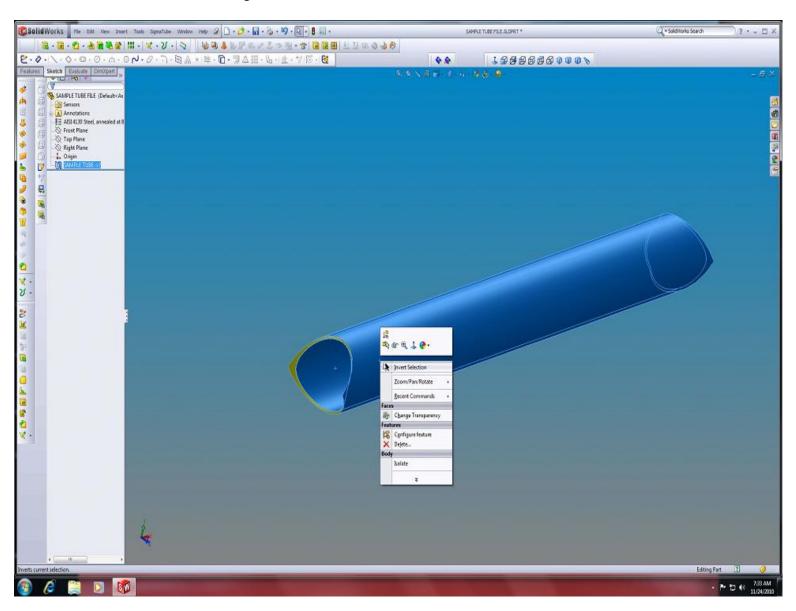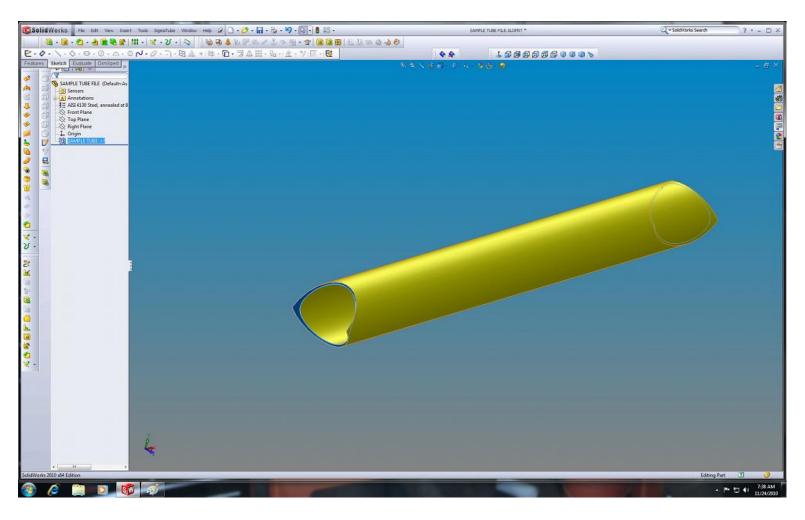Steps to make tubes laser ready.
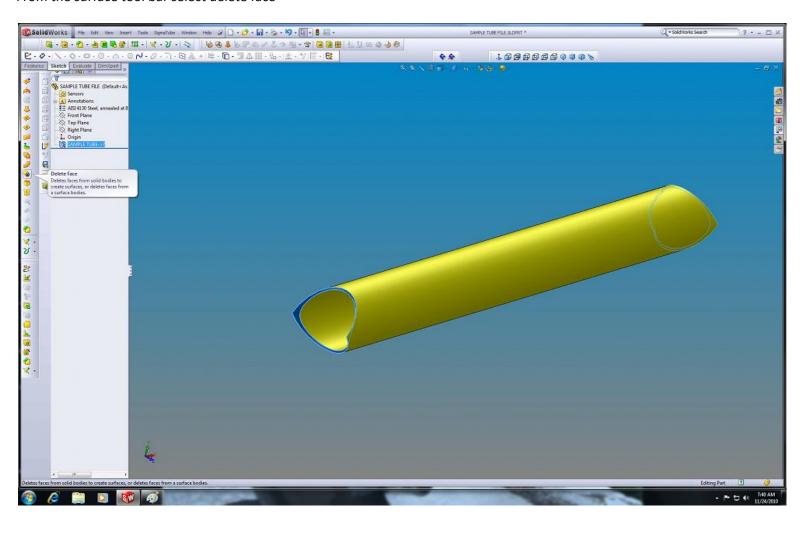
Select inner and outer surfaces, then right click and select invert selection.
