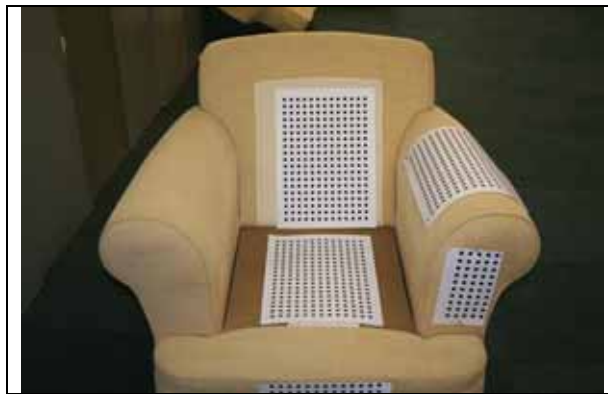


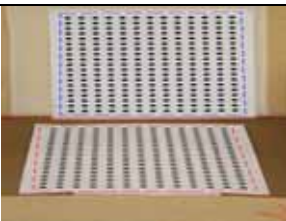

## STEP-BY-STEP GUIDE TO CREATING A SURFACE (With Extrusion)

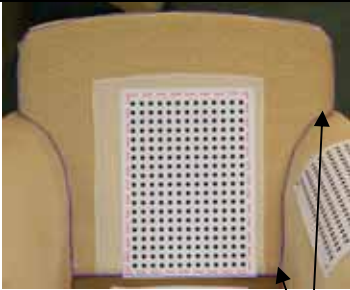
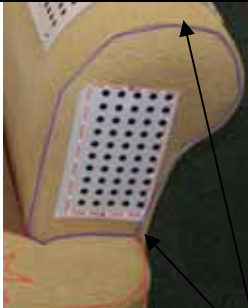
For this example we are using a single Image of a Chair. This process will guide you through the creation of a 3D model.



### Process

To create this image into a 3D model we will need to take the image and break it down in to its relevant surface and faces.

|                      |  |   |
|----------------------|--|---|
| <p><b>Step 1</b></p> | <p>◆ To add the calibration polygons you will need to use the “add calibration planner polygon” tool and using the mouse draw around the calibration board as (shown in fig 1) repeat this for each calibration polygon.</p> |  |
|                      |  | <p><i>Fig 1</i></p>   |
| <p><b>Step 2</b></p> | <p>◆ Draw the outline around each surface using the draw tools</p>   |  |
|                      |  | <p><i>Fig 2</i></p>   |
|                      | <p>We can move on to the 2<sup>nd</sup> stage of the process is to add the Meshes that will define surfaces within the image.</p>  |   |
| <p><b>Step 3</b></p> | <p>Associate the outline and calibration polygons. Select the outline or outlines and select the calibration</p>   |   |

|               |   |   |
|---------------|---|---|
|               | <p>polygon associated to surface we have selected,<br/>Right hand mouse click and select associate.</p>   |   |
| <b>Step 4</b> | <p>Add the surface between two planes using the "extrude" tool. To achieve this we select the point of on an outline which we wish to extrude, we then select the next outline that we wish to extrude too, the system will now construct a surface between the 2 surface sections.</p> |   |
|               |    |  |
|               | <p>Fig 3<br/>Extrusion Section 1</p>  | <p>Fig 4<br/>Extrusion section 2</p>  |
|               | <p>Now that all the surfaces have been identified will need to extrude sections to generate the generate surface of the chair. This is achieved by using the extrude mesh tool and selecting the points needed</p>  |   |
|               |   |   |
|               |   |   |

