


# Tutorials and Tips & Tricks




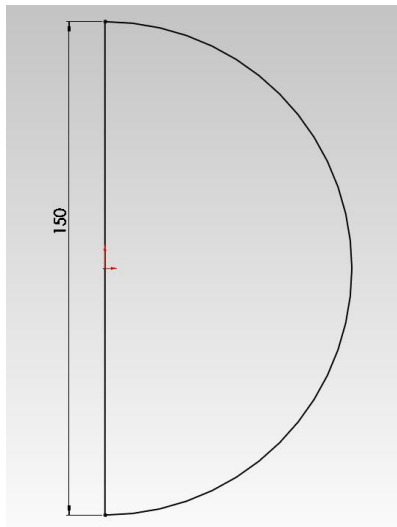
*Adding text to a complex Surface*

....by Andreas Gkertsos

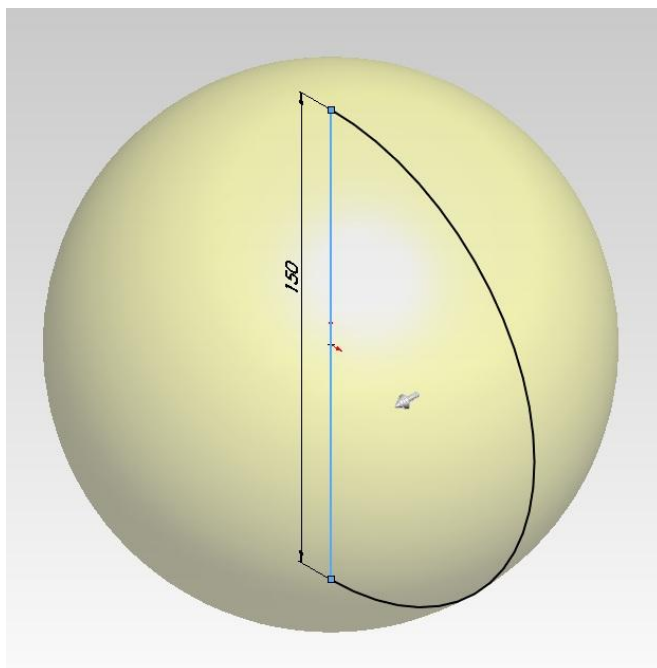
The purpose of this tutorial is to show you the way that you can add (emboss or deboss) text to a non-cylindrical or a complex surface. As we all know, wrap feature, works only on cylindrical faces. In multi-way curvature faces (e.g. sphere or any other surface of any part) there are some steps you should follow in order to do that.


To begin with, we must choose a plane to enter our sketch (this step is only for the tutorial, as you may have the surface already modeled from a part) 

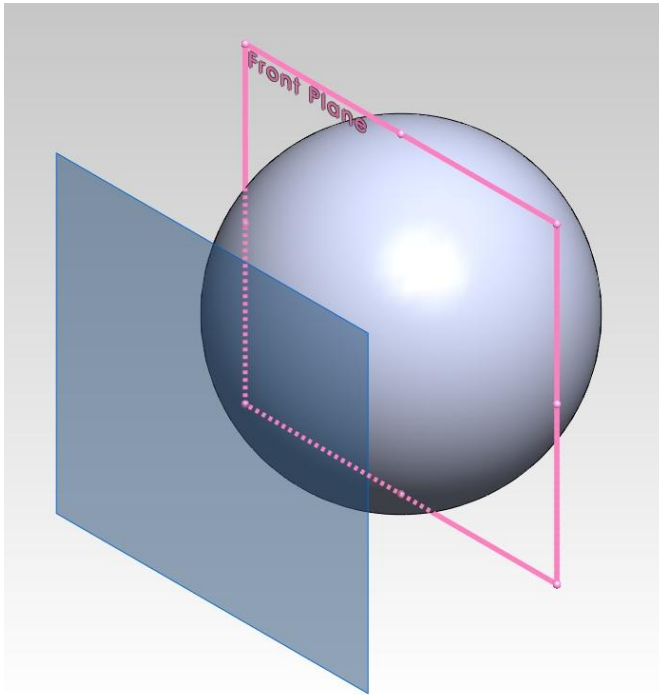
and then we click sketch to add the desired sketch . After that, we draw a half Circle...



