Shafting Coupling Bolts

Amended Rules

Rules for the Survey and Construction of Steel Ships Part D

Outline

The Research Institute of the Society started research on the failure analysis of shafting coupling bolts since failure of shafting coupling bolts had often occurred in recent years. As a result, it was found that failure of the bolts is caused by torsional vibration and the ships which had relatively large torsional vibratory torque were the most likely to have this failure.

However, the present formula for the bolt diameter is based on a nominally rated engine torque, which is prescribed in IACS UR M34, and doesn't consider torsional vibration. Therefore, the present formula is amended, taking torsional vibration into consideration.