

## 1.0 Example: Creating a Cookie Cutter Cell for a Sphere.

The example will create a cookie cutter cell for a sphere of Uranium encased in a sphere of lead. The cookie cutter will remove one quarter of the sphere.

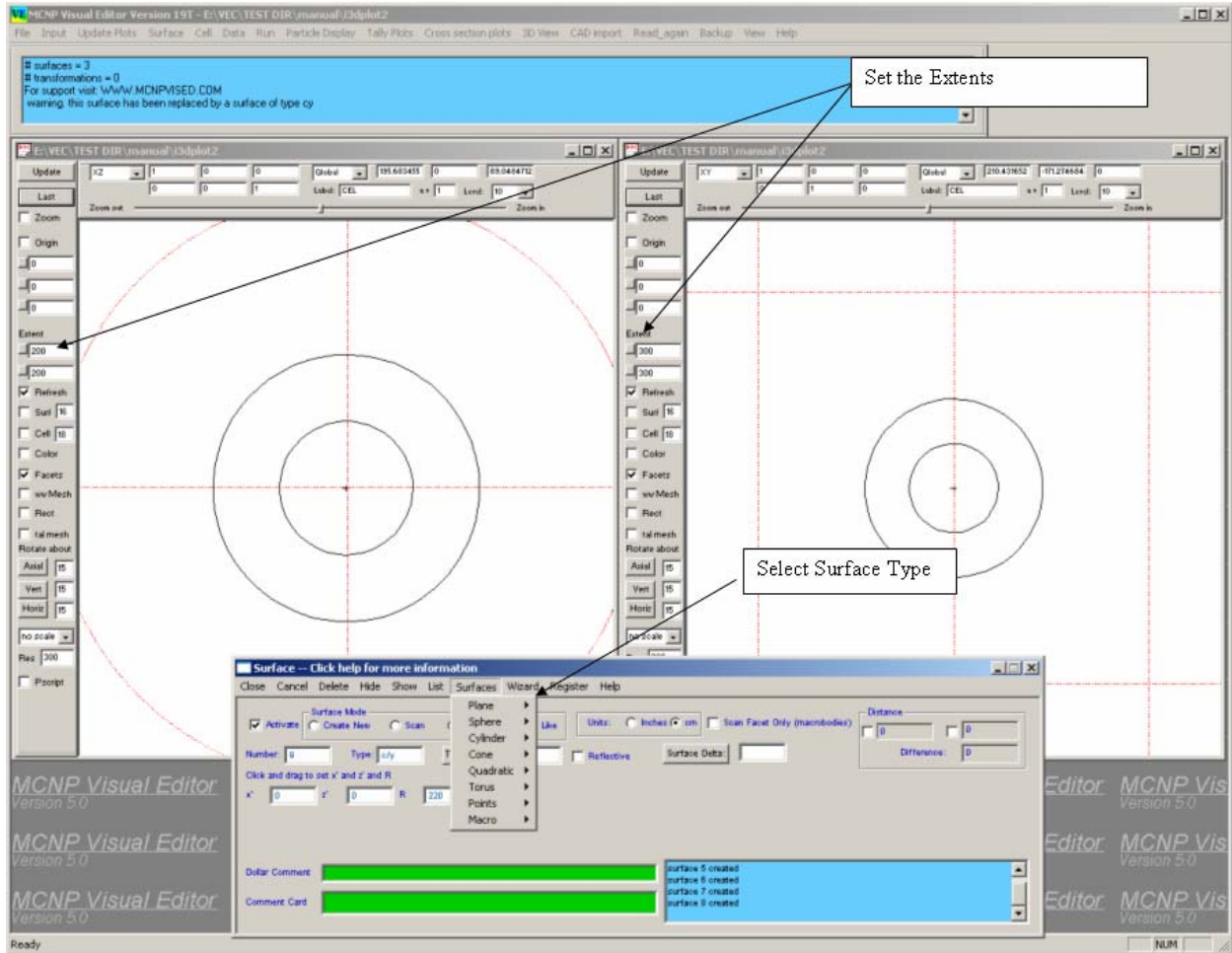


Figure 1-1 Create the Cookie Cutter Surfaces

Start the Visual Editor.

Click on **File...Open** and select the file **i3dplot2**.

Click on **Update Plots**.

On the **Left Plot** window, set both extents to **200**.

On the **Right Plot** window, set both extents to **300**.

To create the cut-away view, a cookie cutter cell must be created.

On the Main Menu, **Click on Surface**.

