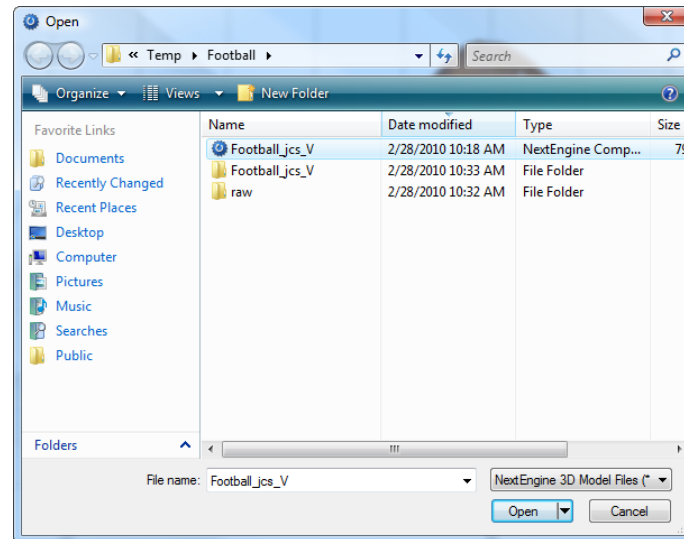


Scanner – Inventor

Jcs – 9/28/2012

Startup

1. Start Scanstudio
2. Open the previously saved file



3. Select:

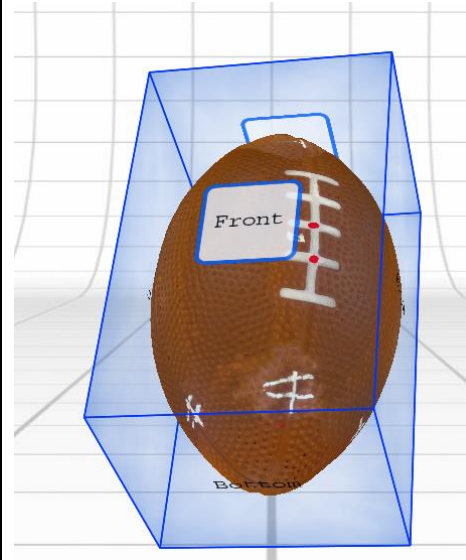


Orient

1. Select:



2. Select:



3. Use the following, to orient the foot ball to the faces

- Rotate Object and Box



- Rotate Box



- Rotate Object



- Constrain rotation to the y-axis

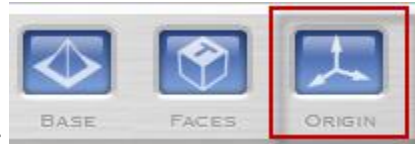