and then we click revolve  to create a sphere

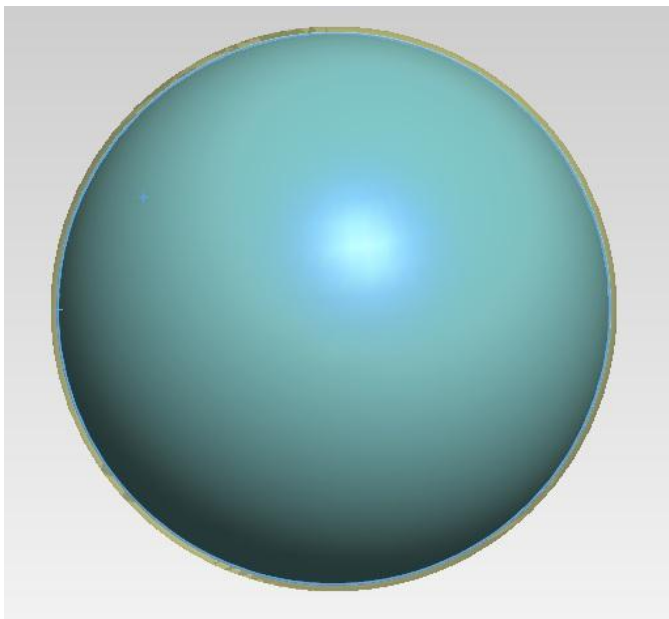


Now we have ready our model to add a text (you can try wrap feature if you want, to confirm that it doesn't work on spherical faces). After we model our sphere, we click on front plane  Front Plane and we click on reference geometry -> plane and we create an offset plane, out of the sphere. (this step is optional, as i've done it in order to see in what direction the split line is going in the next step).

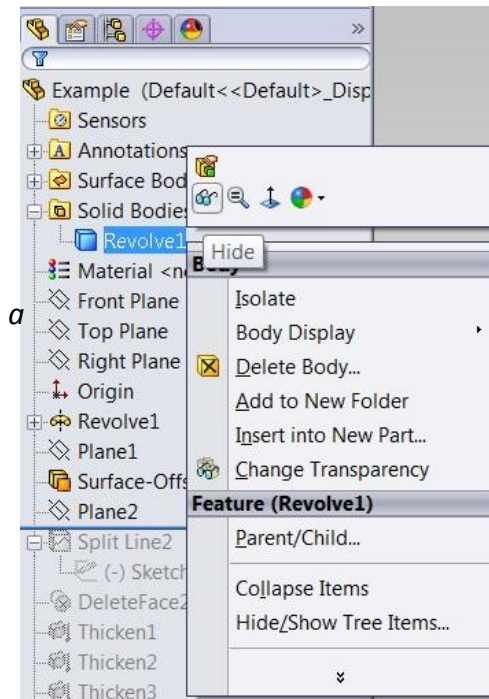



then we create an offset  
surface of the sphere we have

modeled. (**NOTE:** please pay attention to the offset distance you set, because it will be used later to determine the depth if the deboss or emboss).



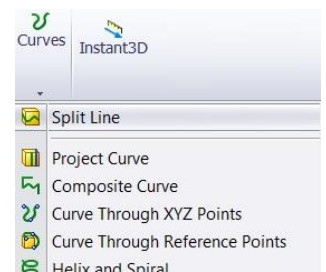
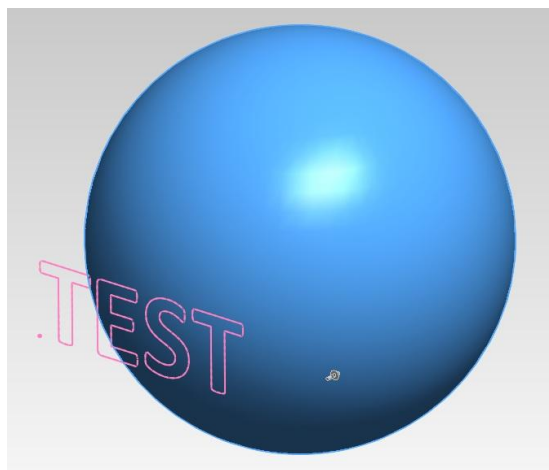
After that, we go to our feature tree -> solid bodies -> Revolve and click hide. This is done because in the next step we're going to create the text and split line it on the offset surface. We don't want to click on the body's surface because it will not work.



