

Chapter 7

Placing Notes on the Circular Problem

In this chapter, you will learn the following to World Class standards:

- **Using the Tools and Panels for Simple 2D Computer Aided Drafting (CAD)**
- **Using the Pan Tool to Change Views in the Drawing**
- **Changing Layers to Place Text on the Drawing**
- **Using the Text Command to Add Text to the Drawing**
- **Using Special Symbols when Adding Text to the Drawing**
- **Saving the Drawing**

Using the Pan Tool to Change the View

Use the **Pan** tool from the **Zoom** tools located at the bottom right corner of the Solid Edge program. Moving the view will allow you to have enough room on the screen to place text next to your dimensioned drawing. Select the **Pan** tool. Pick the lower right hand corner of the display, holding the left mouse button and moving the **Pan** symbol (white glove) to the upper left corner of the display. The display should match the image in Figure 7.1.

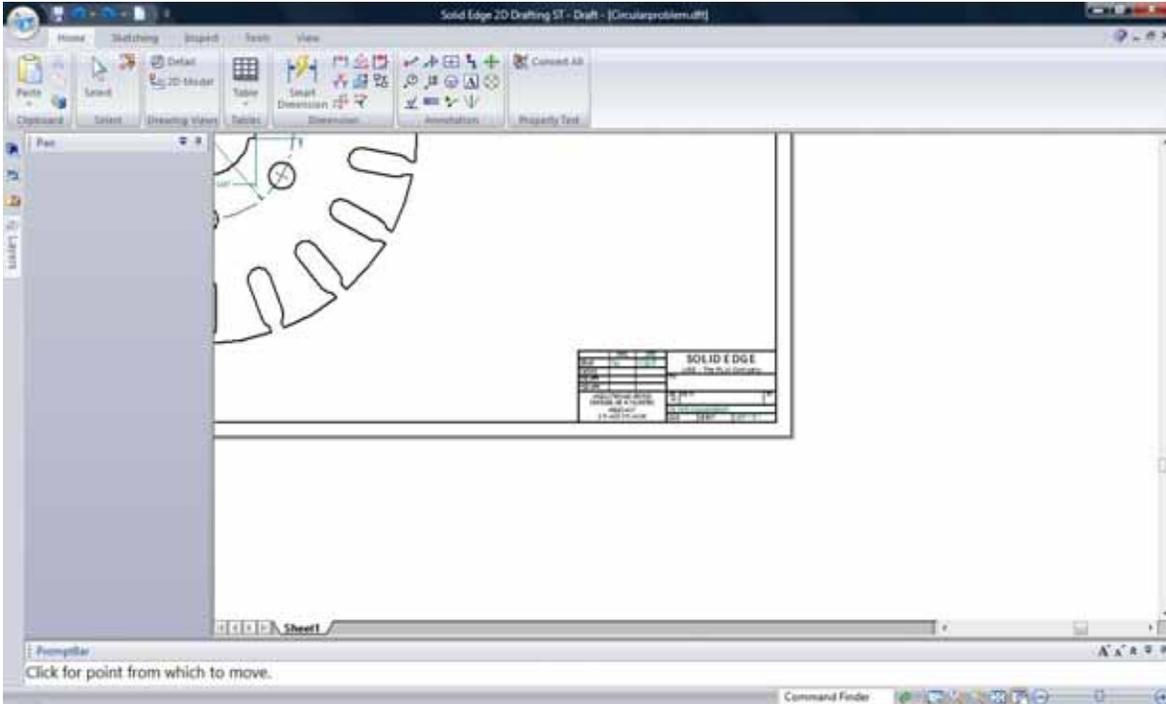


Figure 7.1 – Changing the View of the Drawing Using the Pan Command

Changing Layers to Put Text on the Text Layer

Next you need to change the layer to **Text** by going to the Layers Window on the left side of the screen and double clicking on the Text layer. A pencil should now appear in the small box to the left of the layer indicating that it is in use (Figure 7.2).