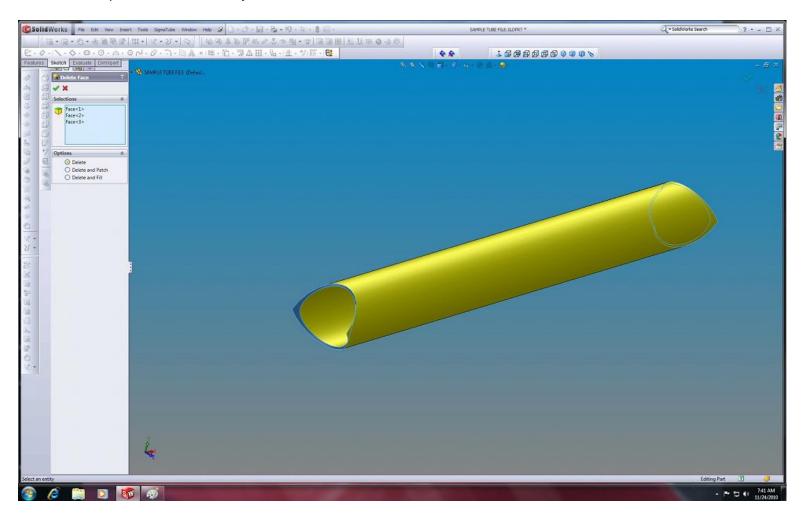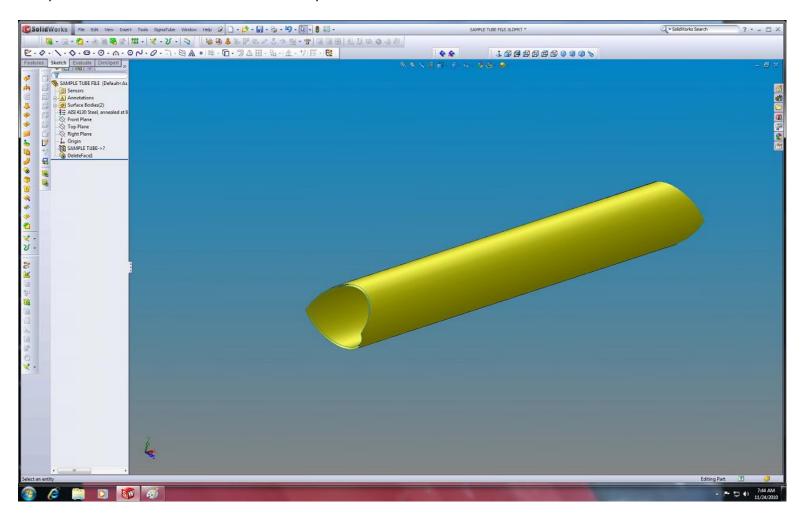
When the end surface have been selected
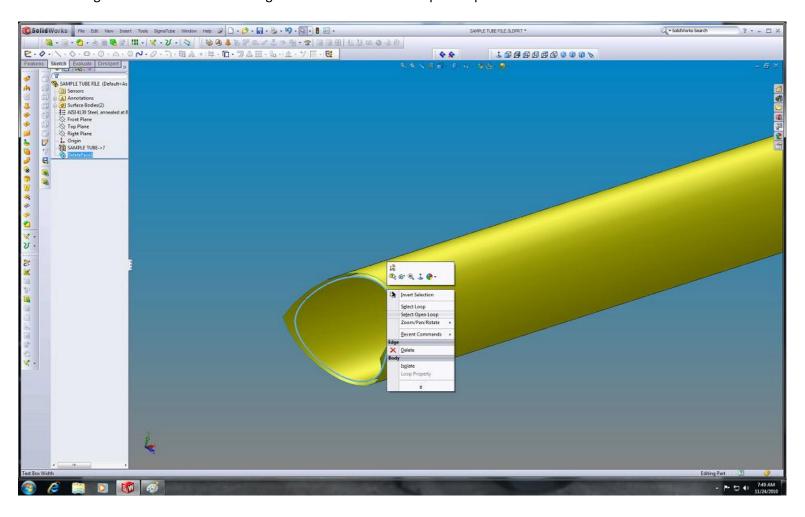
From the surface tool bar select delete face

