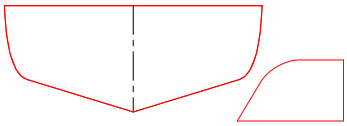
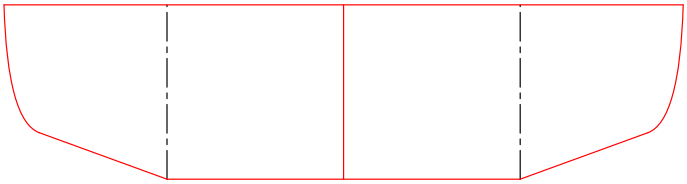
Chapter 13 Export DXF to CorelDRAW



A. Export Fuselage/Tooth Sketch as DXF".

Step 1. Open your **FUSELAGE** part file.

Step 2. Roll the rollback bar to below the **Cut-Extrude1**. To rollback, click **Fillet1** in the Feature Manager and click **Rollback**  from the Content toolbar, **Fig. 1**.



Step 3. Click **Cut-Extrude1** in the Feature Manager and click **Edit Sketch**  on the Content menu, **Fig. 2**.

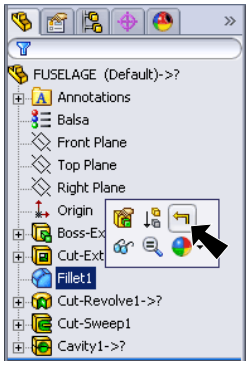


Fig. 1

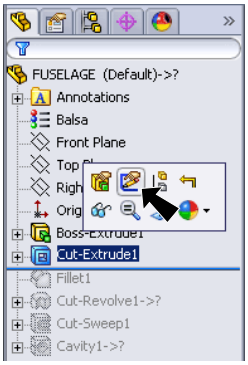


Fig. 2

Step 4. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)

Step 5. Click File Menu > Save As.

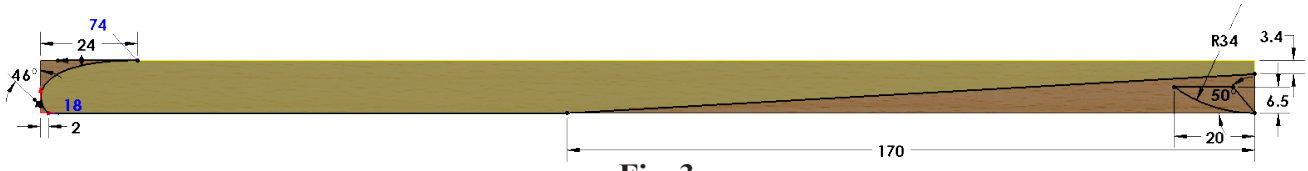


Fig. 3

Step 6. In the Save As dialog box, change **Save as type: to Dxf** and click Save, **Fig. 4**.

Step 7. Click **Save the Document without rebuilding**, **Fig. 5**.

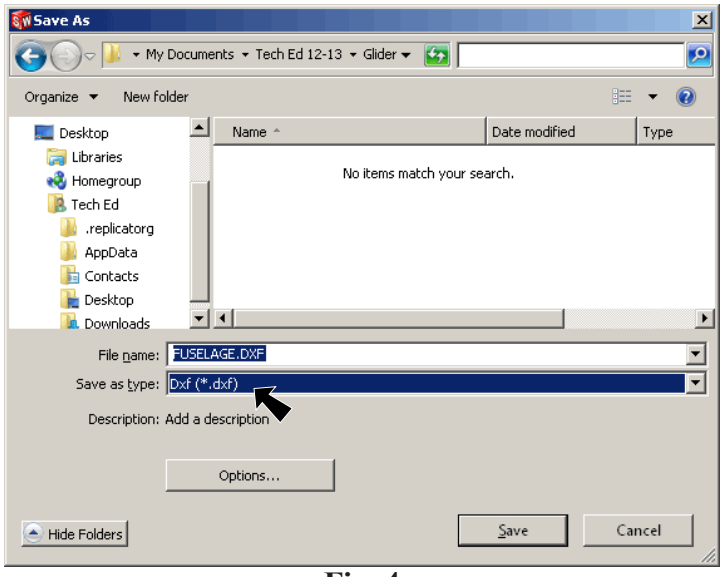


Fig. 4

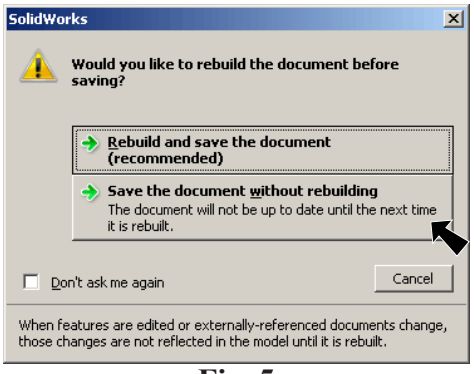


Fig. 5

Step 8. In the DXF/DWG Property Manager set:

under Export, **Fig. 6**

click **Annotation views**

under Views to Export

check **Current**

click OK  .

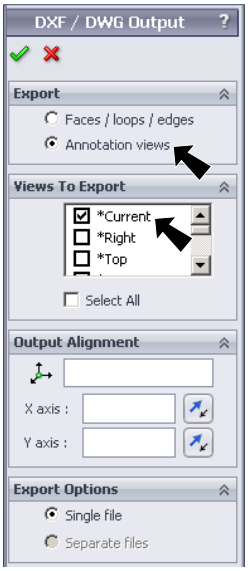


Fig. 6

Step 9. In the DXF/DWG Cleanup dialog box:

Use the **Zoom to Area**  in the View toolbar to drag a zoom window around the **front of fuselage**, **Fig. 7** and **Fig. 8**.

