the rest of the border and the drawing inside the printable area of the page. When you feel that the drawing is ready, click the Print button.

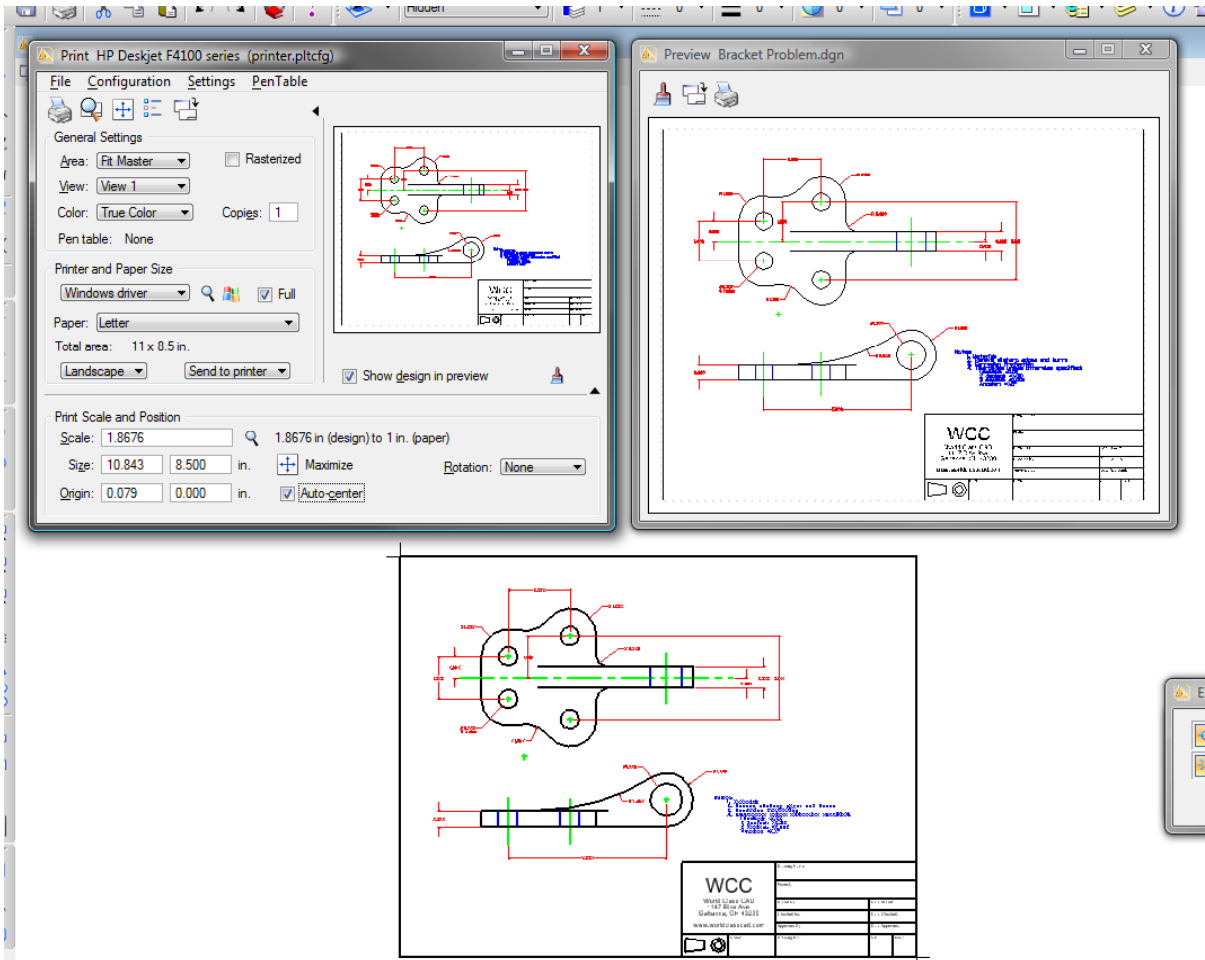


Figure 12.5 – Printing the Bracket Problem

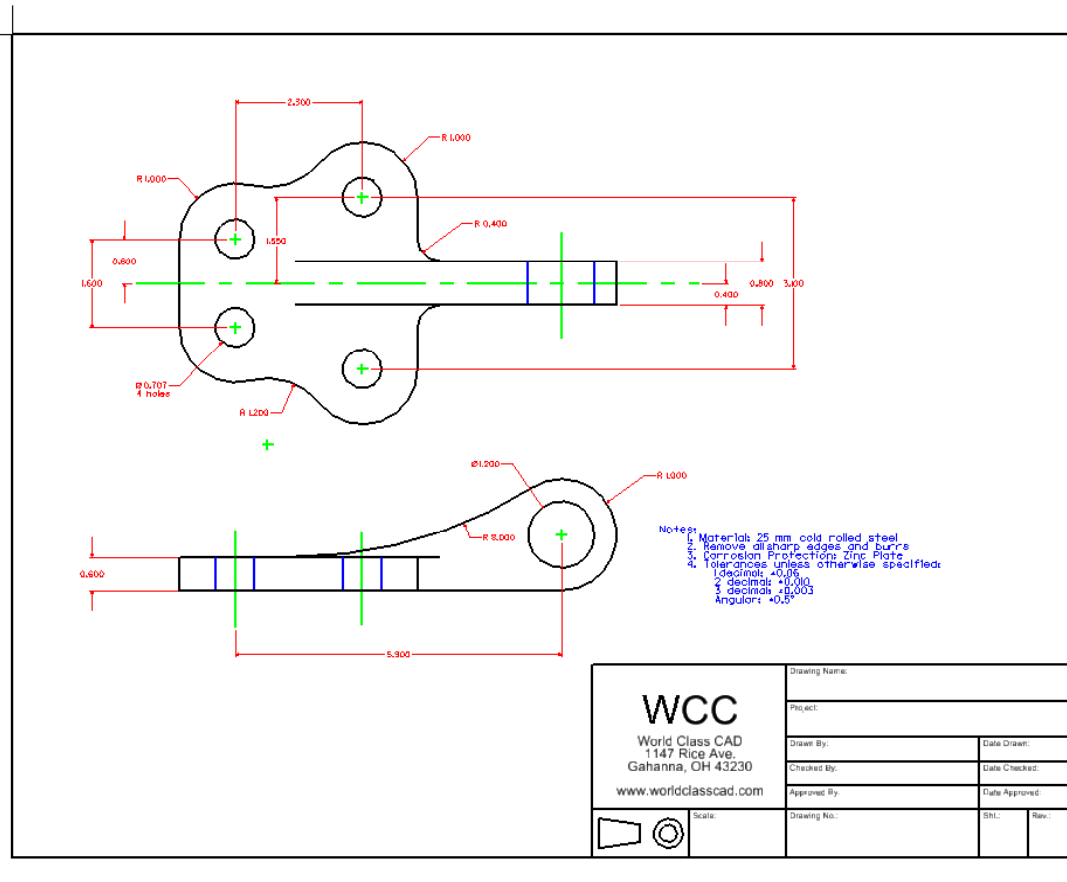


Figure 12.6 – The Finished Bracket Problem

\* World Class CAD Challenge 02-23 \* - Close this drawing file. Create a New file and draw the Bracket problem, dimension, and place the border and notes in less than 15 minutes. Continue this drill four times, each time completing the drawing under 15 minutes to maintain your World Class ranking.