In the surface options make sure that just the "delete" bubble is filled in, then check ok
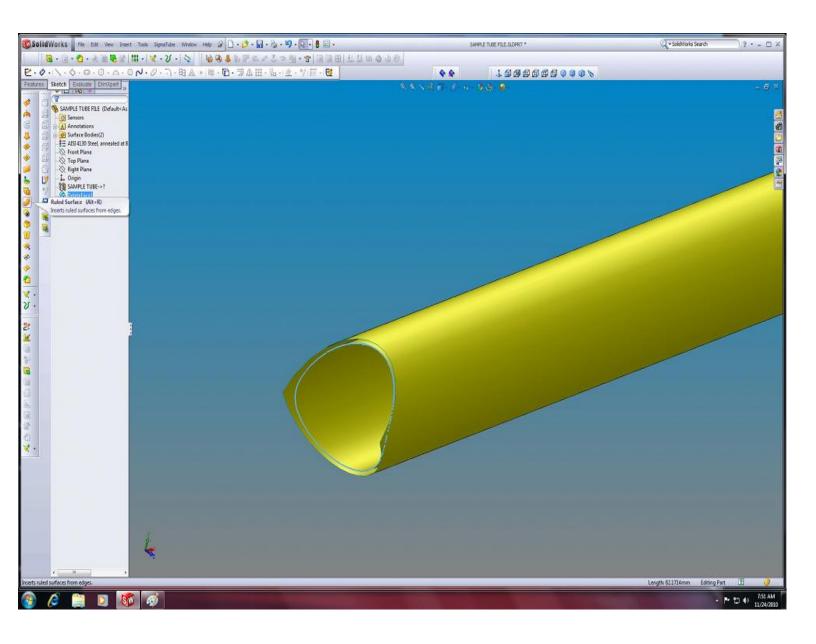
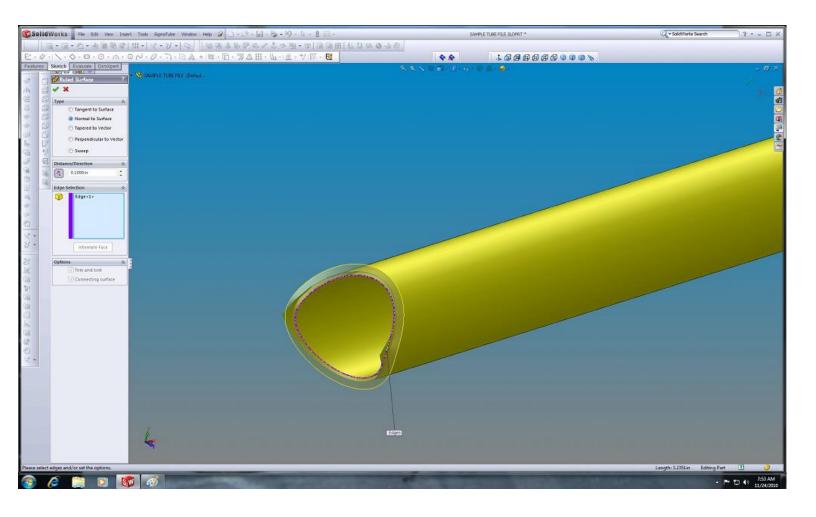Now you will have an inner and outer surfaces only.