To **pan**, hold down **Ctrl key** and drag with middle mouse button (wheel).

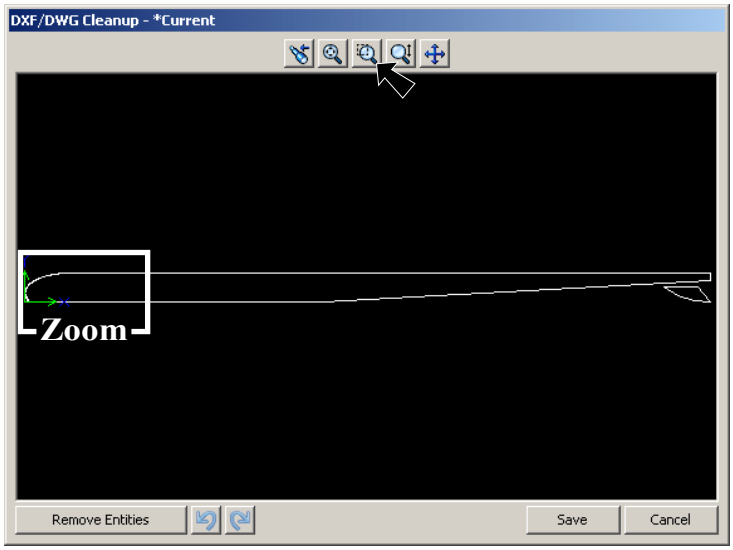


Fig. 7

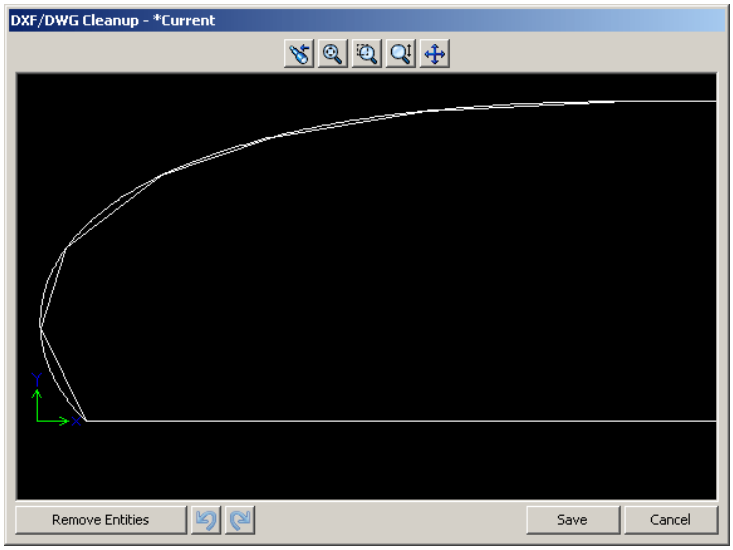


Fig. 8

Step 10. Remove the segmented spline.
To remove, **select the segmented spline** and click **Remove Entities**, **Fig. 9** and **Fig. 10**.

Step 11. Click Save, **Fig. 10**.

Step 12. Close the Fuselage part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

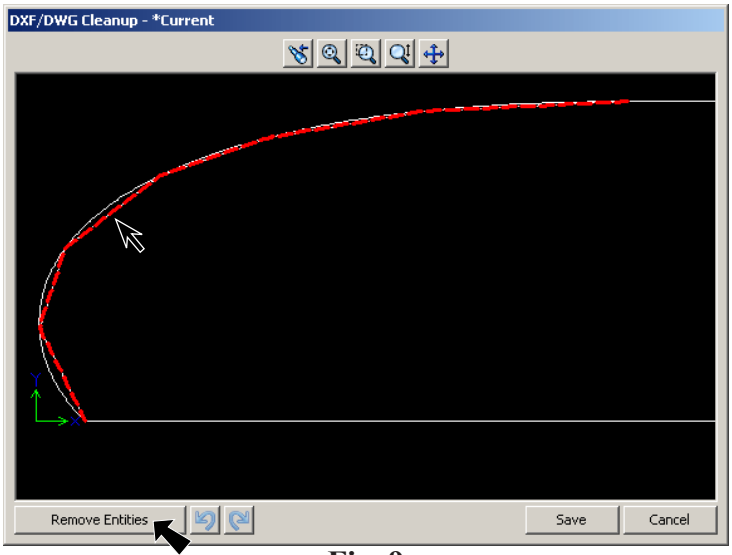


Fig. 9

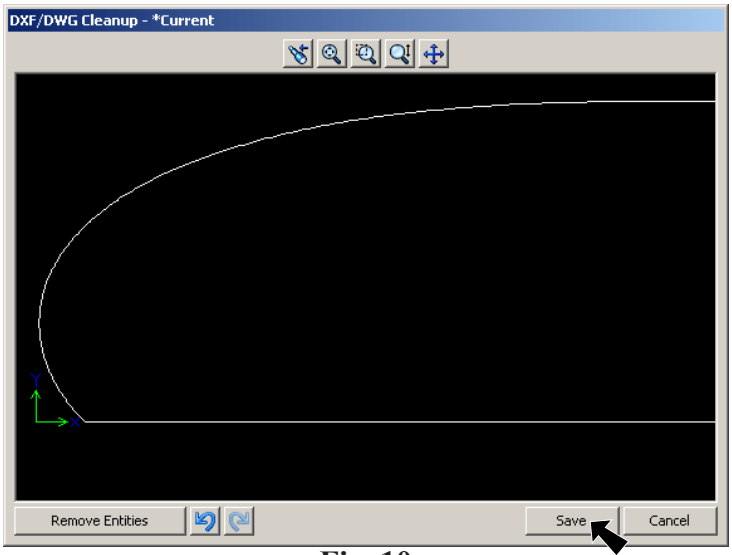


Fig. 10

B. Open Fuselage DXF in CorelDRAW.

Step 1. Open your **FUSELAGE.DXF** file in CorelDRAW.