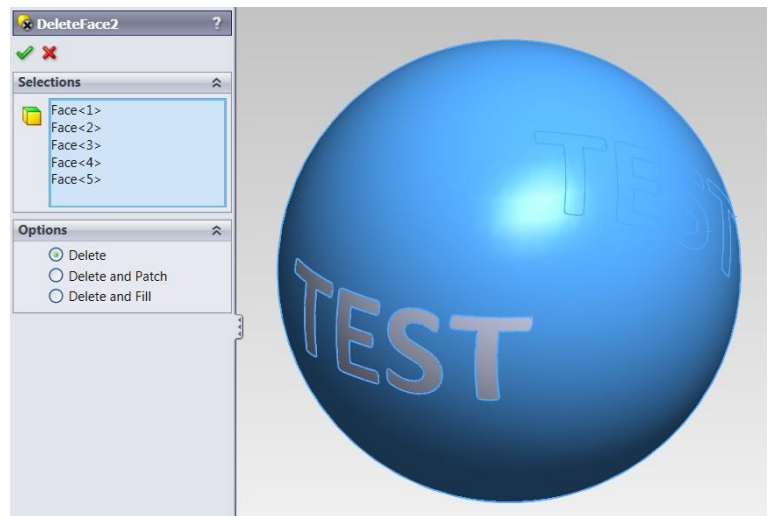
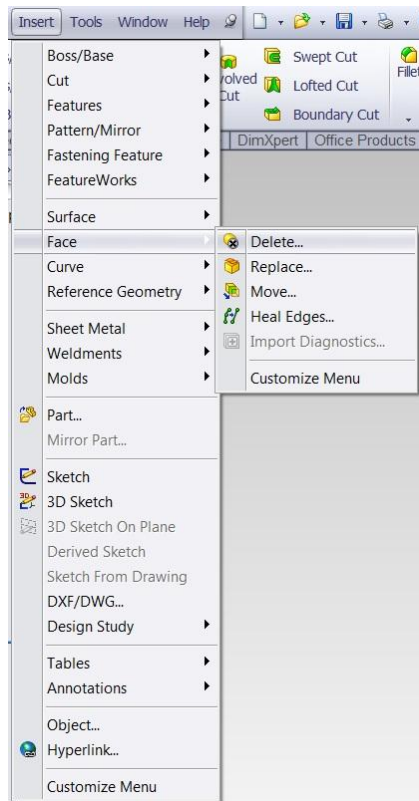
Then we select the plane we created, click sketch , and we add the text we want to split line on our offset surface.



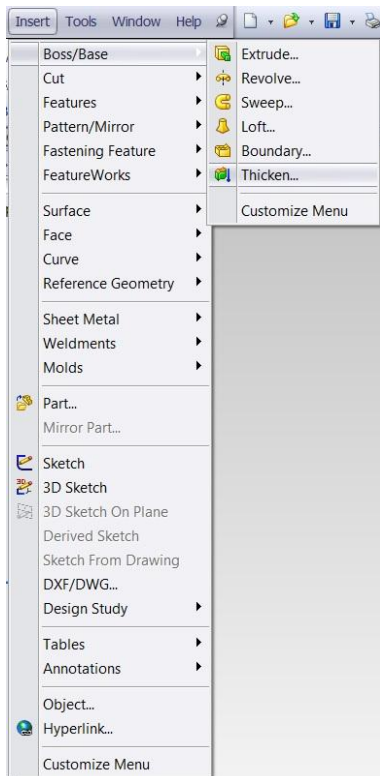
To continue, we select split line , and put the text on our surface



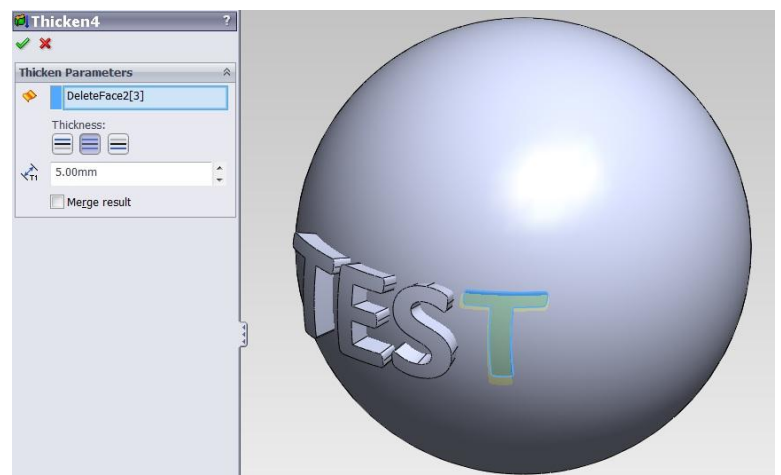
After we split line the text, we then trim off the outer surface of the offset surface with **delete face** command.