Select the edge of the inner surface and right click. Then click select open loop.
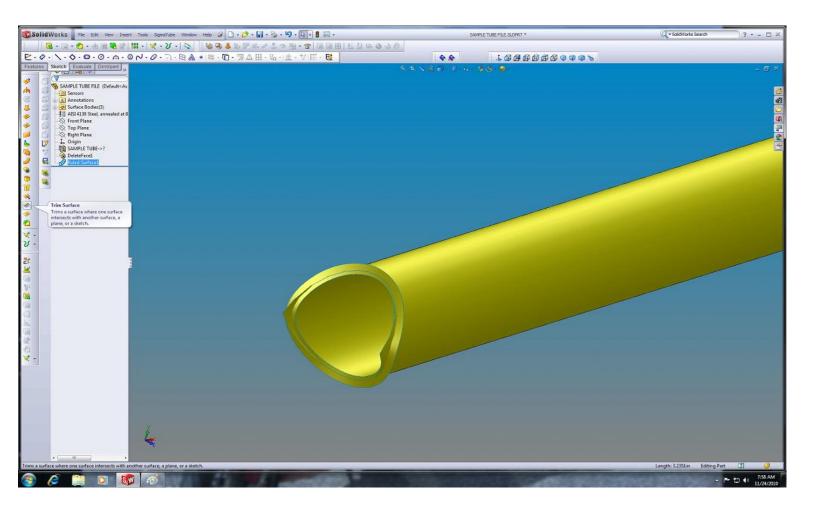
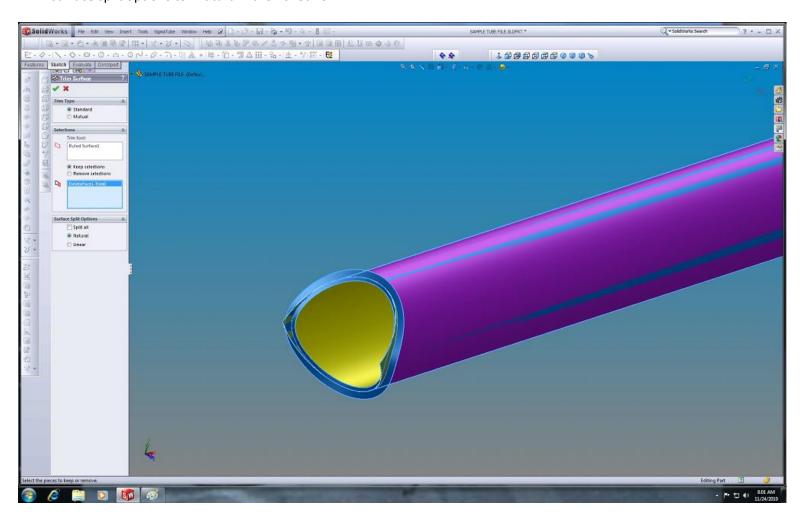With the edge selected, click ruled surface from the surface tool bar

In the ruled surface options, set type to "normal to surface" set distance to thicker than your wall thickness, make sure the direction is outward. Then check ok
