# **Body Plan Window**

The body plan window displays the transverse sections as seen from aft of the model. Starboard is on the right of the centreline and Portside on the left.

The number of sections and their longitudinal positions is specified in the Design Grid dialog in the Data menu.

In body plan view there are a number of options to visualise the model shape

- Display all sections
- Display one section at a time and use the control box to navigate through the sections
- Display half of the model, with or without split sections

View a <u>video</u> showing how to work in the Body Plan window.

### **Display All Sections**

To display all the sections, simply tick the sections box in the Contours dialog in the Display menu.

If the stations are turned off, only the current station will be displayed in the Body Plan and Perspective windows. In the Body Plan window the control box in the top right hand corner is used to navigate through the sections.

### **Control Box**

In the top right hand corner of the Body Plan window is the control box containing a miniature view of the plan shape of all currently visible surfaces. The purpose of the control box is to allow you to specify precisely what part of a surface you wish to view or modify, by allowing you to select different cross sections and columns of control points in that surface.



At the top of the control box several short vertical lines are drawn. These are the station indicators; there is one indicator for each of the stations specified in the Design Grid dialog.

The section marker line shows which section is currently displayed.

The "triangles" on the bottom display the control point columns for the surface you are currently working on. The triangles are spaced evenly along the bottom of the control box.



By selecting the triangles you select a column of control points and display the section that is closest to that column. Alternatively, a column is made the current column of its respective surface whenever one of its control points is selected in any of the drawing windows.



By clicking at the desired longitudinal position well inside the control box, the section closest to that longitudinal position is displayed. By using the arrow keys on your keyboard you can then scroll through the sections. The right arrow displays the next station forward and the left arrow displays the next station aft.

### Note

When the cursor is within the control box the horizontal cursor coordinate at the bottom of the window refers to the cursor's longitudinal position on the plan shape.

#### Markers Display Options In Body Plan Window

If markers are defined, there are three display modes, chosen from the Markers sub-menu in the Display menu:

- Hide all markers all defined markers are invisible
- Markers for current station —only markers with the same longitudinal position as the current station are displayed
- Show all markers all defined markers are displayed

These display modes are particularly useful when trying to fit a surface to a table of offsets.

### Half Hull Display

The half hull display selects whether both halves of a symmetrical surface are displayed. If half is turned on, only the starboard side of symmetrical surfaces will be displayed.



When the Half function is not activated, both sides of each symmetrical surface will be displayed. However, when Half is activated, the Body Plan window will show either a split section view or all sections on one side depending on whether Split Section Display is setup correctly. The Split Section Display option is described in greater detail in the next section.



# Note

Activating Half function changes the hull display in all view windows.

### **Split Section Display**

The Split Section Display affects the way in which sections are displayed in the Body Plan window; if enabled, aft sections are displayed on the left and forward sections on the right.

The Split Section Display option is only enabled when the half hull display is turned on. If Split Section Display is chosen for any surface, it will be displayed with the forward side of the hull on the right of the centreline and the aft half of the hull on the left. The split section option is specified independently for each surface in the surface's Properties dialog and the Surfaces window.



If Split Section Display is not chosen, all stations will be drawn over half of the hull on the right hand side of the centreline.

# **Defining Section Splitting**

It is possible to specify at which section the body plan view will be split using a column in the Design Grid titled Split. Clicking in this column selects the station where the displayed station will change side in the Body Plan window.



The Control box in the body plan window will be drawn with the sections staggered to show where the split has been placed:



# **Plan and Profile Windows**

### **Plan Window**

The plan window displays the model as seen from below, with Starboard above the centreline and Portside below.