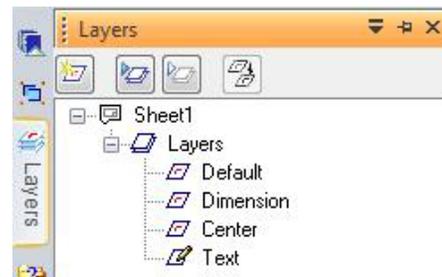


Figure 7.2 – Activating Text Layer

Using the Text Command to Place Text in the Drawing

To place text on your drawing, select the **Text** tool on the **Annotation** panel under the **Home** tab. The PromptBar will ask you to position the text where you would like it. Select your first point to the bottom right of the circular part. Now, clicking with your left mouse button, drag to the lower right of the display to create a text box (Figure 7.3). When creating the text box, it is important that you only click the left mouse button once and then keep it held down while you drag to create the box.

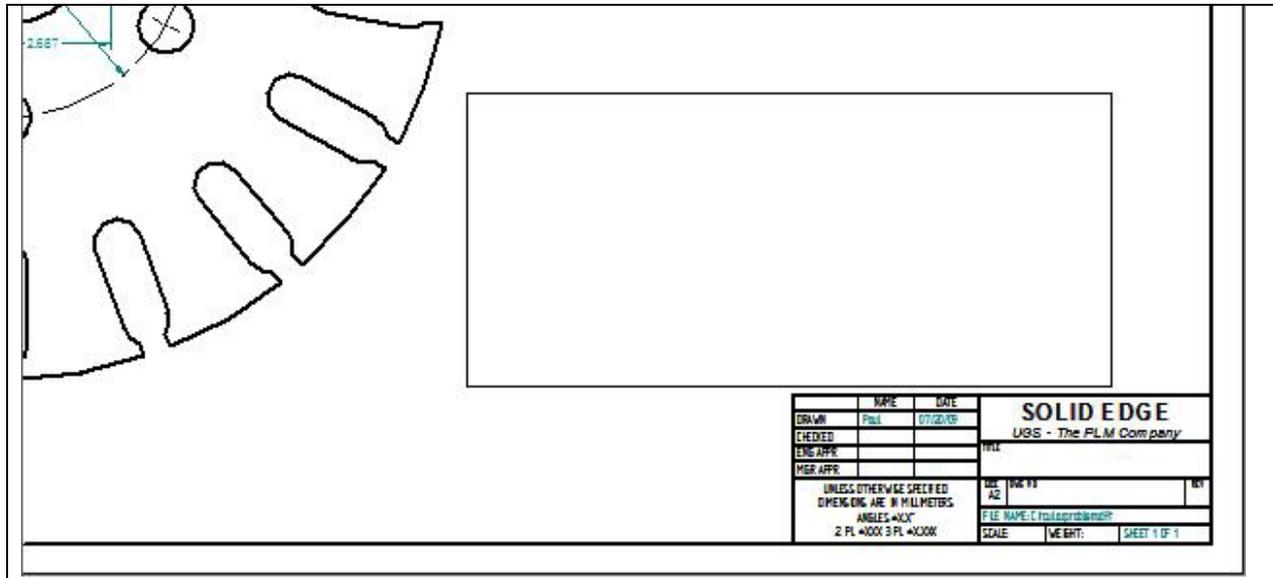


Figure 7.3 – Making the Text Box in the Drawing

To the left of the screen will appear the Text Window. This window will allow you to format the text to the desired font and size. In the **Format** box of the Text Window, you want to set the font to **Arial** (Figure 7.4). In the **Font** box, change the font size to 0.13 (Figure 7.5). Select the text box with your mouse to place the flashing cursor. Now you are ready to type your notes using **Enter** when you need to start a new line. The Text tool is very much like a word processing program.

