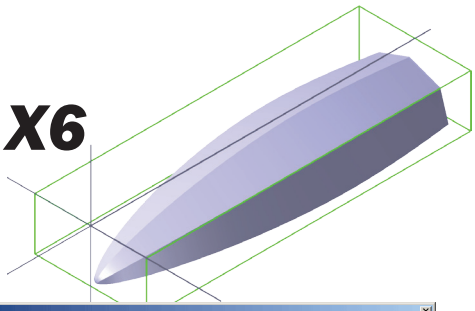
SolidWorks to Mastercam X6



A. Open File in Mastercam X6.

Step 1. If necessary, save your **HULL** file in SolidWorks.

Step 2. In Mastercam X6, click File Menu > Open.

Step 3. In the Open dialog box set **Files of type** to **SolidWorks Files**, select your BODY file, **Fig. 1**. Click Open .

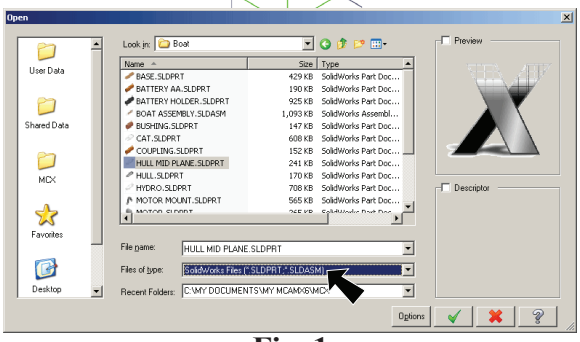


Fig. 1

Step 4. Change to the Isometric View. Use or **Alt-7**.

Step 5. Click Fit or use **Alt-F1** to fit, **Fig. 2**.

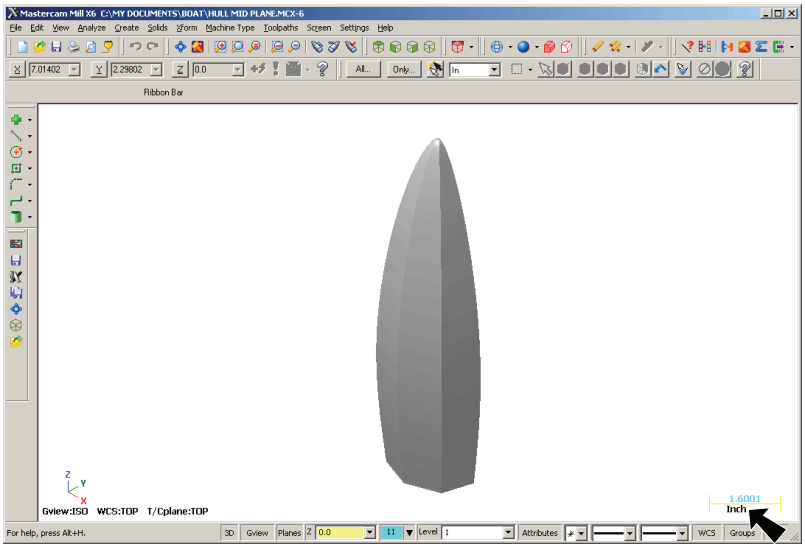


Fig. 2

B. Confirm Units are Inch.

Step 1. Click the bottom right corner of the display, the units should be **Inch**, **Fig. 2**.

C. Save Your File.

Step 1. Click File Menu > Save As.

Step 2. Key-in **HULL1** for the filename and press ENTER.

D. Change Color.

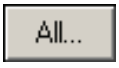
Step 1. Click the **All** button  in the General Selection ribbon bar, **Fig. 3**.

Fig. 3

Step 2. Click **All Entities** button **Fig. 4**.

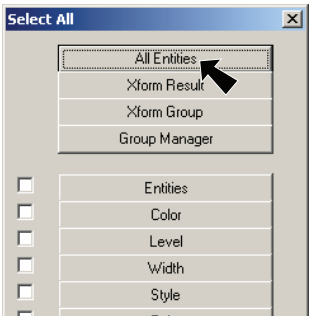


Fig. 4

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Step 3. **Right click** the color swatch in the Status Bar at the bottom of the screen, **Fig. 5**. Key-in **56** color number and press ENTER, **Fig 6**.