On the Surface Panel, **Click on Surfaces...Plane...px**

In the **D** box (for diameter), **Type 1**. This will set the plane slightly off the axis which prevents it from interfering with parts of the geometry that are on the axis. There are none in this example, however it is good practice.

On the Surface Panel, **Click on Surfaces...Plane...pz**

In the **D** box, **type 1**.

On the Surface Panel, **click on Surfaces...Plane...py**.

In the **D** box, **type 220**.

On the Surface Panel, **click on Surfaces...Plane...px**.

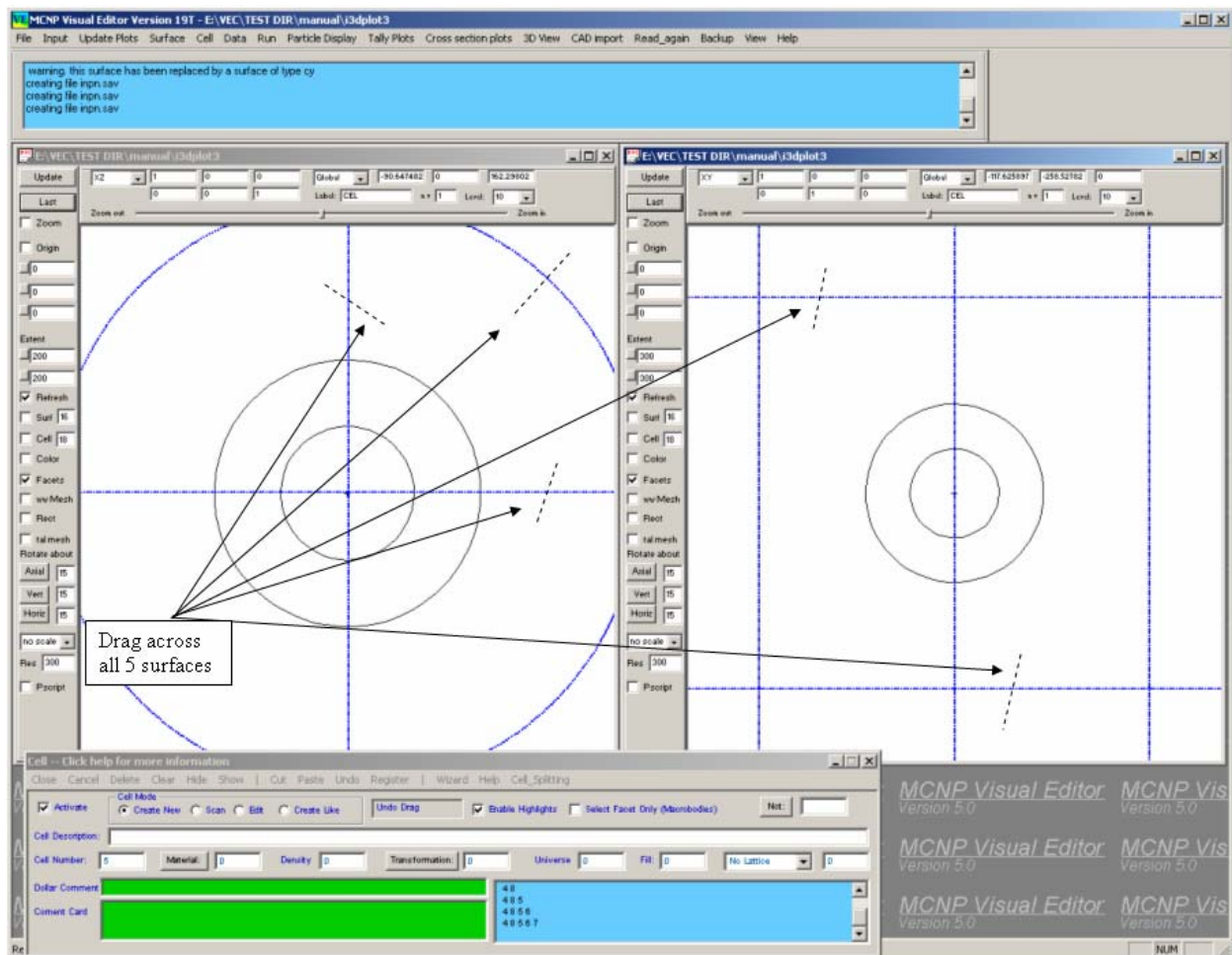
In the **D** box, **type -220** (negative 220).

On the Surface Panel, **click on Surfaces...Cylinder...cy**

In the **R** box (radius), **type 220**.