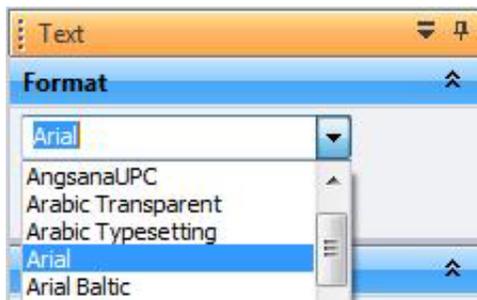


Figure 7.4 – Select “Arial” Font

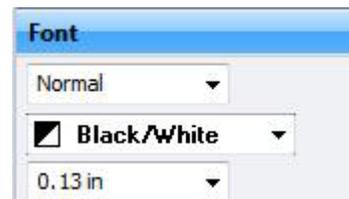


Figure 7.5 – Setting Font Size to 0.13

The notes you need to type are:

NOTES:

1. **MATERIAL: 18 GA. (0.046) C.R.S.**
2. **REMOVE ALL SHARP EDGES AND BURRS.**
3. **CADMIUM PLATE.**
4. **TOLERANCES UNLESS OTHERWISE SPECIFIED:**
3 DECIMAL: ± 0.010
ANGULAR: $\pm 0.1^\circ$

When adding the plus or minus symbol to the 1 decimal note, type the colon and add a space, then select the **Character Map** tool on the **Insert** panel under the **Sketching** tab (Figure 7.6). The Character Map Window will appear on the screen (Figure 7.7). After picking the plus or minus symbol, click on the Select button. Once you have done that, click the Copy button next to the Select button on the Character Map Window. When you want to insert the plus or minus symbol, you need to use the keystroke for the paste command. To do this you must first hold down the control key on your keyboard and then hit the letter “v” while stilling holding down the control key. Some extra text will appear in front of the symbol, but it is very easy to select and delete it by highlighting it with your mouse and hitting the delete key on your keyboard (Figure 7.8). The procedure is the same for the degree sign on the 0.5 tolerance on the Angular measurements. Find the degree sign on the character map, hit select, and then copy. Place the symbol using the keystroke for the paste command (control+“v”) and delete the extra text in front of the symbol.