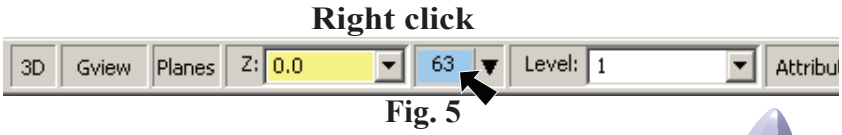


Fig. 5

E. Rotate Hull Around Axes.

Step 1. Click the down arrow of Set Planes button in the toolbar and click **Right (WCS)**, **Fig 7**.

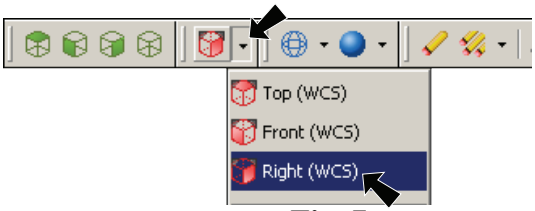


Fig. 7

Step 2. Click Xform Menu > Rotate.

Step 3. Click the solid body to select it and **press ENTER**, **Fig. 6**. The solid will change color with selected.

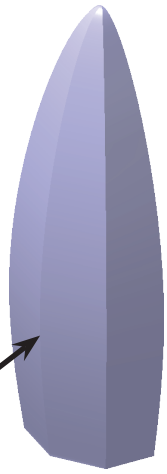


Fig. 6

Step 4. Set: **Move**

1 for Number of Steps

90 for Rotation Angle

Click **Apply**, **Fig. 8**.

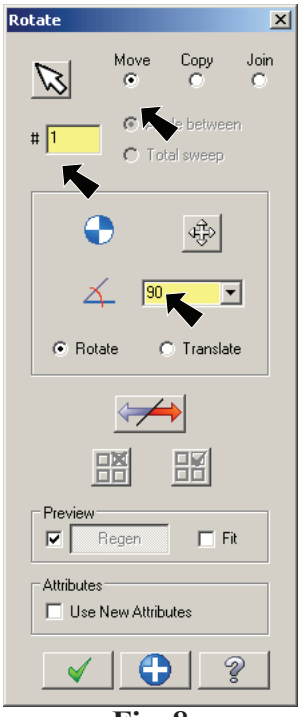


Fig. 8

Step 5. Click the down arrow of Set Planes button in the toolbar and click **Front (WCS)**, **Fig 10**.

Fig. 10

Step 6. Click the solid body again to select it and **press ENTER**, **Fig. 9**.

Fig. 9

Step 7. Set: **Move**

180 for Rotation Angle, **Fig. 11**.

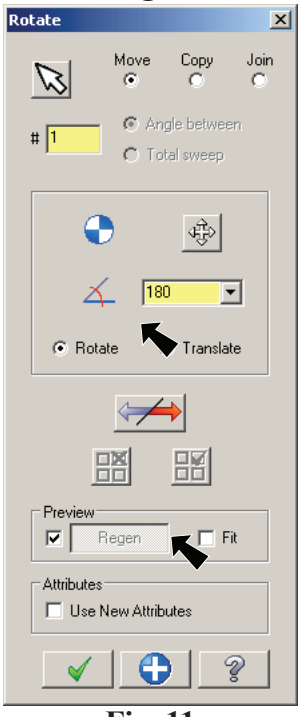


Fig. 11

Step 8. Click OK in the Rotate dialog box.

Step 9. Click Fit or use **Alt-F1** to fit.

Step 10. **Right click** the drawing area and click Clear Colors.

Step 11. Save. Use **Alt-F S**.

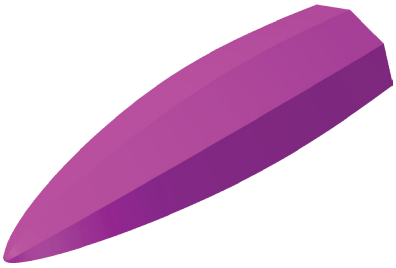


Fig. 12

F. Create Bounding Box.

Step 1. Draw the bounding box **tangerine**. Click the color swatch in the Status Bar at the bottom of the screen. Key-in **94 for tangerine** color number and press ENTER.

Step 2. Click Create Menu > Bounding Box.

