

ABSTRACT

A hot-rolled steel sheet which has excellent rigidity along with high strength, excellent workability, and excellent LME resistance is provided. A hot-rolled steel sheet of the present embodiment consists of, in mass%, C: 0.040 to 0.120%, Si: 0.01 to 0.60%, Mn: 0.50 to 1.50%, P: 0.025% or less, S: 0.010% or less, Al: 0.010 to 0.070%, N: 0.0070% or less, Ti: 0.055 to 0.200%, and B: 0.0010 to 0.0050%, with the balance being Fe and impurities. In the microstructure of the hot-rolled steel sheet, an area fraction of bainitic ferrite is 85% or more and the dislocation density is 8.0×10^{13} to $100.0 \times 10^{13}/\text{m}^2$. The average equivalent circular diameter of Ti carbides in the hot-rolled steel sheet is 10 nm or less, and the average equivalent circular diameter of grains of the bainitic ferrite is 15 μm or less.

[No suitable figure]