

ABSTRACT

STEEL SHEET PILE AND METHOD OF MANUFACTURING SAME

To stably provide high-strength and high-toughness steel sheet piles with high productivity. The steel sheet pile has a predetermined chemical composition and a microstructure where an area fraction of ferrite is 70 % or more, an area ratio of martensite austenite constituent is 1.0 % or less, a total area ratio of V carbonitrides, Nb carbonitrides and complex carbonitrides of V and Nb with a particle size of 10 nm or less is 2.6 % or more, and an area ratio of V carbonitrides, Nb carbonitrides and their complex precipitates with a
10 predetermined particle size d (nm) is 0.3 % or more, where the ferrite has an average grain size of 15 μm or less and a maximum grain size of 40 μm or less.
(Fig. 1A & 1B)