- Constrain rotation to the x-axis



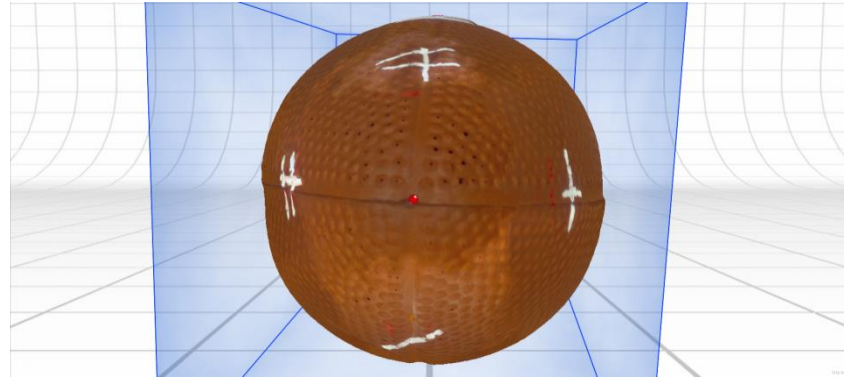
- Constrain rotation to the z-axis





4. Select: (Note: this feature may not work)

5. Place the red dot

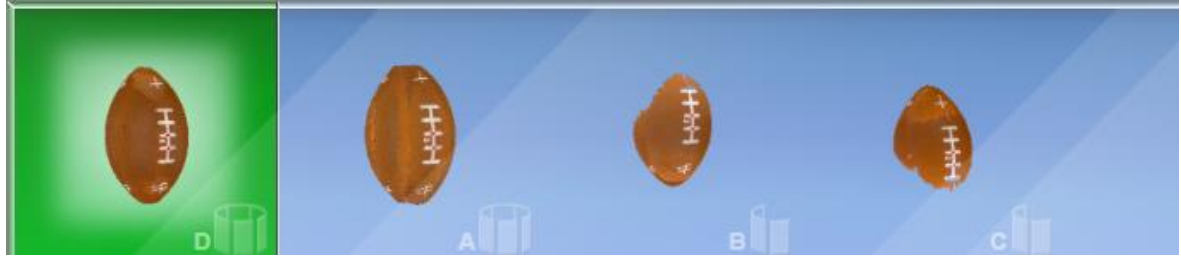


Surface (Generate a NURBS surface)



6. Select:

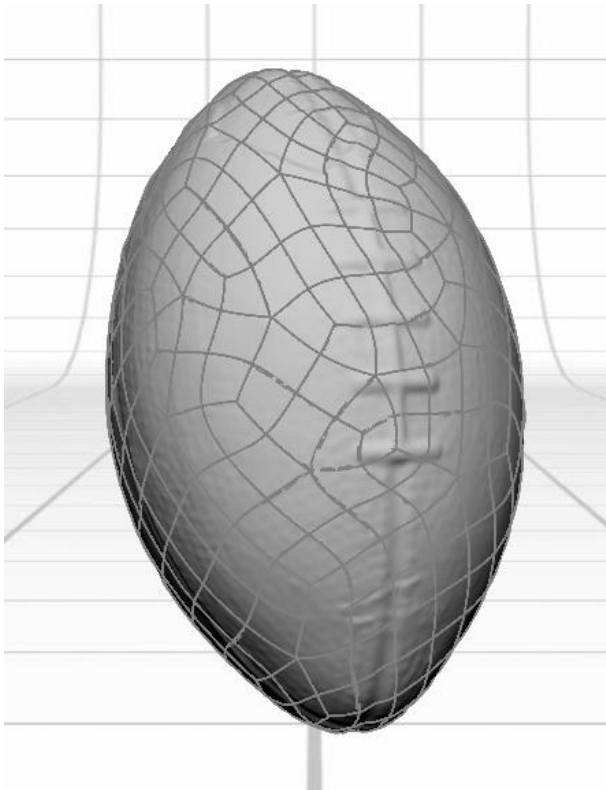
Verify: that only the fused model is in the green portion of the screen