Step 2. In the Import AutoCAD file set:
3D Projection **Top**, **Fig. 11**
select **Metric** (1 unit = 1 mm)
check **Auto-Reduce nodes**
and click OK.

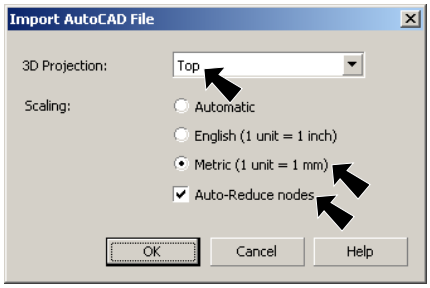


Fig. 11

C. Set Units and Page Size.

Step 1. In the Property bar set:
Units **millimeters**, **Fig. 12**

Page size
Width **300**
Height **13**

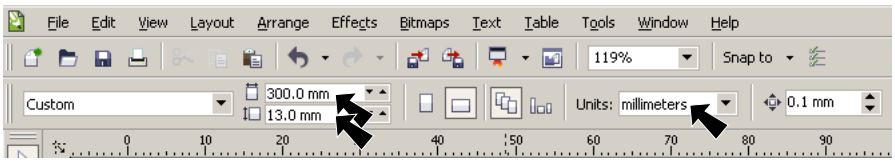


Fig. 12


Fig. 13

D. Delete Duplicate Lines.

Step 1. Delete **two** lines across bottom of Fuselage that are on top of lines (duplicate), **Fig. 14**. To delete, click a line and press Delete key on keyboard.

Fig. 14

E. Set Color and Line Width.

Step 1. Use **Ctrl-A** to select all.

Fig. 15

Step 2. **Right click red** in the **Color** palette to change the outline color to red, **Fig. 15**. Red is the cut color on laser.

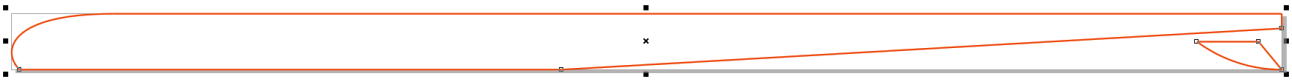


Fig. 16

Step 3. Click **Outline**  in the toolbox and **Hairline** from menu, **Fig. 17**. Hairline is the cut line width on laser.

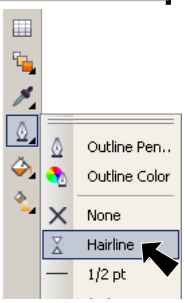


Fig. 17

Step 4. Save the CorelDRAW file. Use **Ctrl-S** and click Save.

Fig. 18

F. Export Wing as DXF".

Step 1. Back in SolidWorks, open your **WING** part file.

Step 2. Suppress features below the **SketchedBend1**. To Suppress, click **Cut-Sweep1** in the Feature Manager and click **Suppress**  from the Content toolbar, **Fig. 19**.

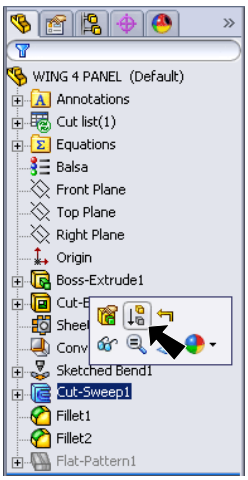


Fig. 19

G. Mirror Sheet Metal.

Step 1. Click **Mirror**  on the Features toolbar.

Step 2. In the Mirror Property Manager set:

under **Mirror Face/Plane**, **Fig. 20**

right click top face of inboard panel and click **Select Other** from the menu, **Fig. 21**

click root face of Wing, **Fig. 22**

expand **Bodies to Mirror**

click the **Wing**, **Fig. 23**

click OK  .