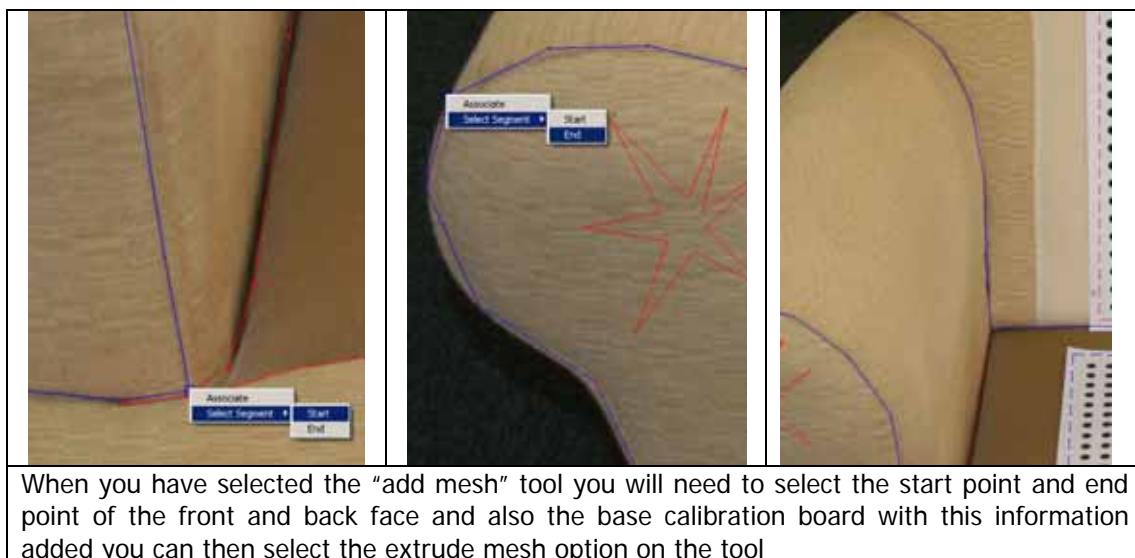
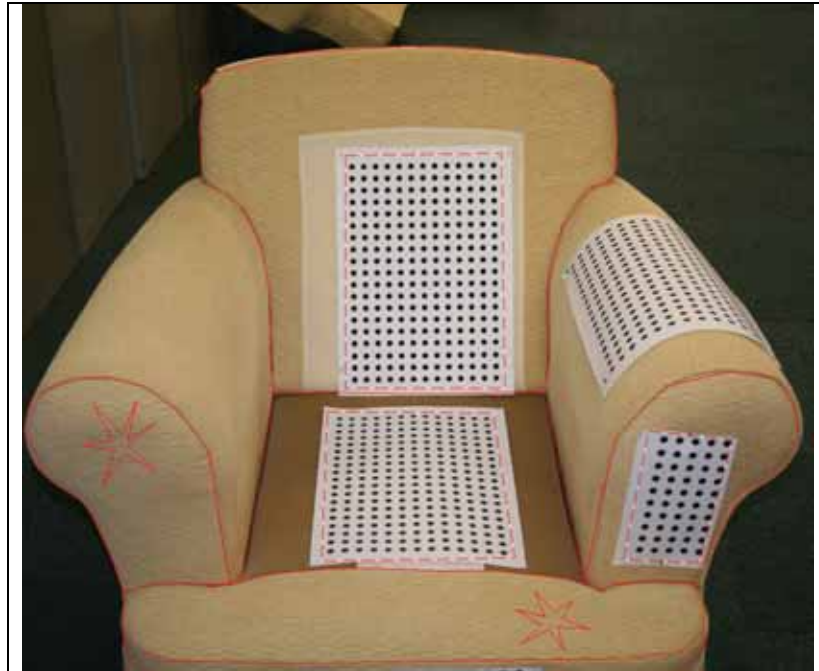


Fig 3 :- the back of the chair with the extrusion section selected.

Fig 4 :- the Front arm with the extrusion section selected.

Finally the resultant image looking some thing like this tool is now ready to be exported.

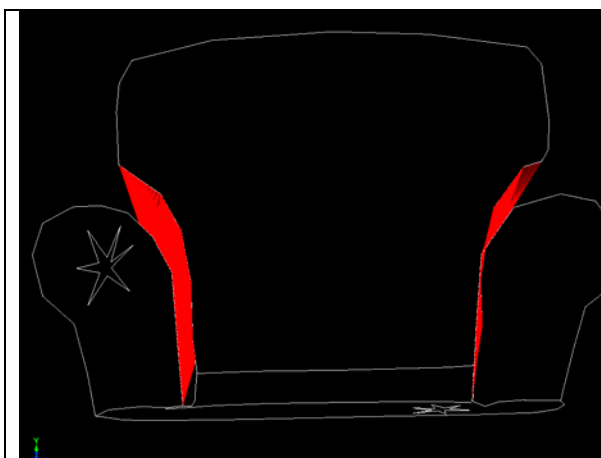


### Step 5

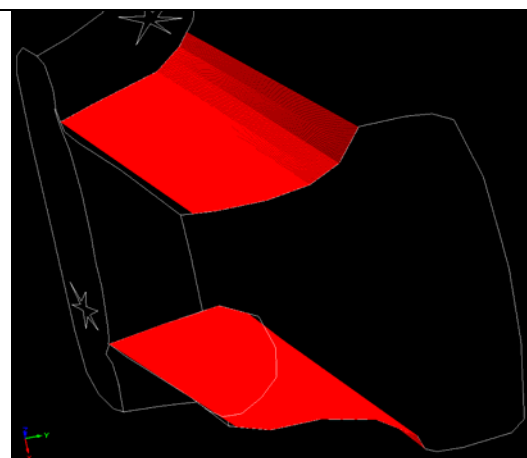
Export is a simple case of selecting export, from the file menu.

### Results

These are Screen shots taken of the final result in which it can be rotated to any angle you wish



Line export in the same orientation as photograph



Line export in the rotated

Difference view of the surface representation