7. Select: Surface

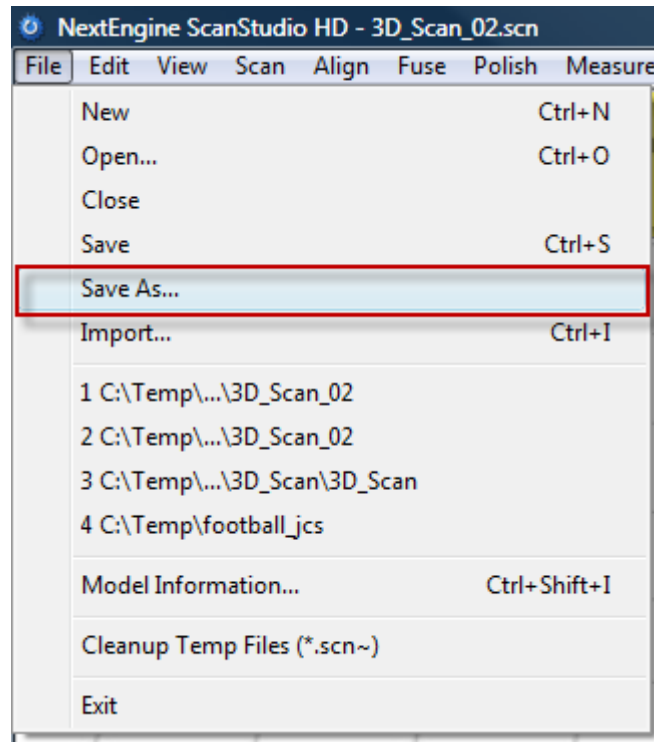


Result



Export

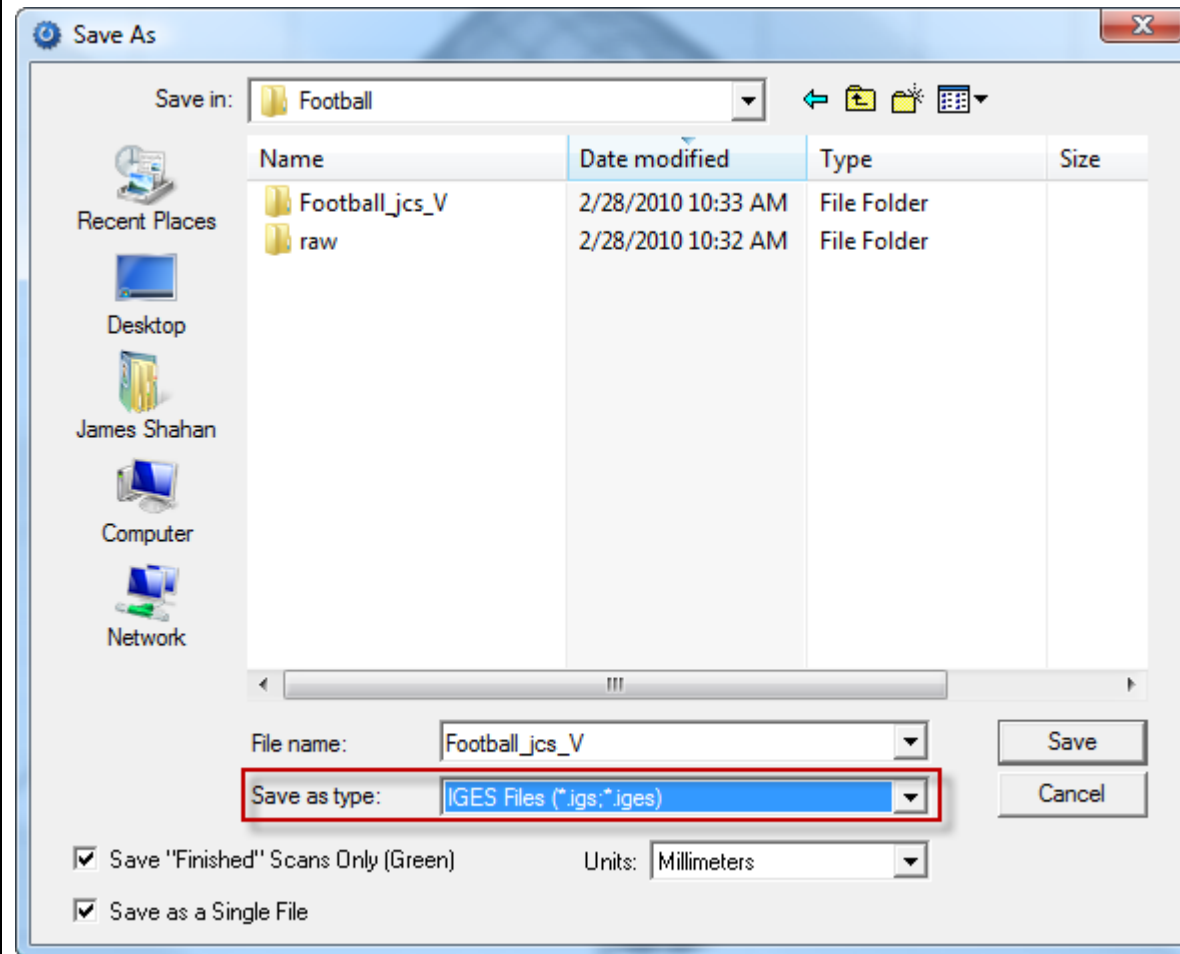
1. Select: File | Save-AS



Verify: that only the surfaced model is in the green portion of the screen



2. Select – Save as type: IGES

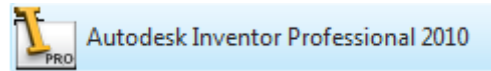


3. Select:

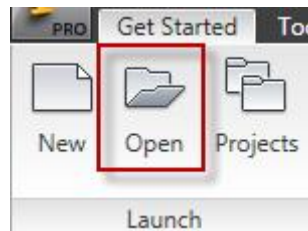


Open Inventor / Import the IGES file

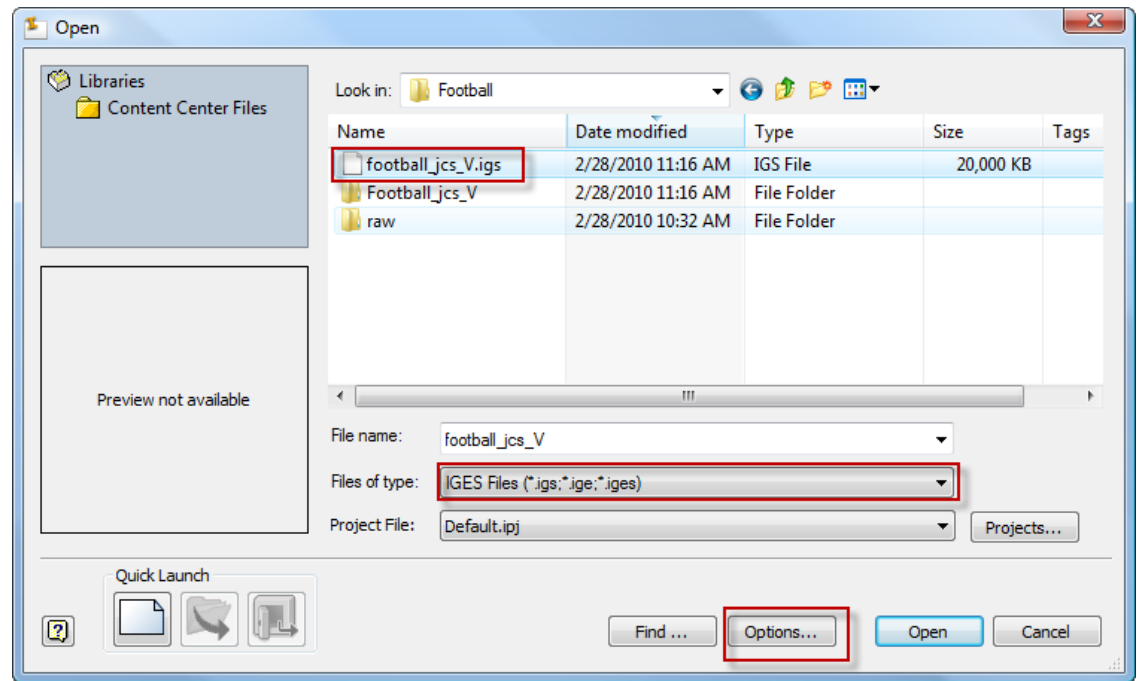