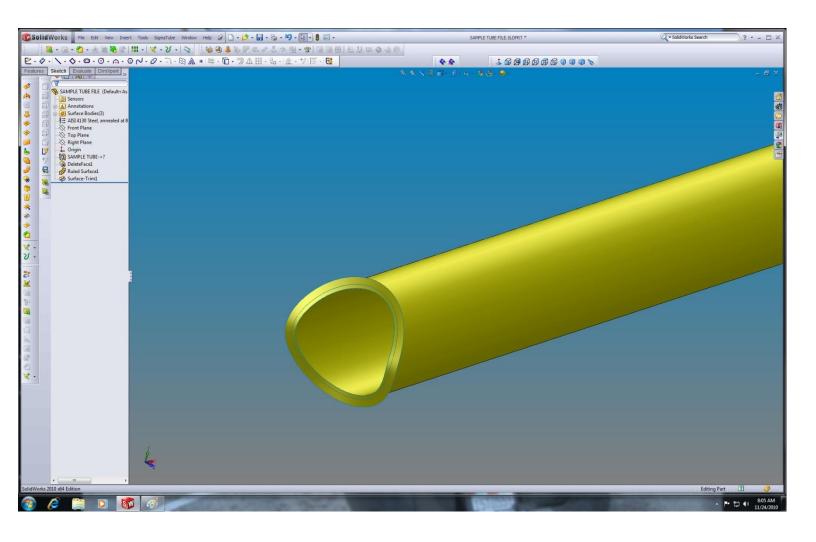
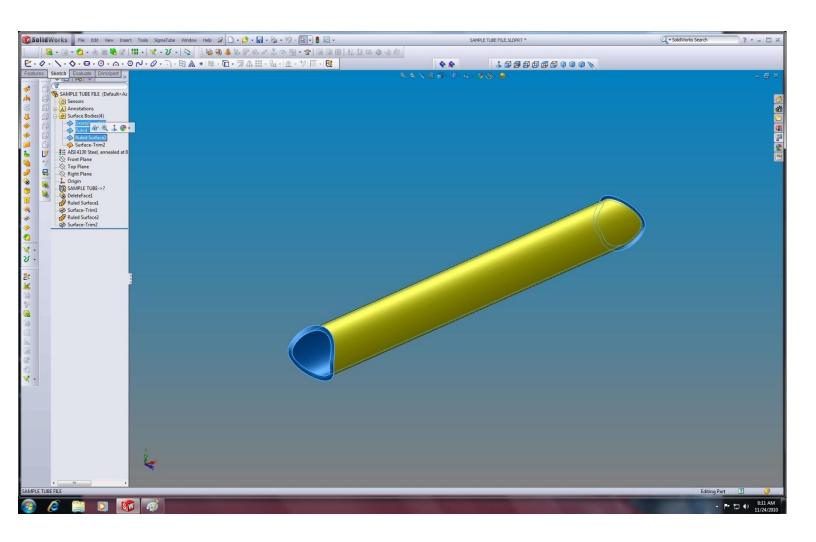From the surface toolbar select trim surface

In the trim surface options, trim type to "standard", in selections the trim tool is the "ruled surface", fill in "keep selections" then select the outer surface to make it highlighted
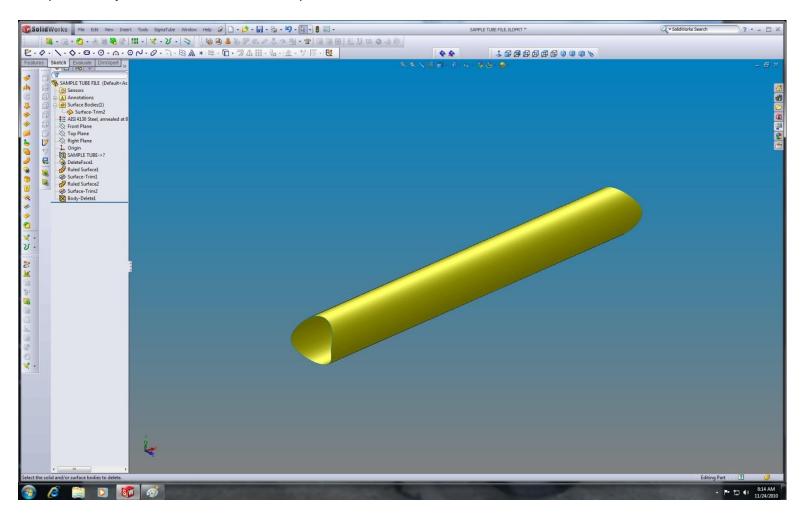Fill in surface split options to "natural" then check ok.