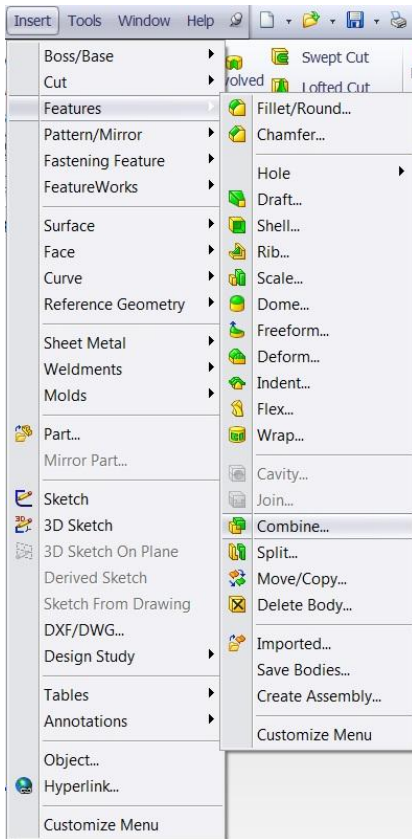


After we delete the surfaces, we now have 4 surfaces of the words we want to emboss or deboss. We thicken them **WITHOUT merging result**.



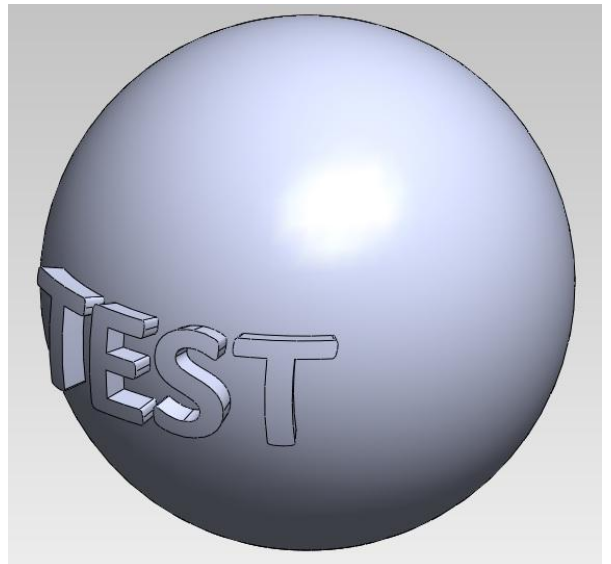
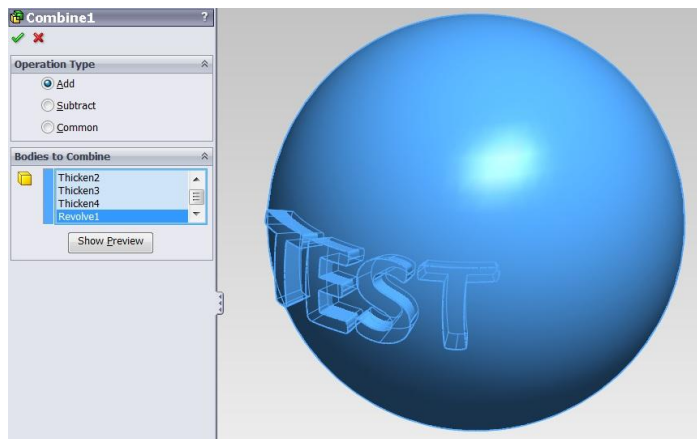
(NOTE: the thickness we pick, should be picked, considering the offset distance of the surface)



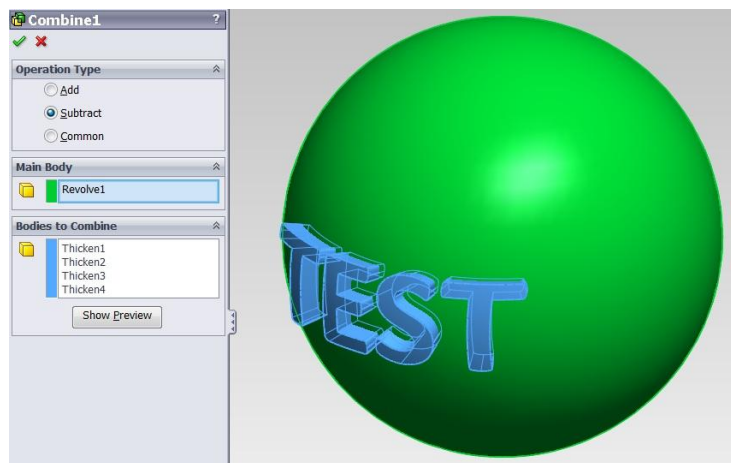


Now we have 5 solid models in our part. Using the combine feature

We can either add them together to create an Emboss...



Or subtract them, to create a deboss...



*These are the steps you must do in order to add a text to a complex surface. It works on any surfaces. Almost every model out there consists of complex surfaces and most of the times, wrap feature doesn't work...*

***FINISH***