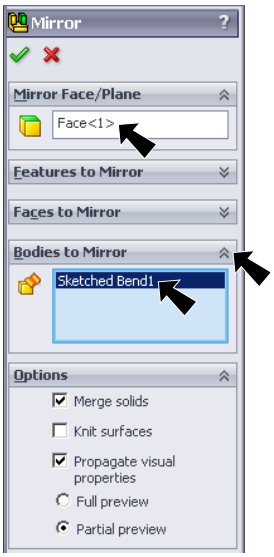


Fig. 20

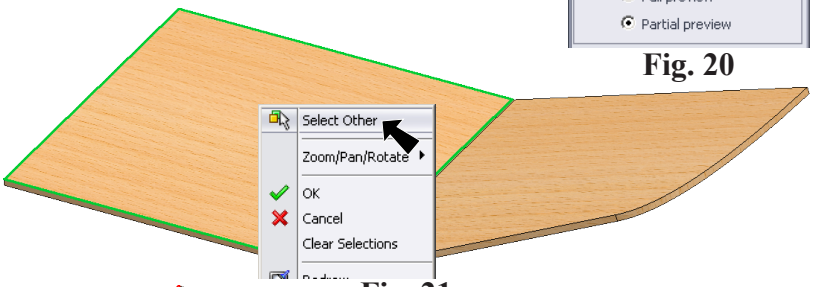


Fig. 21

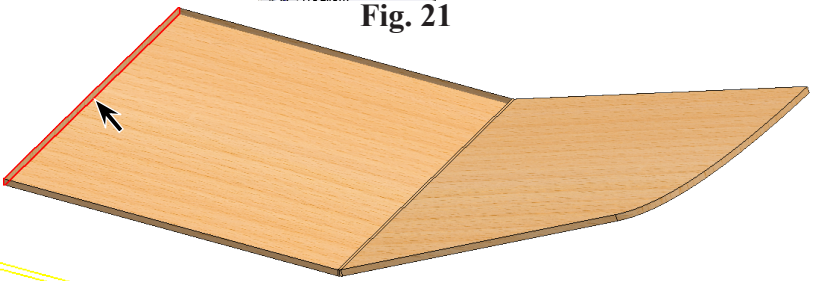


Fig. 22

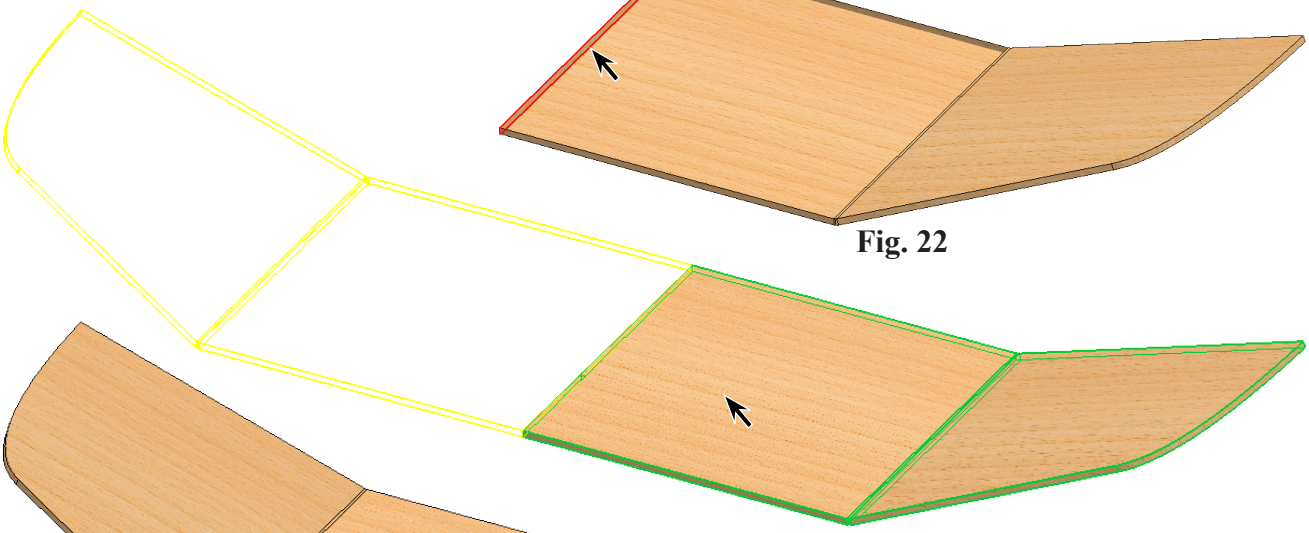


Fig. 23

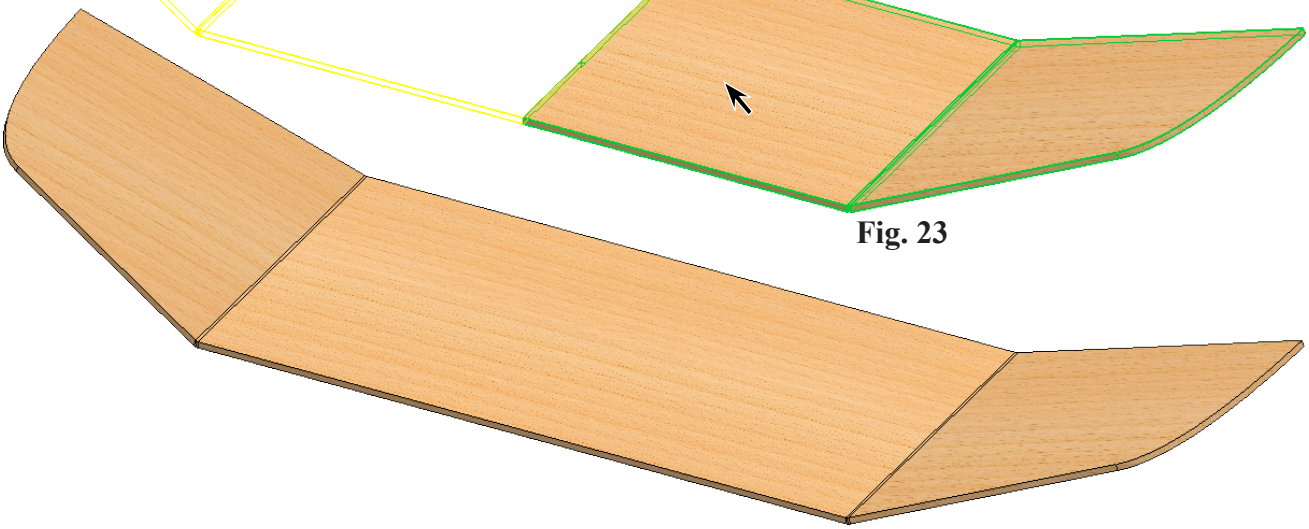


Fig. 24

H. Draw Line.

Step 1. Click the **top face of inboard panel** and click **Sketch**  on the Content menu, **Fig. 25**.

