

The members and locations subjected to fatigue analysis are described in Table 1 of Ch 8, Section 1 of CSR bulk carrier Rule (see below table). Could you please clarify following queries:-

Members	Details
Inner bottom plating	Connection with sloping and/or vertical plate of lower stool
	Connection with sloping plate of hopper tank
Inner side plating	Connection with sloping plate of hopper tank
Transverse bulkhead	Connection with sloping plate of lower stool
	Connection with sloping plate of upper stool
Hold frames of single side bulk carriers	Connection to the upper and lower wing tank
Ordinary stiffeners in double side space	Connection of longitudinal stiffeners with web frames and transverse bulkhead
	Connection of transverse stiffeners with stringer or similar
Ordinary stiffeners in upper and lower wing tank	Connection of longitudinal stiffeners with web frames and transverse bulkhead
Ordinary stiffeners in double bottom	Connection of longitudinal stiffeners with floors in way of transverse bulkhead
Hatch corners	Free edge of hatch corners

- (1) The fatigue performance of members and locations **in red font** in above table need to be evaluated using very fine mesh FE model, the other parts can be evaluated using simplified method.

For very fine mesh analysis, which cargo hold should be done? Heavy ballast hold, Heavy cargo hold or Light cargo hold?

- (2) The transverse BHD connection with **sloping** lower stool and upper stool should be checked, but how about transverse BHD connection with **vertical** lower stool and upper stool? Should it be checked as well or just ignored it?

- (3) Which locations should be checked, for example:-

(3-1) Inner bottom plating/ connection with sloping and/or vertical plate of lower stool **Centreline or full breadth?**

(3-2) Inner bottom plating/ Connection with sloping plate of hopper tank **Mid-hold or full length of hold?**

(3-3) Inner side plating/ Connection with sloping plate of hopper tank **Mid-hold or full length of hold?**

(3-4) Transverse bulkhead/ Connection with sloping plate of lower stool **Centreline or full breadth?**

(3-5) Transverse bulkhead/ Connection with sloping plate of upper stool **Centreline or full breadth?**

(3-6) Hold frames of single side bulk carriers/ Connection to the upper and lower wing tank **Mid-hold or full length of hold?**

END