

# **Definitions of the Forging Methods for Solid Crank Shafts**

## **Amended Guidance**

Guidance for the Survey and Construction of Steel Ships Part K

## **Reason for Amendment**

Regarding the manufacturing of crank shafts, the requirements for crank shafts manufactured using special forging processes are specified in 6.1.13-2 and -3, Part K of the Rules. The former is the requirement applied to crank shafts manufactured by continuous grain flow forging methods such as RR forging or TR forging and the latter is the requirements applied to high strength crank shafts which can reduce their dimensions according to 2.3.1-1, Part D of the Rules.

A bend forging method is generally used for manufacturing crank shafts. However, such a method is not considered to be one of the special forging processes mentioned above. Accordingly, relevant requirements have been amended to specify that a bend forging method is not considered to be a “special forging process”

## **Outline of Amendment**

In Part K of the Guidance, it has been specified that a bend forging method is not considered to be a “special forging process”.

- \* Crank shafts manufactured by continuous grain flow forging refers to crank shafts formed from round bars by special jigs and having continuous metal flow. Currently, RR forging devised by R. Roberson in France and TR forging devised by T. Rutz in Poland are widely used in the forging industry.