

ABSTRACT

STEEL PLATE AND METHOD OF PRODUCING SAME

A high strength steel plate, having excellent toughness not only in an inside portion of the steel plate but also in a surface layer of the steel plate,
5 can be stably produced. The steel plate has a chemical composition containing, in mass%, C: 0.080 % or more and 0.200 % or less, Si: 0.40 % or less, Mn: 0.50 % or more and 5.00 % or less, P: 0.015 % or less, S: 0.0050 % or less, Cr: 3.00 % or less, Ni: 5.00 % or less, Al: 0.080 % or less, N: 0.0070 % or less, and B: 0.0030 % or less, the balance being Fe and inevitable
10 impurities, wherein an equivalent carbon content C_{eqIIW} is 0.57 % or more, an area fraction of bainite in the surface layer is 10 % or more, and a yield stress is 620 MPa or more.