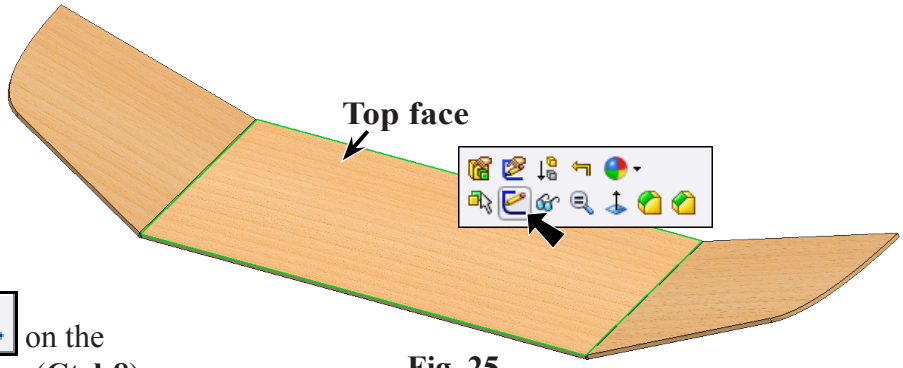


Fig. 25

Step 2. Click **Normal To**  on the Standard Views toolbar. **(Ctrl-8)**

Step 3. Click **Line**  **(L)** on the Sketch toolbar.

Step 4. Draw the vertical line (centerline) down through the Origin, **Fig. 26**. Start from the Midpoint of edge.

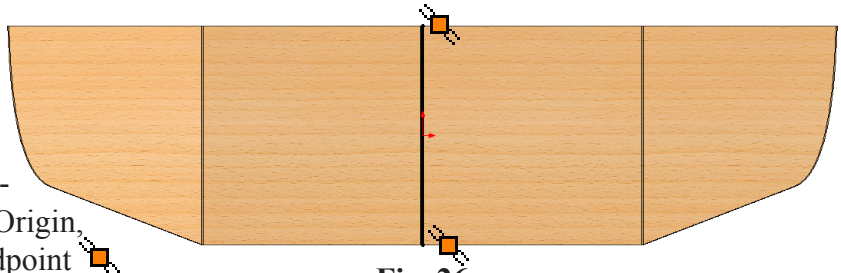


Fig. 26

Step 5. **Do not save Part file**.

I. Save As WING.DXF.

Step 1. Click File Menu > Save As.

Step 2. In the Save As dialog box:
change **Save as type: to Dxf** and click Save, **Fig. 27**.

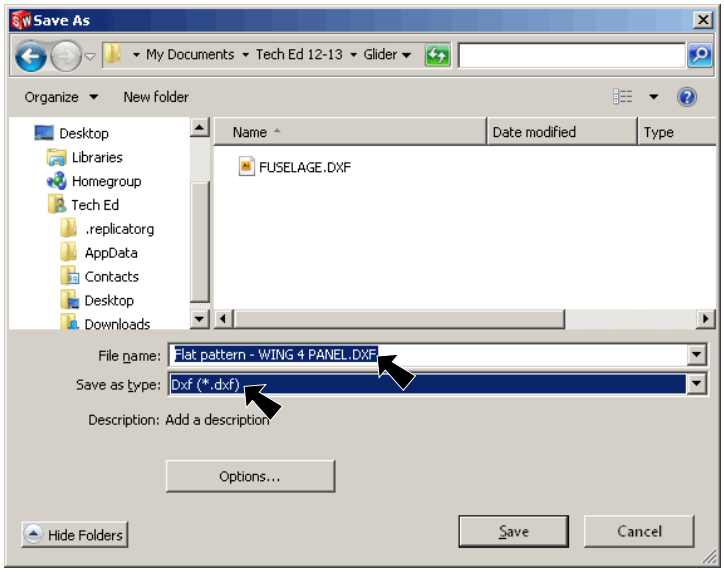


Fig. 27

Step 3. In the DXF/DWG Property Manager set:
under Entities To Export, **Fig. 28**
check **Bend lines**
check **Sketches**
click OK  .

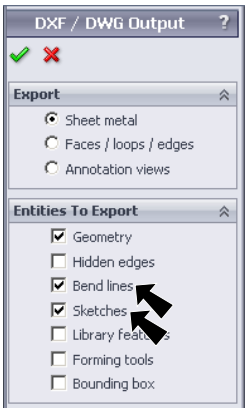


Fig. 28

Step 4. In the DXF/DWG Cleanup dialog box:
Remove the extra line to the right of the centerline. To remove, **select line** and click **Remove Entities**, **Fig. 29** and **Fig. 30**.

Step 5. Click Save, **Fig. 30**.