1. Start: Autodesk Inventor



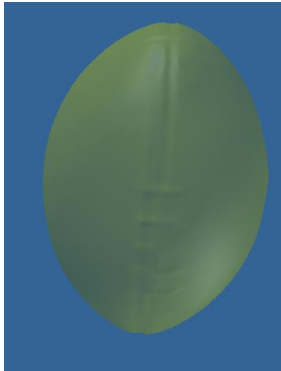
2. Select: Open



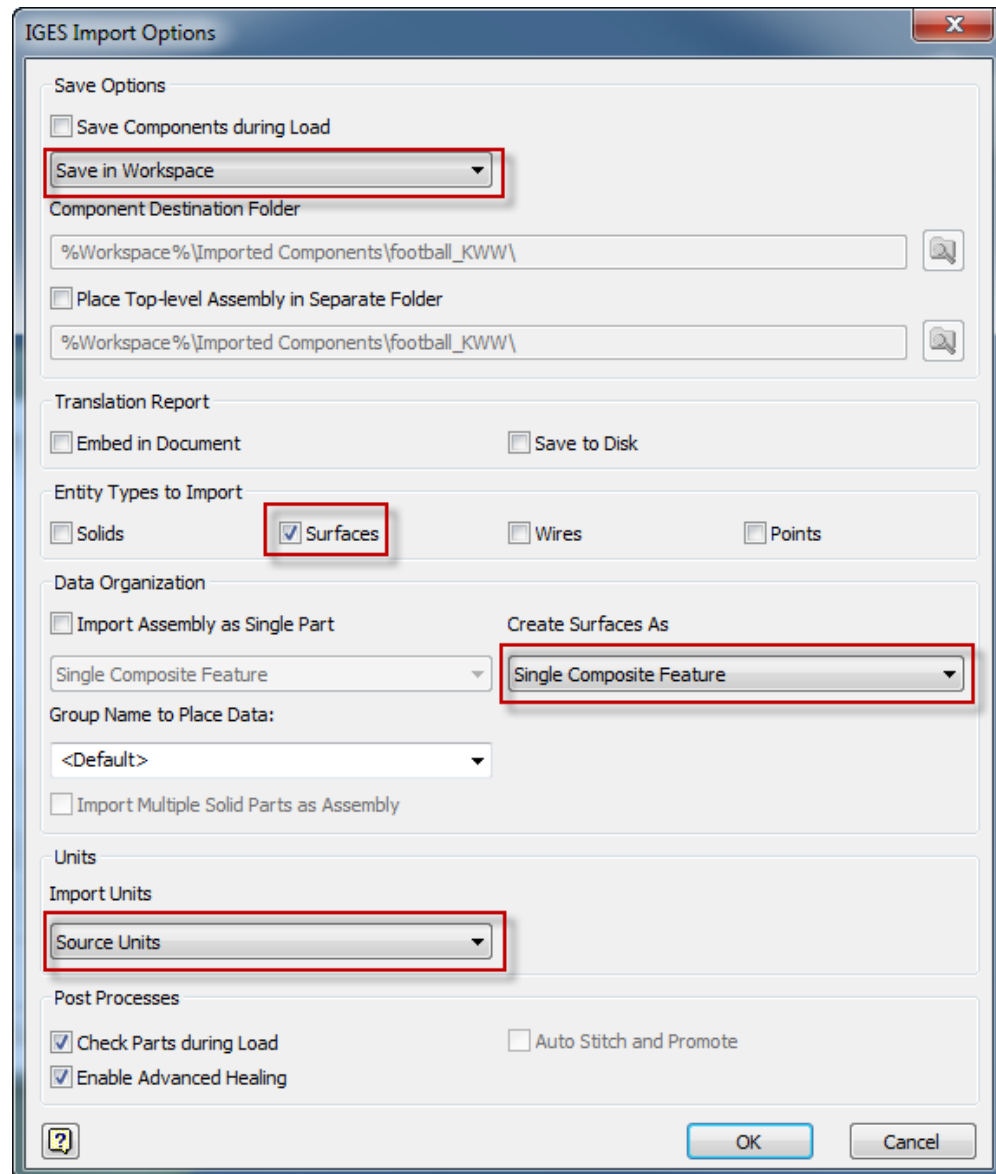
3. Select
 - a. Files of type: IGES
 - b. File name: preveiously saved
 - c. Options



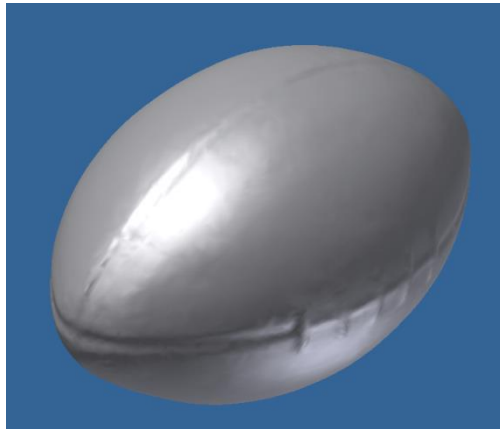
4. Create a Surface Model



5. Save the file.



6. Repeat steps 3-5. Create a solid model. Use appropriate filenames



IGES Import Options

Save Options

☐ Save Components during Load

Save in Workspace

Component Destination Folder

%Workspace%\Imported Components\football\

☐ Place Top-level Assembly in Separate Folder

%Workspace%\Imported Components\football\

Translation Report

☒ Embed in Document ☒ Save to Disk

Entity Types to Import

☐ Solids ☒ Surfaces ☐ Wires ☐ Points

Data Organization

☐ Import Assembly as Single Part

Create Surfaces As

Single Composite Feature

Single Construction Group

Group Name to Place Data:

<Default>

☐ Import Multiple Solid Parts as Assembly

Units

Import Units

Source Units

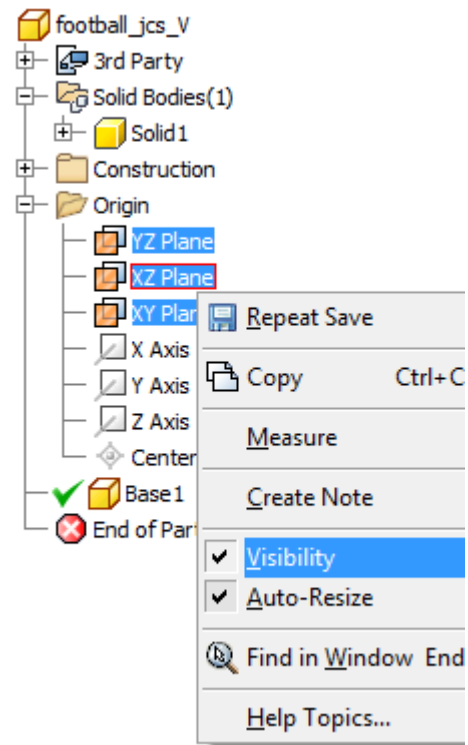
Post Processes

☐ Check Parts during Load ☒ Auto Stitch and Promote

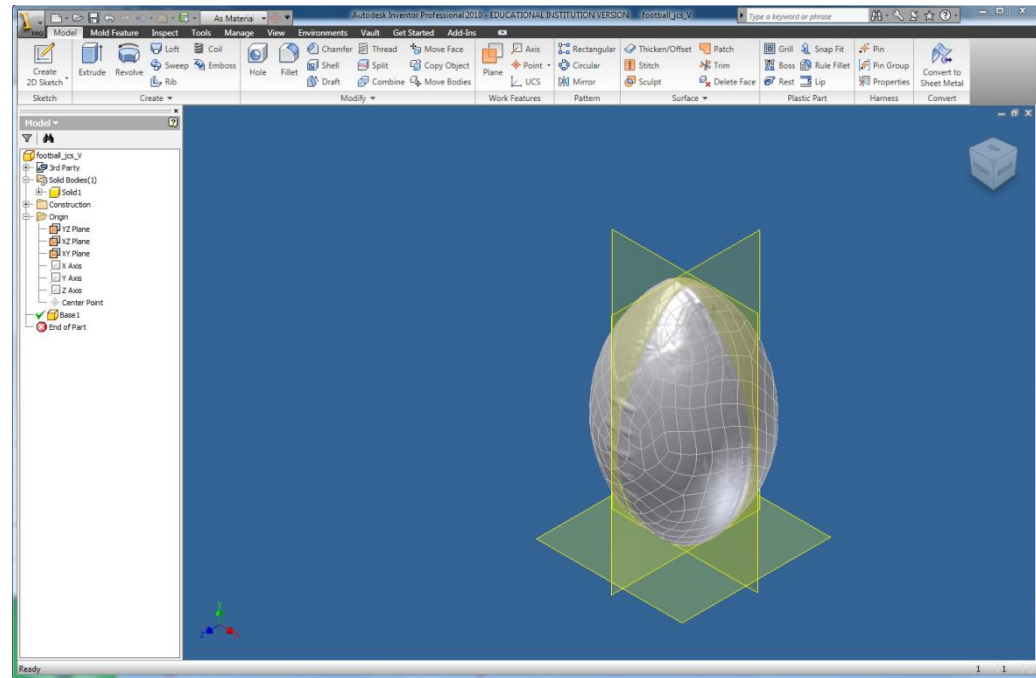
☐ Enable Advanced Healing

OK Cancel

7. Display the XYZ reference planes.



8. Verify



9. Save the .ipt file

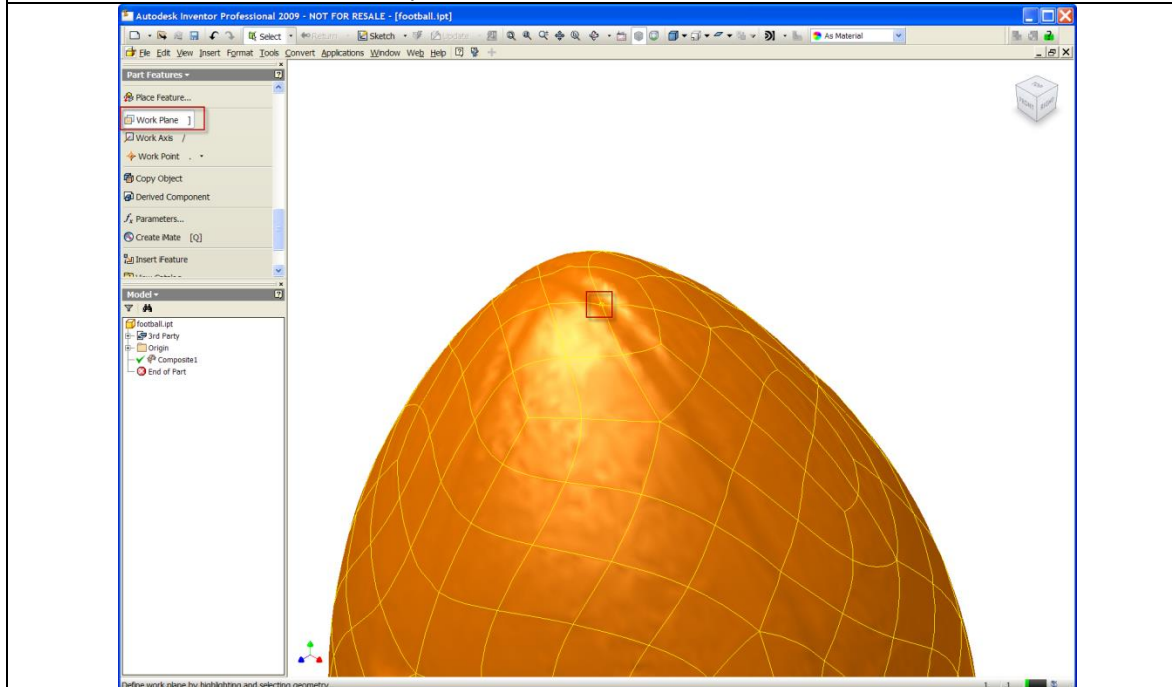


