

**By:** MS

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**Subject:** How to import a Maxsurf multihull design into HST

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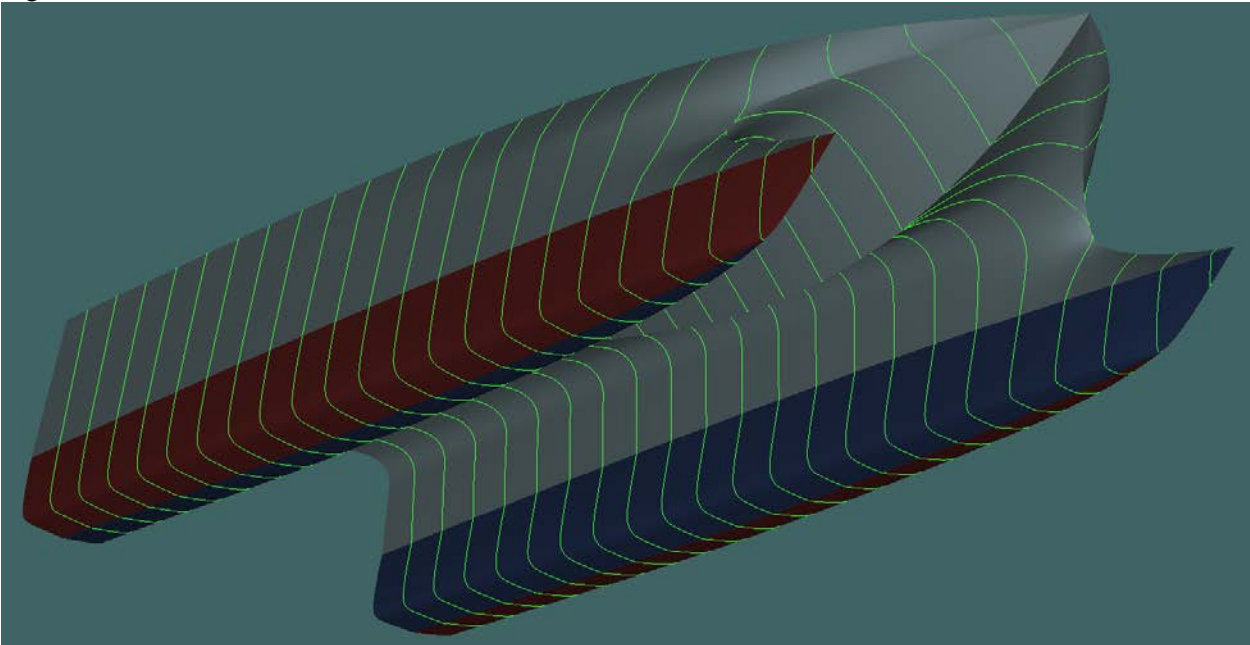
### 1. Programs used or referred to in this Note

**Maxsurf** 16.0 Pro 64-bit  
**Hydrolink** 16.0 64-bit  
**HST Release 2** 02.01.16.1  
**DXF to LFH** 28.05.15.1

### 2. Initial Maxsurf design

The multihull used for this tutorial is a 45 metre catamaran design with a bulbous bow, see Figure 1.