Step 6. Close the Wing part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

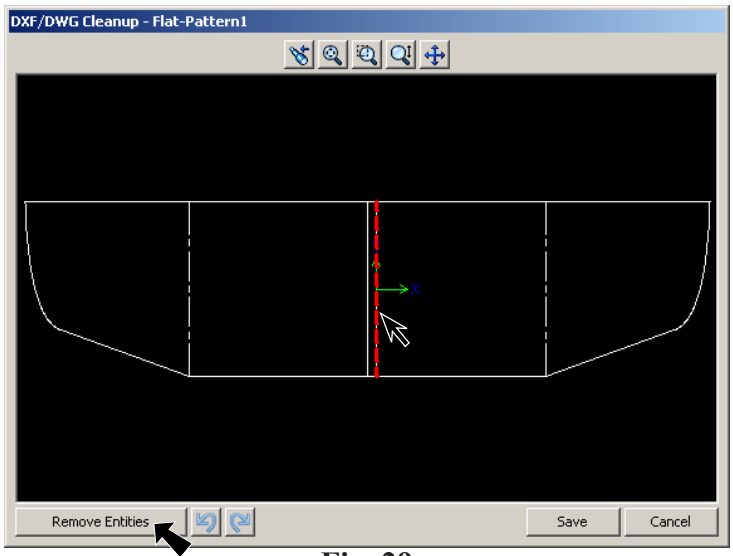


Fig. 29

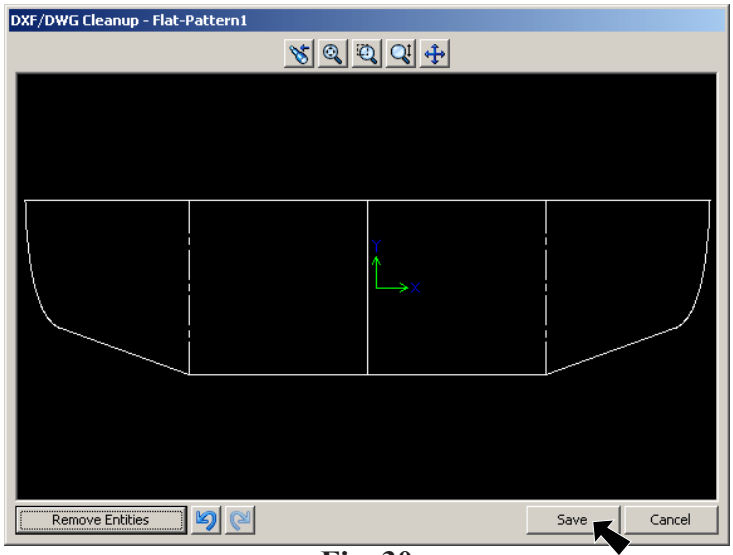


Fig. 30

J. Open Wing DXF in CorelDRAW.

Step 1. Open your **WING.DXF** file in CorelDRAW.

Step 2. In the Import AutoCAD file set:
3D Projection: **Top**, **Fig. 31**
select **Metric** (1 unit = 1 mm)
and click OK.

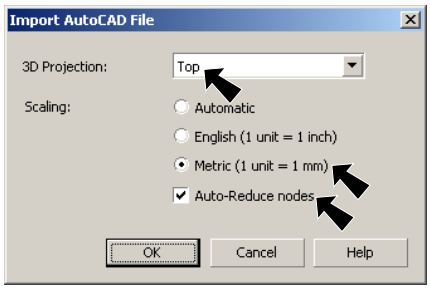


Fig. 31

K. Set Units and Page Size.

Step 1. In the Property bar set:
Units **millimeters**, **Fig. 32**

Page size
Width 300
Height 77

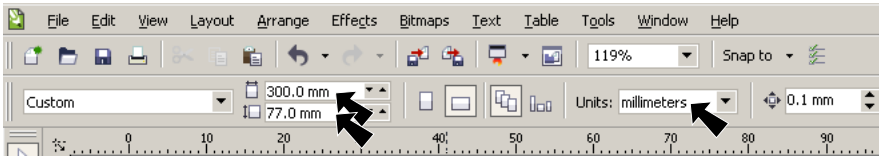


Fig. 32

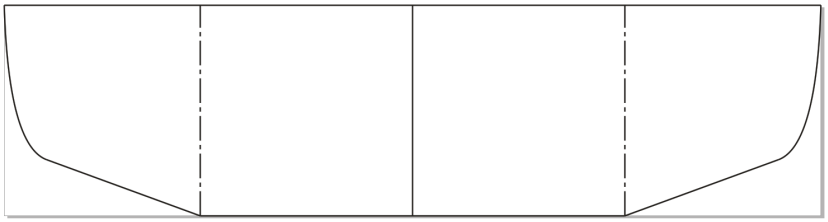
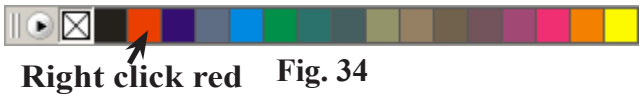


Fig. 33

L. Set Color and Line Width.

Step 1. Use **Ctrl-A** to select all.

Step 2. **Right click red** in the **Color** palette to change the outline color to red, **Fig. 34**. Red is the cut color on laser.



Right click red **Fig. 34**

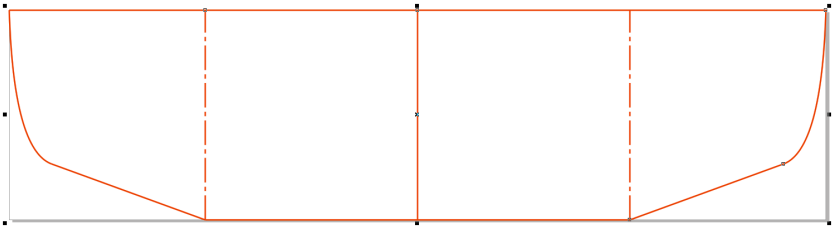


Fig. 35

Step 3. Click **Outline** in the toolbox and **Hair-line** from menu, **Fig. 36**. Hairline is the cut line width on laser.

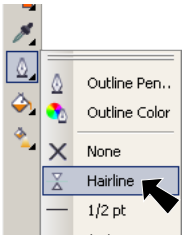


Fig. 36

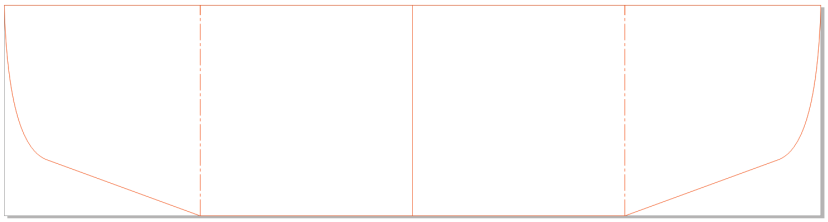


Fig. 37

Step 5. **Shift click both bend lines** and change to **Black 1/2 Stroke**, **Fig. 38**.

Fig. 38

Step 4. Save the CorelDRAW file. Use **Ctrl-S** and click Save.

M. Export Stabs as DXF".

Step 1. Back in SolidWorks, open your **H STAB** part file.

Step 2. Roll the rollback bar to below the **Cut-Extrude1**. To rollback, click **Fillet1** in the Feature Manager and click **Rollback**  from the Content toolbar, **Fig. 39**.