Completed surface trim. Now make the other end of the tube be the same as the end shown starting from the select open loop step.
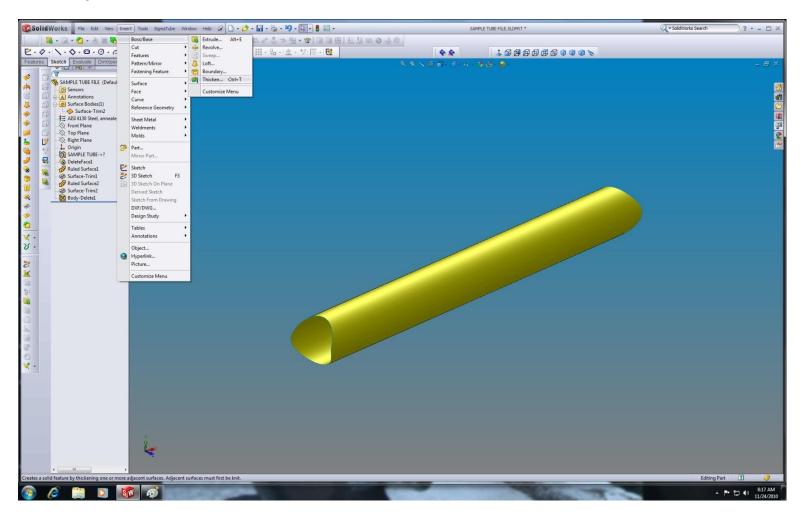
In the feature tree, expand the surface bodies folder, select the 2 end surfaces and the inner surface, then press "delete" on your keyboard. The delete body window will show up
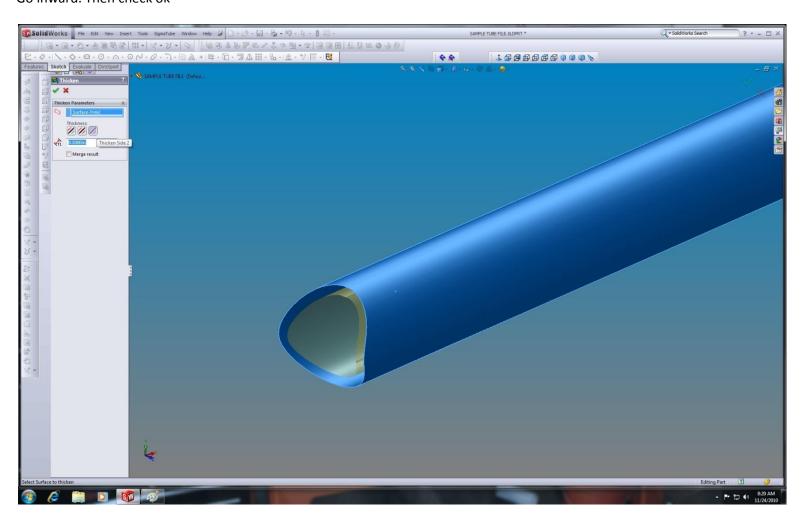Then check ok.

Now you should just have the outer surface only as shown.
