

標 題：

船体用圧延鋼材
(鋼板及び広幅平鋼)
の厚さのマイナス許容差

NK テクニカル インフォメーション

No.110

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関係各位

拝啓、貴社益々ご清栄のこととお喜び申し上げます。

さて、昨年11月に開催されたIACS（国際船級協会連合）第26回理事会におきまして、船体用圧延鋼材（鋼板及び広幅平鋼）の厚さのマイナス許容差に関する統一規則が改正されました。ご参考までに、改正規則を添付するとともにこの改正の要点及び改正規則の実施日を下記に示します。

本会におきましてもこの統一規則を取り入れるべく規則改正を予定しておりますので、今後の船舶の設計等におかれましては、十分注意されますようお願い申し上げます。

— 記 —

1. 船体用圧延鋼材（鋼板及び広幅平鋼）の厚さのマイナス許容差は、板厚及び鋼種（軟鋼，高張力鋼）に関わらず 0.3 mm とする。
2. 改正規則は、1994年 1月 1日以降新造入級申請のある船舶から適用する。

敬具

添付 UR W13(Rev.2 1992)

W13 Allowable under thickness tolerances of steel plates and wide flats

(1981)
(Rev. 1
1989)
(Rev. 2
1992)

W13.1 Scope

W13.1.1 These requirements apply to the allowable under thickness tolerances of steel plates and wide flats with thicknesses of 5 mm and over, covering the following steel grades:

- (i) Normal and high strength hull structural steels according to W11, W19, W20 and W21.
- (ii) Steels for machinery structures in accordance with the individual Rules of Classification Societies.

The allowable under thickness tolerances for thicknesses below 5 mm may be specially agreed.

W13.1.2 These requirements do not cover plates and wide flats intended for the construction of boilers, pressure vessels and independent tanks, e.g. for the transportation of liquefied gases or chemicals.

NOTE:

Tolerances for length, width, flatness and over thickness may be taken from national or international standards.

W13.2 Manufacturers responsibility

W13.2.1 The responsibility for maintaining the required tolerances rests with the manufacturer, who is to carry out the necessary measurements. Occasional checking by the Surveyor does not absolve the manufacturer from this responsibility.

W13.3 Allowable under thickness tolerances

W13.3.1 The maximum permissible under thickness tolerance for hull structural plates and wide flats for both normal and high strength steels is -0,3mm.

Note:

The attention of shipbuilders and shipowners is to be drawn to the fact that when thickness gauging is carried out during the ship's life, estimation of the diminution of hull plating and structure will be based on the nominal thickness, this being the original approved thickness for the item of structure under consideration.

The under thickness tolerance acceptable for Classification is to be considered as the lower limit of a "plus-minus" range of thickness tolerance which could be found in the normal production of a conventional rolling mill manufacturing material, on average, to the nominal thickness.

With modern rolling mills, however, it may be possible to produce plates within a narrow range of thickness tolerance thus permitting the consistent production of material having a thickness less than the nominal thickness whilst at the same time satisfying the under thickness tolerance given.

In such cases, the time for the material to reach the maximum allowable diminution may be reduced.

It is therefore a matter for the shipbuilder and shipowner to mutually agree in individual cases as to whether, for commercial reasons, they wish to specify a more stringent under thickness tolerance than that given.

W13

W13.3.2 The tolerances for plates and wide flats for machinery structures are to be in accordance with Table 1.

Table 1

Nominal thickness (mm)	Under thickness tolerance (mm)
$\geq 5 - < 8$	- 0,4
$\geq 8 - < 15$	- 0,5
$\geq 15 - < 25$	- 0,6
$\geq 25 - < 40$	- 0,8
≥ 40	- 1,0

W13.4 Thickness measurements

W13.4.1 The thickness is to be measured at random locations whose distance from an edge shall be at least 25 mm. Local surface depressions resulting from imperfections and ground areas resulting from the elimination of defects may be disregarded provided the imperfections or grinding is in accordance with national or international standards.