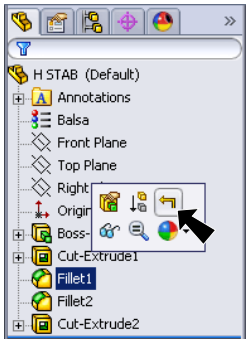


Fig. 39

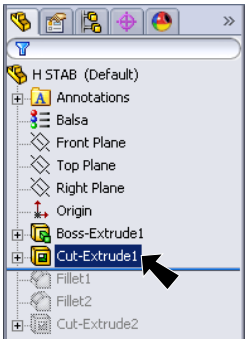


Fig. 40

Step 3. Click **Cut-Extrude1** in the Feature Manager and press **Delete key** on the keyboard, **Fig. 40**. Deleting the feature will prevent duplicate lines.

Step 4. Click **Sketch2** in the Feature Manager and click **Edit Sketch**  on the Content menu, **Fig. 41**.

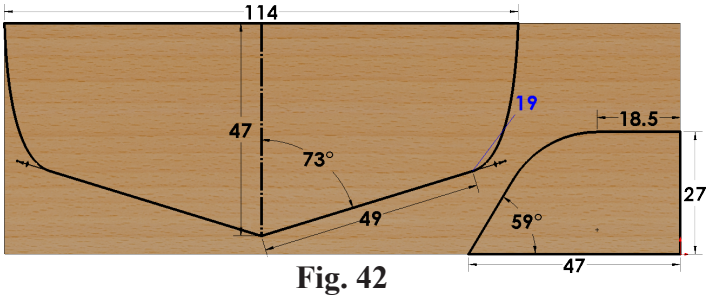


Fig. 42

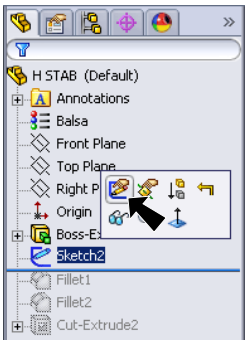


Fig. 41

Step 5. Click **Normal To**  on the Standard Views toolbar. **(Ctrl-8)**

Step 6. Click File Menu > Save As.

Step 7. In the Save As dialog box:
key-in **STABS** for file name
change **Save as type: to Dxf**
and click Save, **Fig. 43**.

Step 8. Click **Save the Document without rebuilding**, **Fig. 44**.

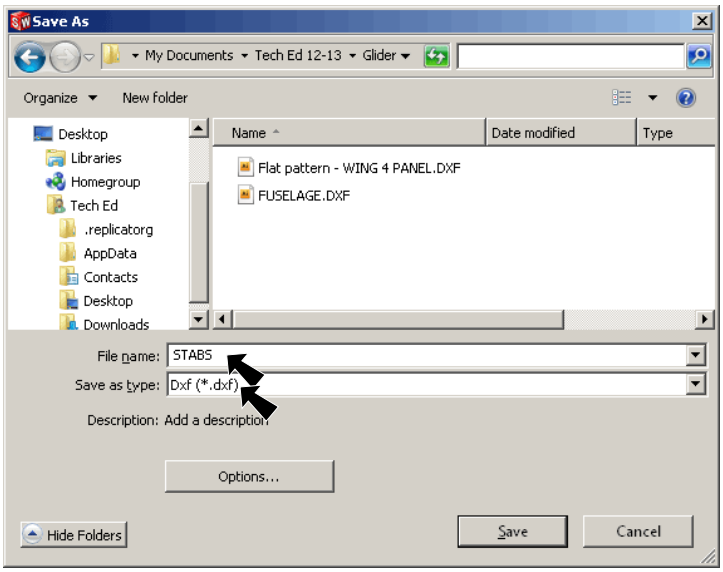


Fig. 43

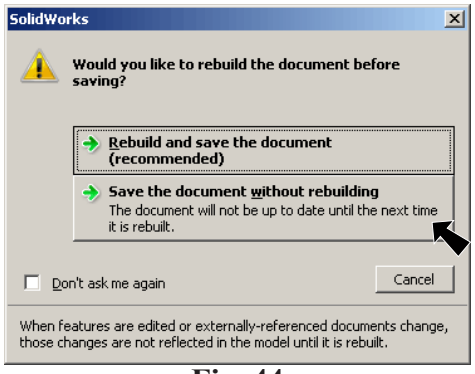


Fig. 44

Step 9. In the DXF/DWG Property Manager set:
under Export, **Fig. 45**
click **Annotation views**

under Views to Export
check **Current**
click OK  .

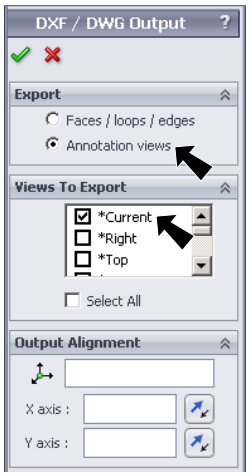


Fig. 45

Step 10. In the DXF/DWG Cleanup dialog box click Save, **Fig. 46**.

Step 11. Close the H Stab part file and **Don't Save**. Use File Menu > Close. **Don't** exit SolidWorks.

N. Open Stabs DXF in CorelDRAW.

Step 1. Open your **STABS.DXF** file in CorelDRAW.

Step 2. In the Import AutoCAD file set:
3D Projection: **Top**, **Fig. 47**
select **Metric** (1 unit = 1 mm)
check **Auto-Reduce nodes**
and click OK.

