

Title (en)
STEEL PLATE

Title (de)
STAHLPLATTE

Title (fr)
PLAQUE D'ACIER

Publication
EP 3502296 A1 20190626 (EN)

Application
EP 18819890 A 20180227

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Abstract (en)

A steel plate according to an aspect of the present invention has a predetermined chemical composition, an index Q obtained by Equation (1) is 0.00 or more, a carbon equivalent Ceq (%) obtained by Equation (2) is less than 0.800%, a ratio of a difference between a hardness at a surface layer portion and a hardness at a thickness center portion to the hardness at the surface layer portion at a room temperature is 15.0% or less, the hardness at the surface layer portion at a room temperature is 400 or more in terms of Vickers hardness, and a steel thickness is 40 mm or more.

IPC 8 full level

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Cited by

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