Step 3. Set: **Check All Entities**
Check Lines Arcs
Uncheck Center Point, **Fig. 13**

Click OK . The bounding box places a rectangle wire frame around the hull, **Fig. 14**.

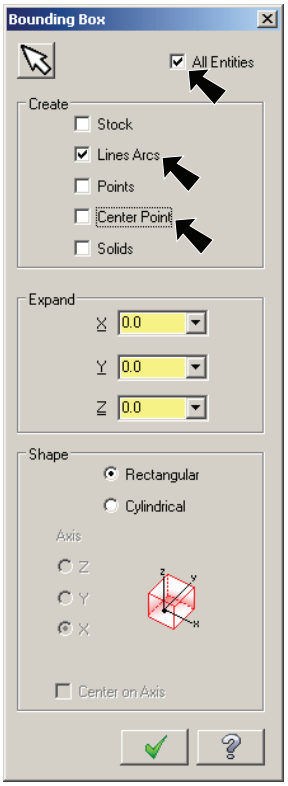


Fig. 13

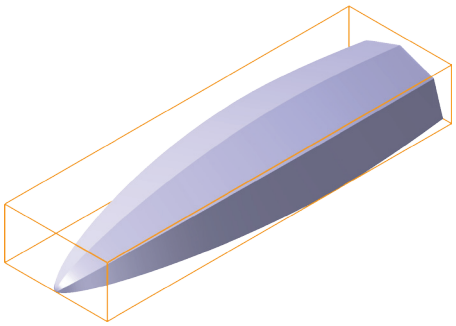


Fig. 14

G. Create Center Point.

Step 1. Draw the **center point green**. Click the color swatch in the Status Bar at the bottom of the screen. Key-in **10 for green** color number and press ENTER.

Step 2. Click Create Menu > Bounding Box.

Step 3. Set: **Uncheck Lines Arcs**
Check Center Point
Uncheck All Entities
(at top), **Fig. 15**
Click the rectangle lines that make up the bottom of the bounding box, **Fig. 16** and press **ENTER.**

Click OK . The bounding box places a point in center of the solid hull on the bottom plane.

Step 4. Use **Alt-S** to turn off the shading to see the Point, **Fig. 17**. The Point should be green.

Step 5. Save . Use **Alt-F S**.

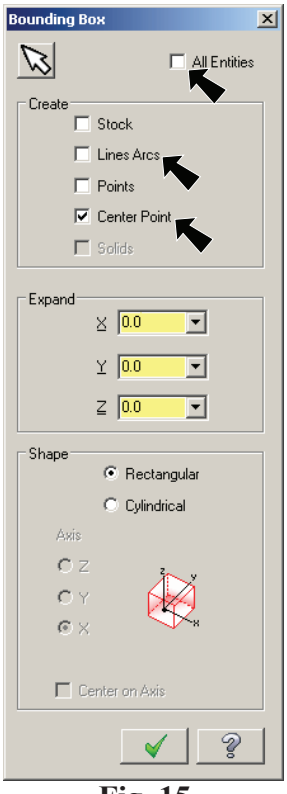


Fig. 15

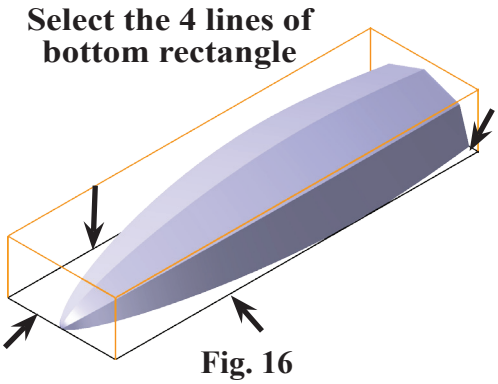


Fig. 16

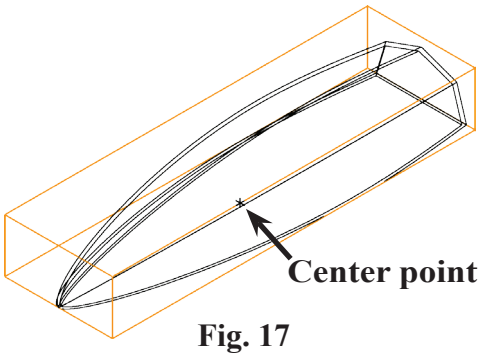
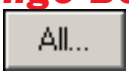


Fig. 17

H. Delete Orange Bounding Box.

Step 1. Click the All 

in the General Selection ribbon bar, **Fig. 18**.