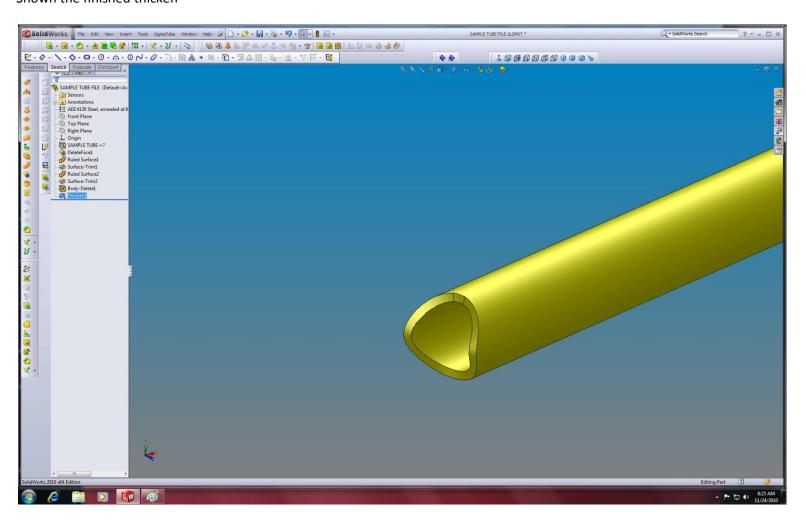
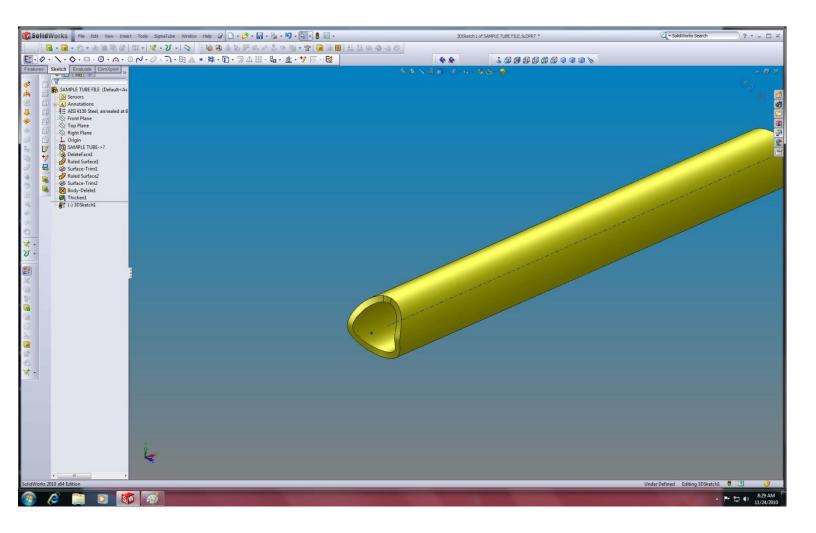Now, through insert, boss/base, select thicken.

Within the thicken options, select the outer surface of the tube, stet the number to the desired wall thickness, then select the button to the right that will make the thicken
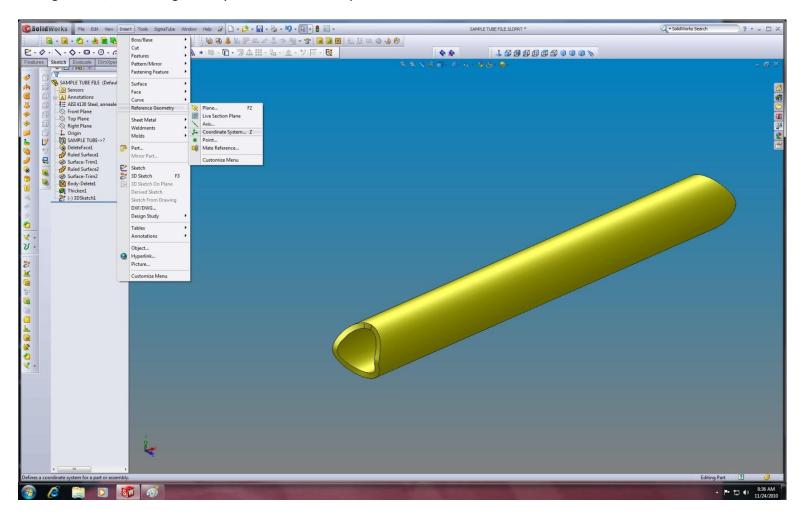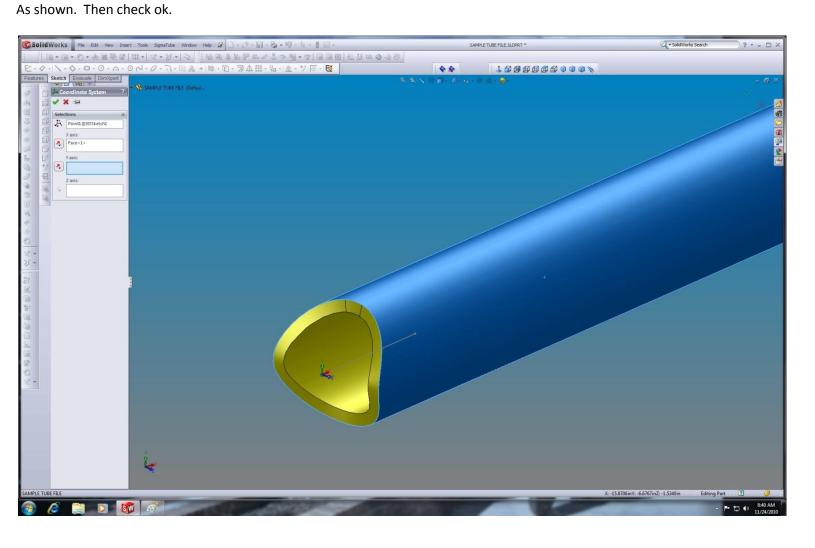Go inward. Then check ok

Shown the finished thicken

Now to add the coordinate system, show the memory axis of the tube and add a 3d sketch line on the tempory axis about an inch long at one end of the tube, it just need to be coincident to the axis of the tube