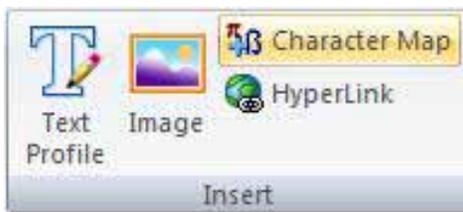


Figure 7.6 – Character Map Tool

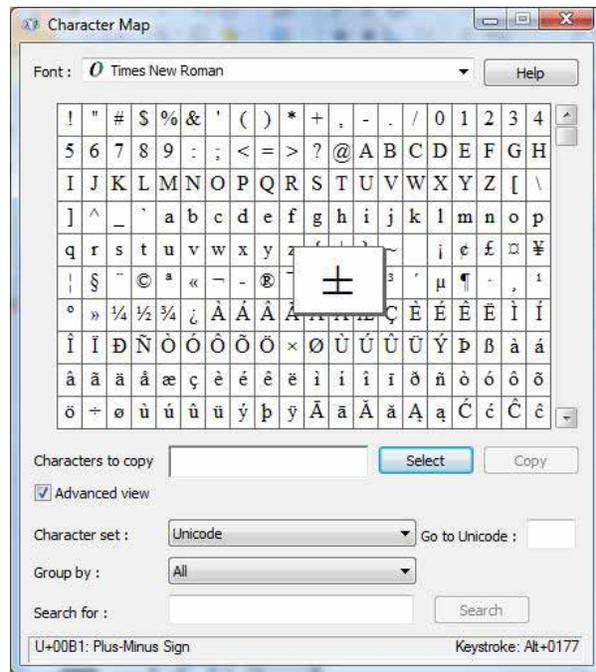


Figure 7.7 – Character Map Window

<p>NOTES: 1. MATERIAL: 18 GA. (0.046) C.R.S. 2. REMOVE ALL SHARP EDGES AND BURRS. 3. CADMIUM PLATE. 4. TOLERANCES UNLESS OTHERWISE SPECIFIED: 3 DECIMAL: ± 0.010 ANGULAR: ± 0.1 Msftedit 541212508°</p>	<p>NOTES: 1. MATERIAL: 18 GA. (0.046) C.R.S. 2. REMOVE ALL SHARP EDGES AND BURRS. 3. CADMIUM PLATE. 4. TOLERANCES UNLESS OTHERWISE SPECIFIED: 3 DECIMAL: ± 0.010 ANGULAR: $\pm 0.1^\circ$</p>
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Figure 7.8 – Selecting Extra Text for Deletion Figure 7.9 – Finished Notes

Saving Your Drawing

To save the drawing, select the **Save** tool from the **Quick Access** toolbar on the upper left of the screen. The Save As window will appear in the display. You can make your own directory or you can place the drawing in the My Documents folder. Ask your Network Administrator or Supervisor to show you where you should store your finished drawing. You should type the name of the drawing “rectangle” in the File Name text box. The “.dft” suffix is added automatically to the name when you save the drawing.