Fig. 18

Step 2. Click **Color button** in the Select All dialog box, **Fig. 19**.

Step 3. Click to place a **check** in **tangerine (94)** check box, **Fig. 19**.

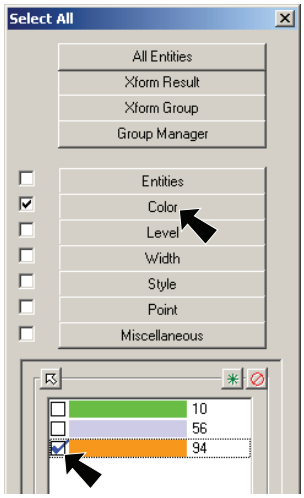


Fig. 19

Step 4. Click OK .

Step 5. Press **Delete** on the keyboard.

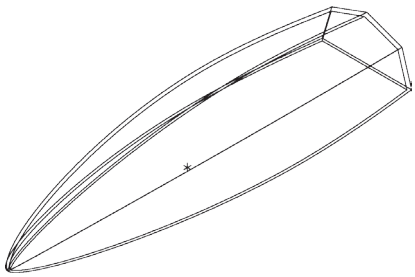


Fig. 20

I. Create Rectangle.

Step 1. Click the down arrow of Set Planes button in the toolbar and click **Top (WCS)**, **Fig 21**.

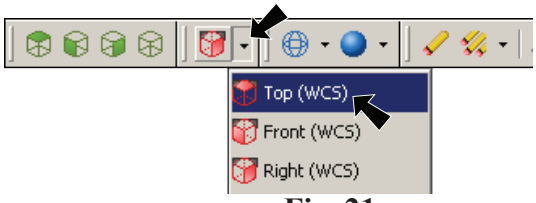


Fig. 21

Step 2. Click Create Menu > Rectangle.

Step 3. Key-into the ribbon bar:

3.2 for **Width**
***(Cat Hull set width to 4.2)**

9.3 for **Height**

Click Anchor to Center , **Fig. 22**.

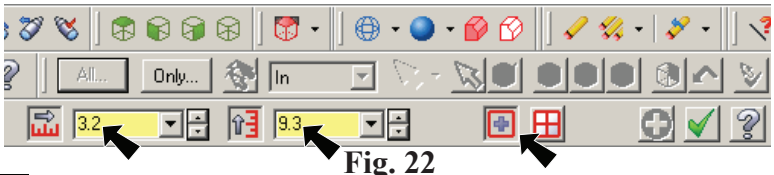


Fig. 22

Step 4. Click the Point in the center of the hull, **Fig. 23.**

Step 5. Click OK in the ribbon bar to fix rectangle and close ribbon bar.

Step 6. Click Fit or use **Alt-F1** to fit drawing on screen.

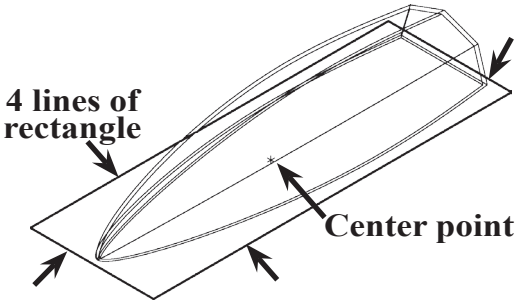


Fig. 23

J. Xform 3d Block.

Step 1. Turn on the shading. Use **Alt-S**.

Step 2. Click Xform Menu > Translate.

Step 3. Click the **4 lines** of rectangle, **Fig. 24**.

Step 4. Press ENTER.

Step 5. Set: **Join**

Z to 1.5 , **Fig. 25**.

Step 6. Click OK button to close the Translate dialog box, **Fig. 25**.

Step 7. **Right click** the drawing area and click Clear Colors from the menu or use **Alt-R C**.

Step 8. Save . Use **Alt-F S**.

