

The hull lines and all structural members in the modeled region were represented using shell elements based on the midship section drawing. The arrangement of frames, bulkheads, and other structural components was defined according to the structural drawings, including the sectional configurations from Frame 13 to Frame 18 and the bulkhead layout in the analyzed region (Figure 4, Figure 5, Figure 6, Figure 7, Figure 8, Figure 9, Figure 10).

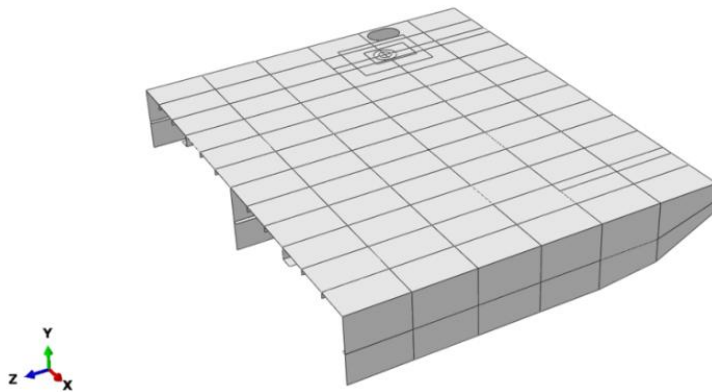


Figure 3 The model represents a length of three compartments in the Abaqus software

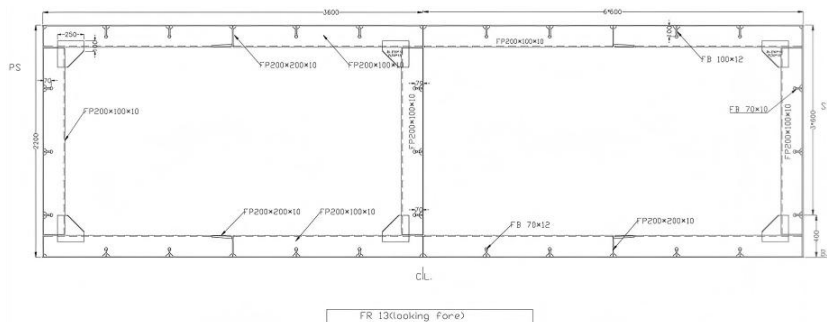


Figure 4 Frame 13 structure

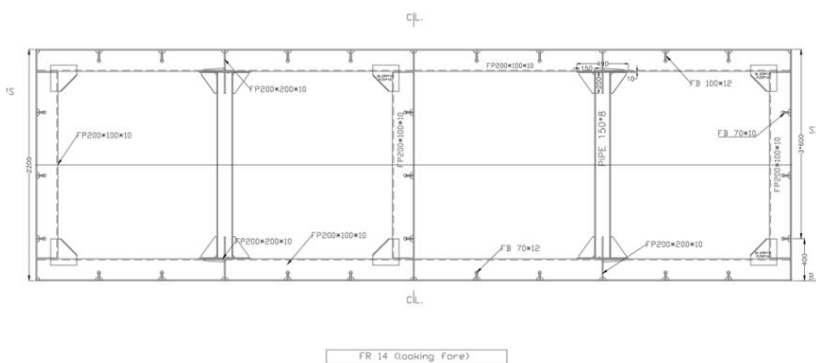


Figure 5 Frame 14 structure

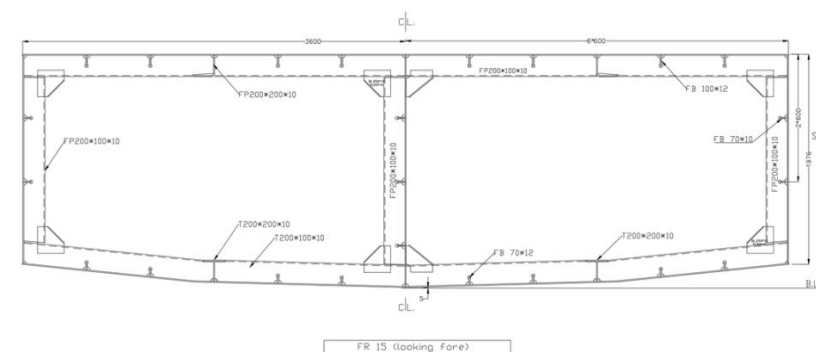


Figure 6 Frame 15 structure