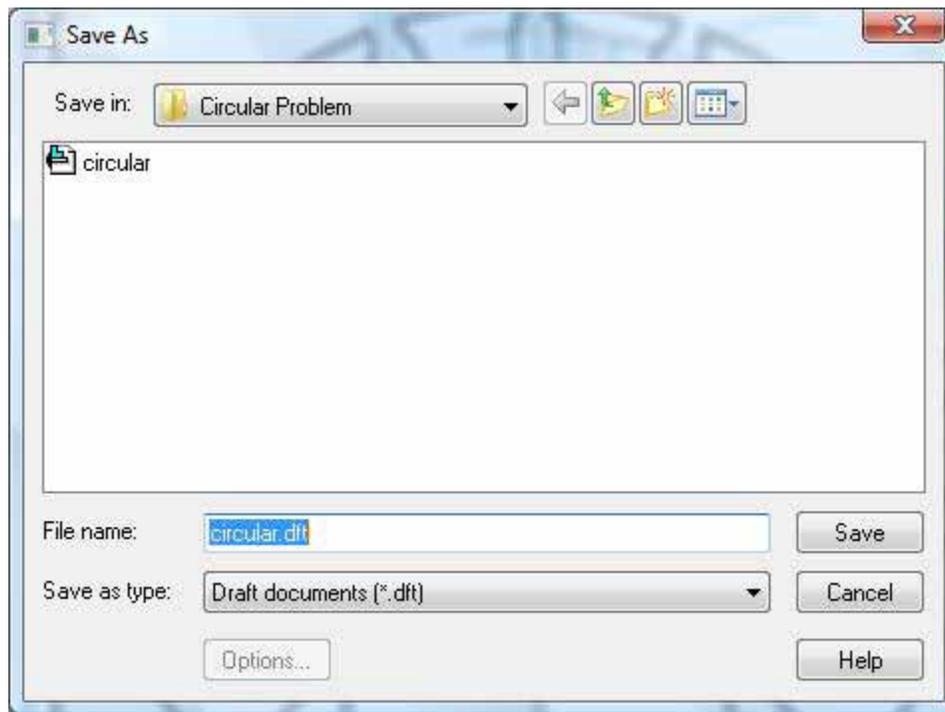


Figure 7.10 – Saving Drawing as circular.dft

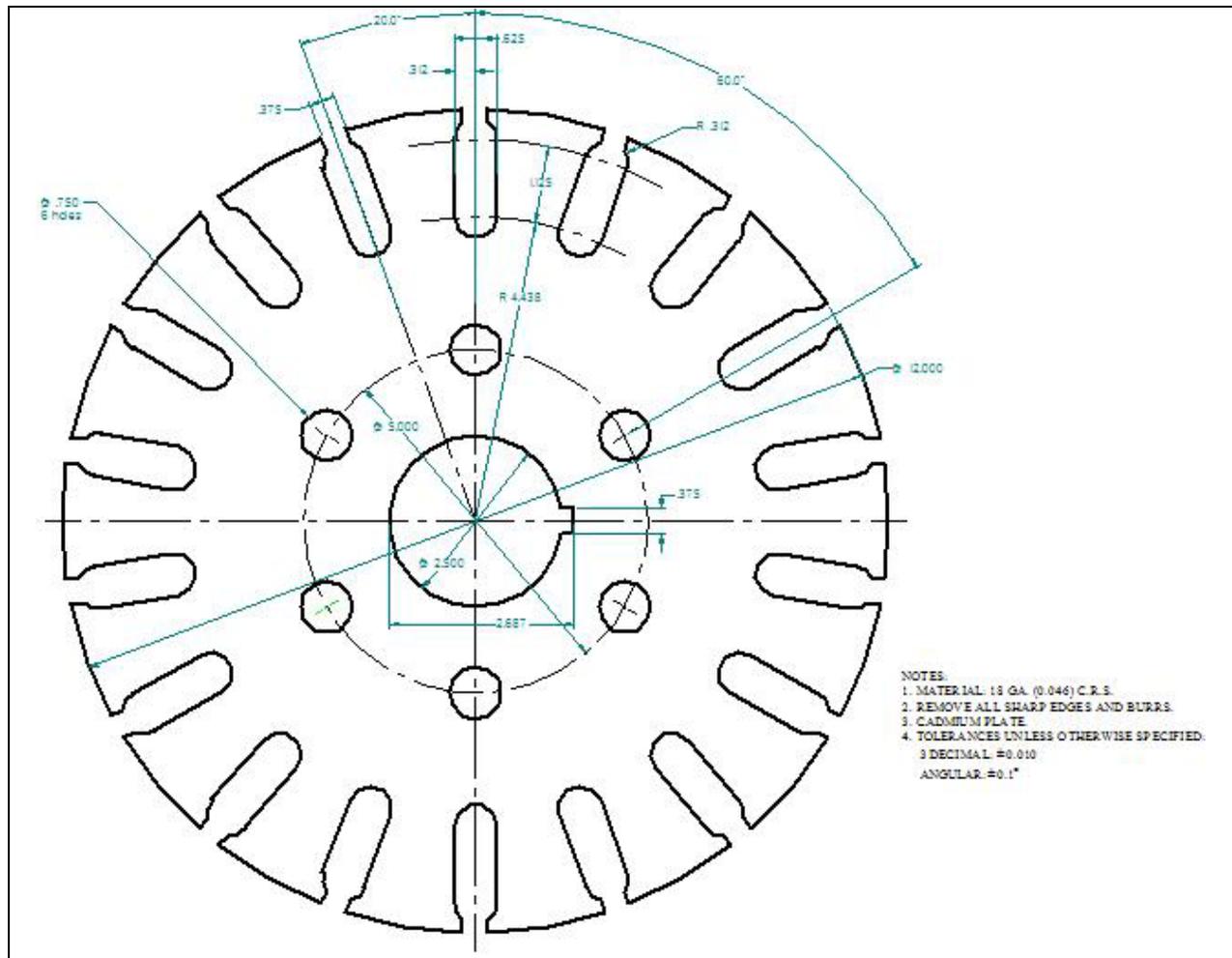


Figure 7.11 – Finished Circular Problem with Notes

*** World Class CAD Challenge 22-16 * - Close this drawing file. Create a New file and draw the entire circular problem on proper layers, using proper dimensions and finally placing notes on the drawing. Continue this drill four times, each time completing the drawing in less than 15 minutes to maintain you World Class ranking. The world record for the complete drawing is less than 5 minutes. See if you can match that effort, but if you are able to complete it in less than 15 minutes, you may proceed to the next chapter, making a drawing template.**

Send your best time and a copy of your drawing for verification to the authors of these problems to have your name, location and time posted. See the web site for instructions.

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