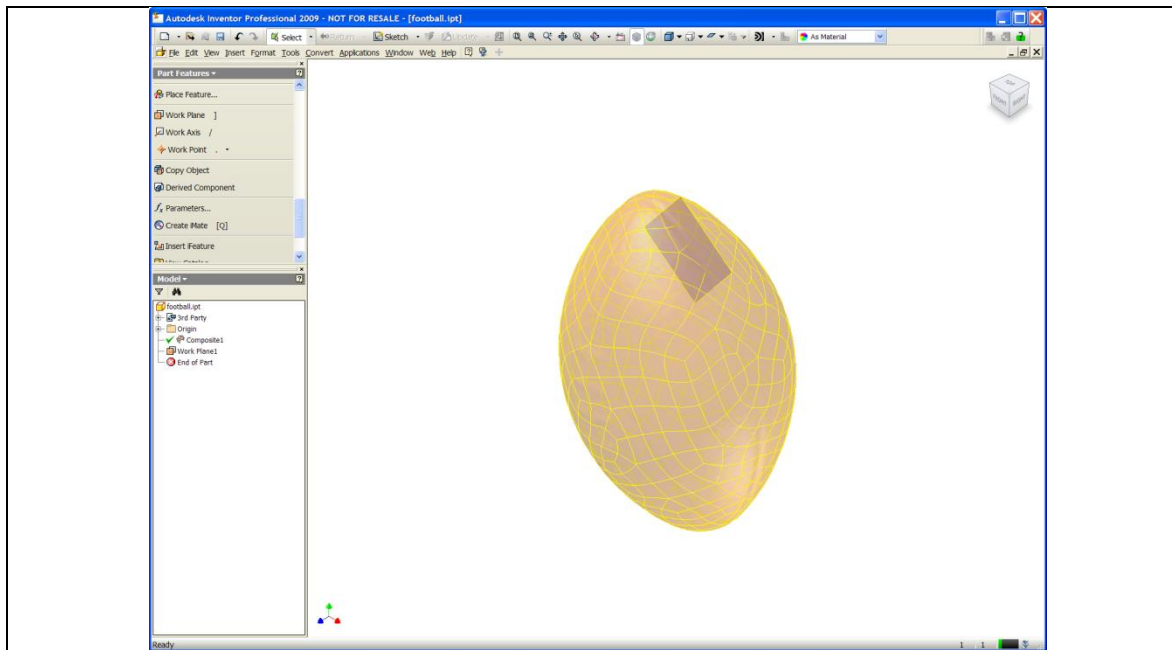
10. Add reference geometry to the football. (If needed)

- Establish the orientation of the football
- The reference geometry will be used to locate the part in an assembly

Note: The football doesn't require "precise" alignment. Therefore the following quick steps will work to get started. Additional accuracy requires more time.

