Welding for Cross-joints subject to High Stress

Amended Rules

Rules for the Survey and Construction of Steel Ships Part C

Reason for Amendment

Current requirements for the size of fillet welds take into account that the tensile stress acting upon cross-joints is transmitted through fillet welding so that the size of the weld is, in principle, sufficient to withstand hull girder longitudinal bending stress. This, however, is based upon the types of ship structures common at the time the requirement was originally developed, and new structural designs have been introduced over the years which makes this approach less effective because some cross-joints may in some cases, depending upon the type of structure, actually be subject to stresses larger than hull girder longitudinal bending stress due to transverse deformation, etc.

Accordingly, relevant requirements were amended to give special consideration to the welding of such high stressed cross-joints.

Outline of Amendment

Amended relevant requirements to specify that special consideration is to be given to the welding of high stressed cross-joints.

Amended Requirements

Rules for the Survey and Construction of Steel Ships Part C: 1.2.3, Fig.C1.3, Fig.C1.4, Fig.C1.5