

ABSTRACT

Title of Invention: THICK-WALLED HIGH-TOUGHNESS HIGH-STRENGTH STEEL PLATE AND METHOD FOR MANUFACTURING THE SAME

A technique for achieving high surface toughness and high strength and toughness of the inner part of a steel plate is provided.

A thick-walled high-toughness high-strength steel plate is manufactured from steel having a particular composition and casted under conditions where the cooling rate of a surface during solidification is 1°C/s or less. The surface of the steel plate has a toughness (vE-40) of 70 J or more, and the steel plate has a thickness of 100 mm or more. The surface of the steel plate has high toughness, and the inner part of the steel plate has high strength and toughness.

(No Suitable Figure)