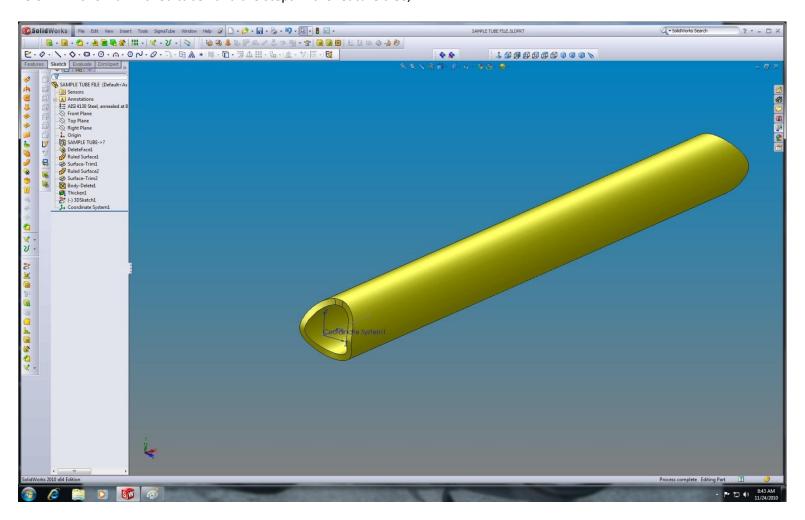And near the end by eye. Then exit the sketch.

Through insert, reference geometry, select coordinate system.

In the coordinate system options, select the end point of the sketch as the origin, then in the x axis box select the outer face of the tube and the triad should look
As shown. Then check ok.

Below will show a finished tube. and the steps in the feature tree,

The last and final step is to create as solid works assembly, that contains all the tubes that you would like to have cut. After you have created this assy, you can use a free ftp sited called
Sendthisfile.com   to send CRD the files.