Click on **File...Save As...** and name the new file **i3dplotcc**.

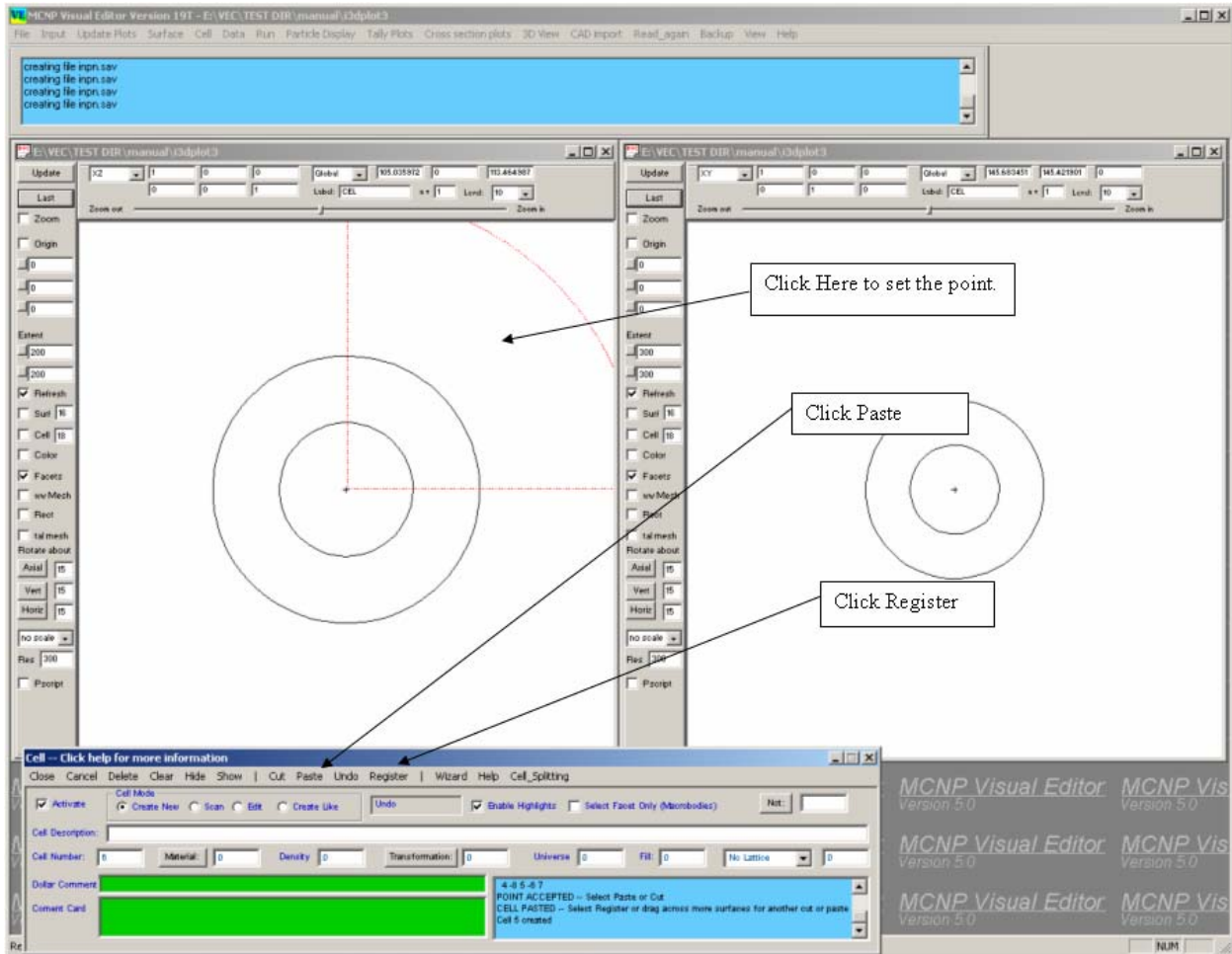
**Close the Surface Panel.**



**Figure 1-2 Create the Cookie Cutter Cell**

On the Main Menu, Click on Cell

Drag the mouse across all five surfaces as indicated in *Figure 1-2*.



**Figure 1-3 Set the Point of Reference and Register**

**Click in the top right quadrant of the cylinder** as indicated in Figure 1-3. This will establish the point which will set the “sense” of the surfaces bounding the cell.

On the Cell Panel, **Click on Paste.**

On the Cell Panel, **Click on Register.**

**Close the Cell Panel.**

**Click on File...Save...**