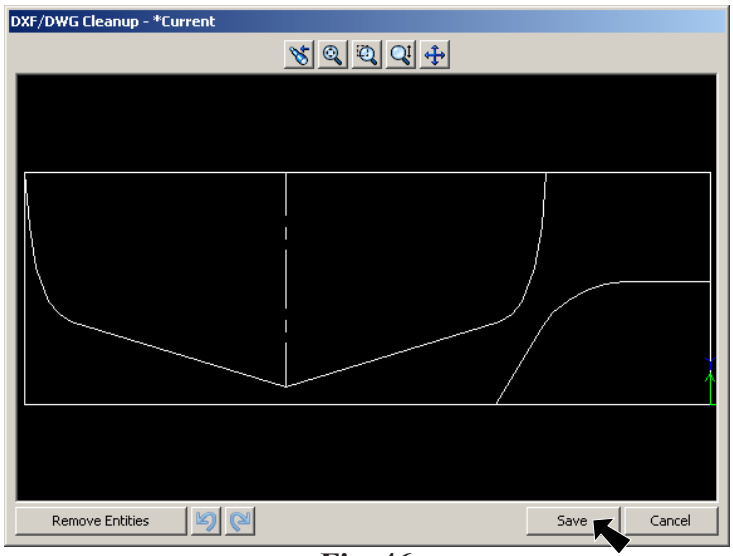


Fig. 46

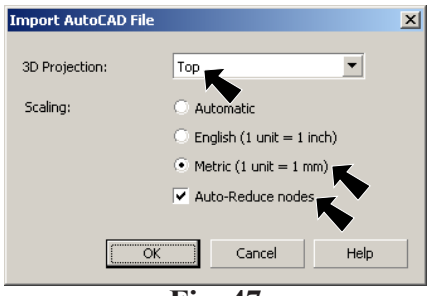


Fig. 47

O. Set Units and Page Size.

Step 1. In the Property bar set:

Units **millimeters**, **Fig. 48**

Page size

Width **150**

Height **51**

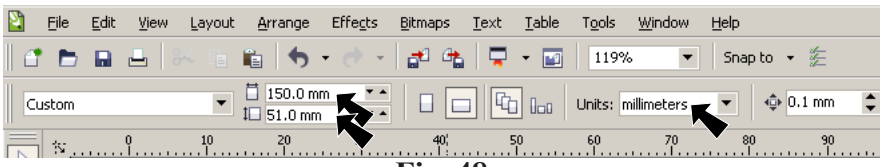


Fig. 48

P. Delete Extra Lines.

Step 1. Delete the **four** line of the Blank feature, **Fig. 49**. To delete, click line and press Delete key on keyboard.

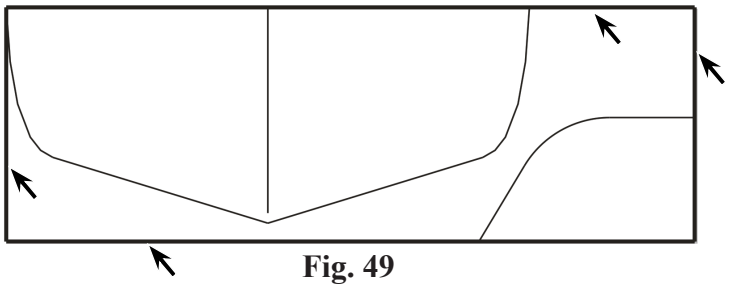


Fig. 49

Q. Set Color and Line Width.

Step 1. Use **Ctrl-A** to select all.

Step 2. **Right click red** in the **Color** palette to change the outline color to red, **Fig. 50**. Red is the cut color on laser.

Right click red **Fig. 50**

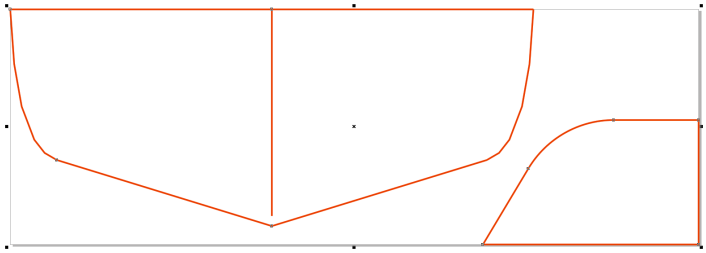


Fig. 51

Step 3. Click **Outline** in the toolbox and **Hairline** from menu, **Fig. 52**. Hairline is the cut line width on laser.

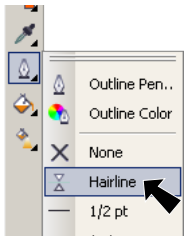


Fig. 52

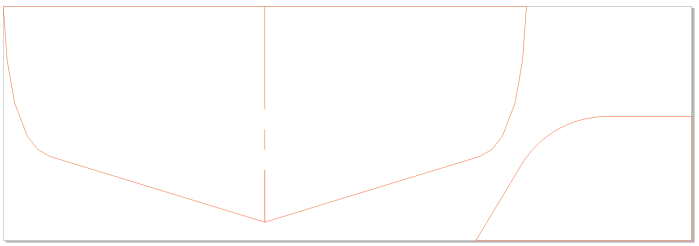


Fig. 53

Step 4. Deselect all. To deselect, click any empty area of the document window or ESCAPE key.

Step 5. Select the **centerline of the H Stab** and change to **Black 1/2 Stroke**, **Fig. 54**.

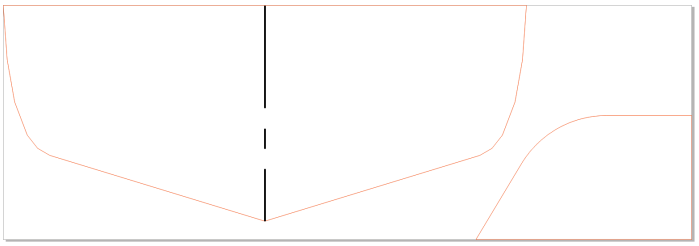


Fig. 54

Step 6. Save the CorelDRAW file. Use **Ctrl-S** and click Save.