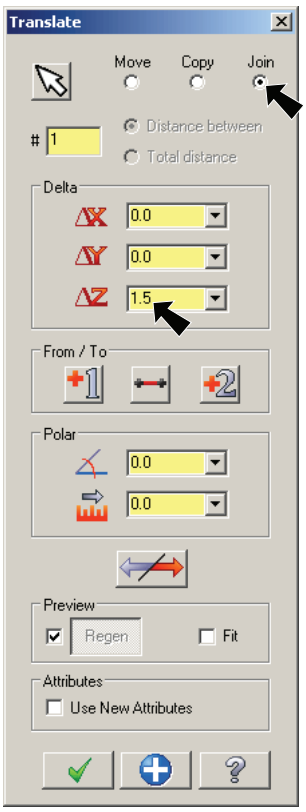


Fig. 24

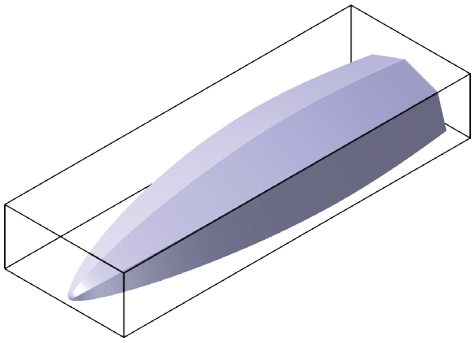


Fig. 25

K. Move to Origin.

Step 1. Display the origin. Use **F9** to show the axes.

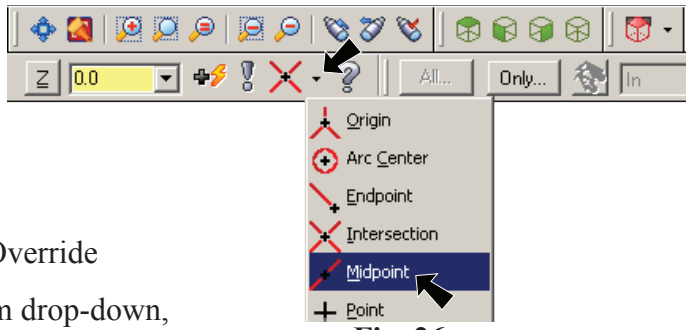


Fig. 26

Step 2. Click Xform Menu > Move to Origin.

Step 3. Click the down arrow of AutoCursor Override toolbar and select **Midpoint** from drop-down, **Fig 26**.

Step 4. Click **top front line** of bounding box, **Fig. 27**.

Step 5. Click Fit or use **Alt-F1** to fit.

Step 6. **Right click** the drawing area and click Clear Colors from the menu or use **Alt-R C**.

Step 7. Note new position of origin, **Fig. 28**.

Step 8. Save . Use **Alt-F S**.

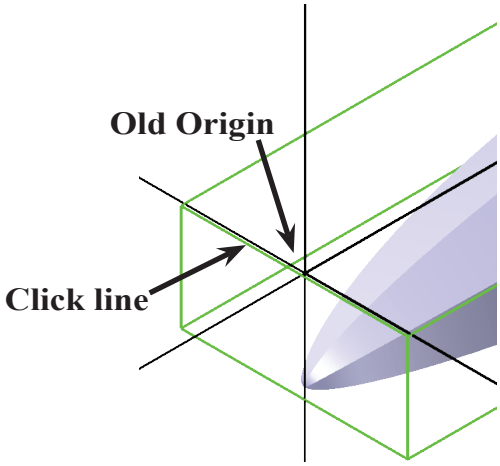


Fig. 27

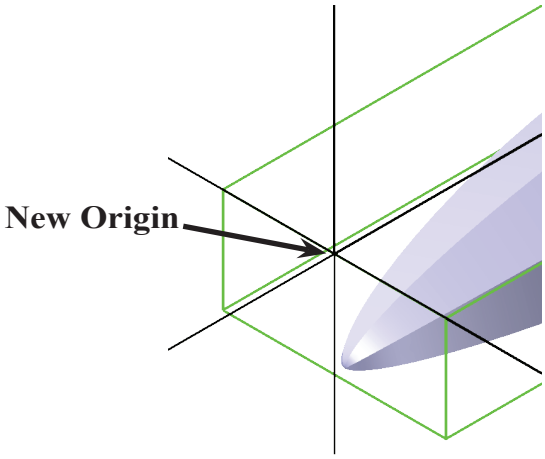


Fig. 28