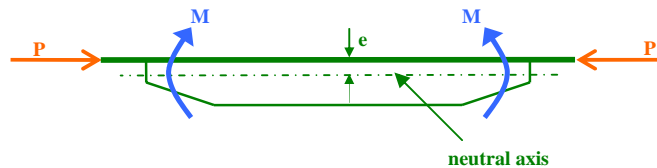


Rule Change Proposal
for Net Section Modulus of Stiffener W_{st}
in Paragraph 4.2.2 of Chapter 6, Section 3 of CSR BC

LR Yokohama Design Support Office
4 June 2008

1. In Paragraph 4.2.2 of Chapter 6, Section 3 of the CSR BC, it is noted that the net section modulus W_{st} of a stiffener is calculated at its flange (or face plate) or the attached plate to it, where compressive bending stress may appear, to assess its buckling capability, in both cases of availability of lateral pressure and no pressure on it.
2. However, it is not clear there how the net section modulus of a stiffener snipped at both ends is calculated.
3. When the stiffener is under compression, compressive stress is induced at the attached plate by a moment due to eccentricity of a compression force off the neutral axis of the stiffener. Consequently the net section modulus is to be calculated at the attached plate for this purpose.



4. A description in the definition of imperfection w_0 seems to support the above, i.e., “For stiffeners sniped at both ends w_0 must not be taken less than the distance from the midpoint of the attached plating to the neutral axis of the stiffener”.
5. It is proposed that the net section modulus of a stiffener snipped at both ends is to be clearly defined in the CSR in line with the above.