

# Structure of Bilge Keels

## **Amended Rules and Guidance**

Rules for the Survey and Construction of Steel Ships Part C  
Guidance for the Survey and Construction of Steel Ships Part C

## **Reason for Amendment**

Occasionally there have been reports of ships with bilge keels experiencing crack damage in their bilge strakes from the ends of pad plates placed between the bilge keels and the bilge strakes.

As the result of a comprehensive investigation into the causes of such damage, the Society determined that the cracks were fatigue cracks caused by stress concentrations due to hull girder bending moments. In addition, it was found that the frequency in which such crack damage occurred varied according to the design of the supporting structures for bilge keel ends.

Therefore, in order to prevent such cracks, relevant requirements were accordingly amended based upon the results of the aforementioned investigation.

## **Outline of Amendment**

- (1) Specified requirements related to the arrangements and the materials of pad plates.
- (2) Specified requirements related to bilge keel ends and their supporting structures.