

The Brittle Crack Arrest Toughness Kca Test Method

Amended Guidance

Guidance for the Survey and Construction of Steel Ships Part K

Reason for Amendment

With regard to the specially considered steels which have brittle crack arrest properties, it is specified in 3.12, Part K of the Rules for the Survey and Construction of Steel Ships that the brittle crack arrest properties of steel plates are to be confirmed through temperature gradient ESSO tests or double tension tests.

ClassNK established a research committee on brittle crack arrest design in 2007 and standardized the brittle crack arrest toughness Kca test method. As a result, Guidelines on Brittle Crack Arrest Design were published in September 2009.

Accordingly, relevant requirements have been amended so as to clarify the brittle crack arrest toughness Kca test method.

Outline of Amendment

The requirements for the brittle crack arrest toughness Kca test method have been added as Annex K3.12.2-1 and it has been specified that temperature gradient ESSO tests can follow this Annex.