Figure 1



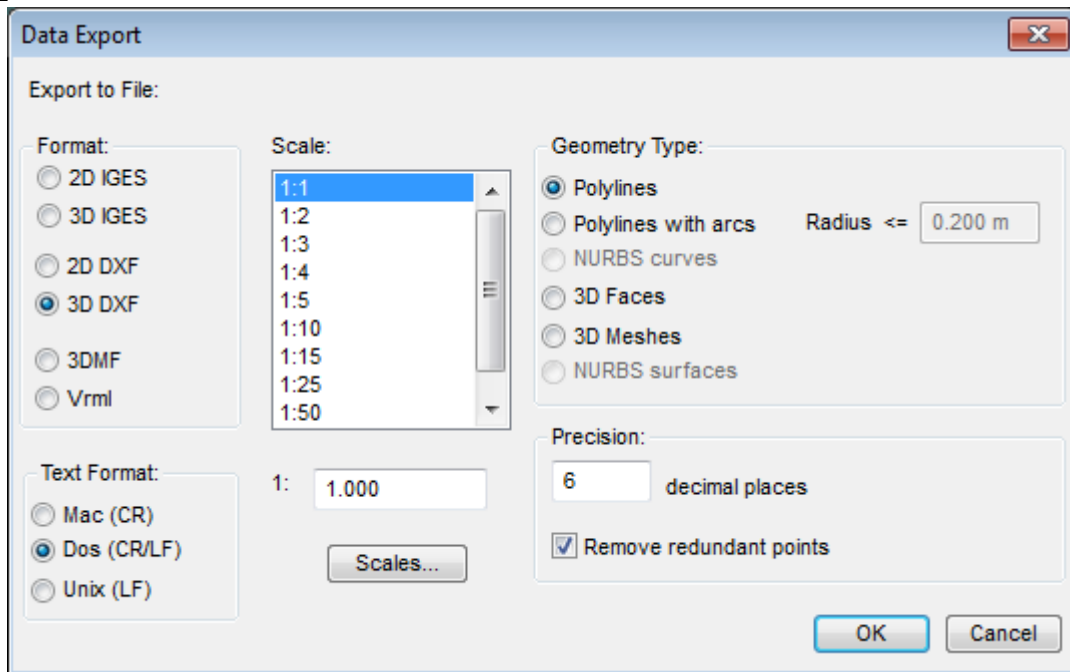
### 3. Routes into HST

The recommended route is via Wolfson's DXF to LFH converter, and is described below. The Hydrolink conversion module distributed with Maxsurf was also tested, but it appears that it cannot handle multihulls.

### 4. Hullform conversion

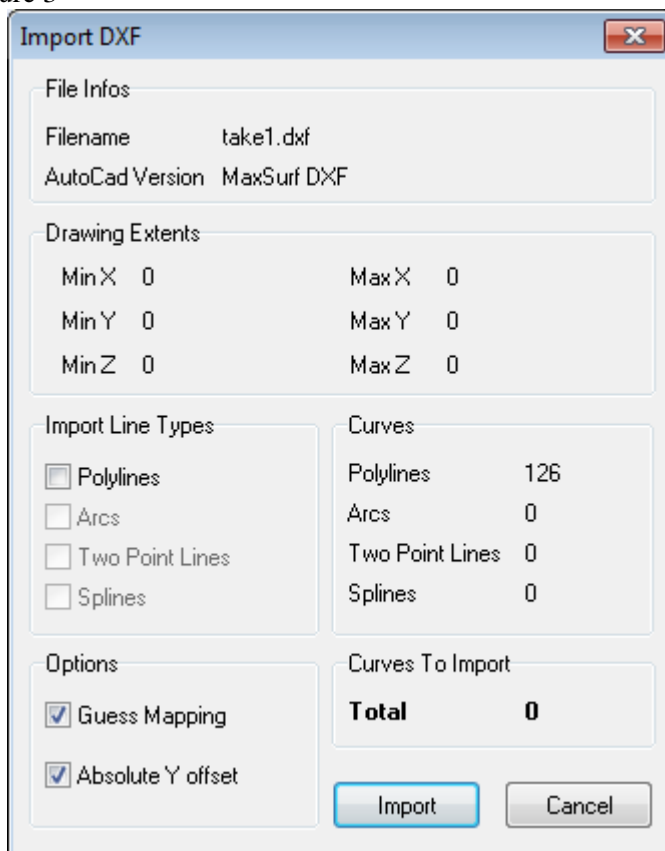
1. Run MaxSurf and open your design.
2. Go to Display>Design grid. Ensure these options are turned off:
  - Zero point
  - Frame of reference
  - Design grid
3. Lock all surfaces via the Lock All option: Surfaces>Locking>Lock All
4. Display>Half
5. Export as 3d DXF using the settings given in Figure 2 below

Figure 2



6. Run the DXF to LFH converter and import the dxf file generated above. This will bring up the Import DXF dialog of Figure 3.

Figure 3



7. Tick the Polylines check box to import all polylines, then press the Import button.

8. Delete all curves marked as Long ie Longitudinals. These are not required by HST.
9. The curves may be manipulated at this stage, this can be done via the Tools menu. For example, the 126 polylines of this example required stitching (Tools>Stitch All Curves) ,a command that joins adjacent curves. Please see the 'Manipulating Curves' help page of the DXF to LFH online help for further information on this.
10. Export as LFH via File > Save > LFH.
11. Run HST and import the LFH file created above. This will bring up a File Conversion dialog where parameters such as Deletion Factor, Scale etc can be set. Please refer to the HST online help for further information on this dialog. Click OK.
12. One element will be created, and will contain all the imported curves. Such a hull definition may need additional manipulation if the hull form is complex; for example a bulbous bow requires an additional element and break sections. These should be generated manually, please see the Hull and Compartment Definition Guide in the HST online help.

Figure 4