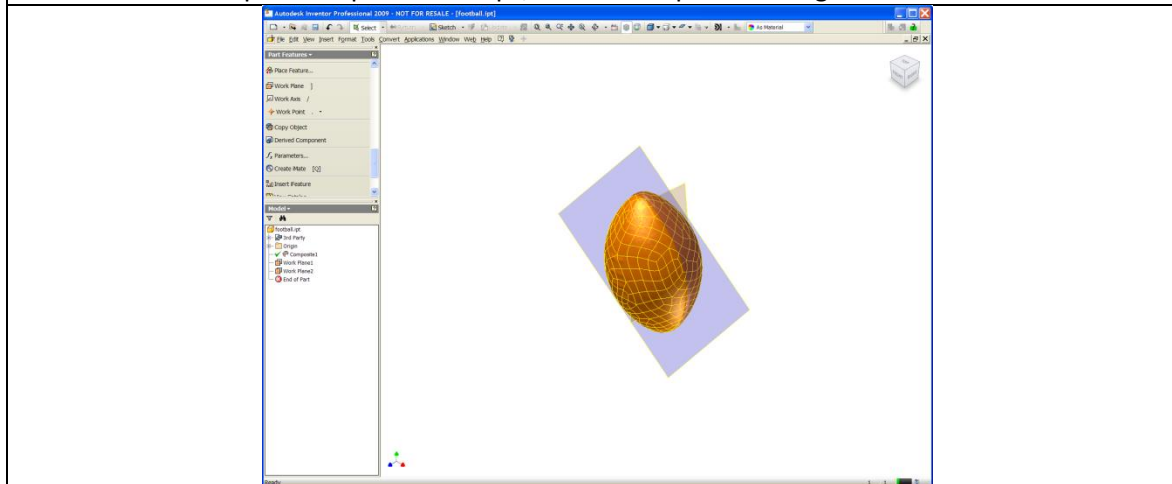
- a. Add a work plane through one of the seams in the model.
 - a. Select the workplane feature
 - b. Select 3 points that are on the seam





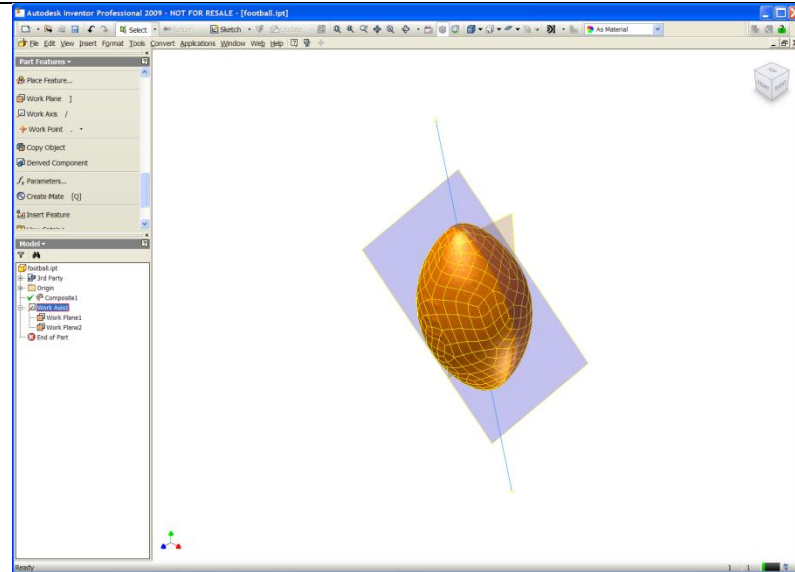
A work plane is added through one of the seams. Rotate the model to verify the position.

b. Repeat the previous steps, add a work plane through the other seam.



c. Add a work axis, located at the intersection of the two planes

- Select the work axis feature
- Select one of the work planes
- Select the other work plane



d. Save the part. It is now ready to use in an assembly