

ABSTRACT

HOT-ROLLED STEEL SHEET FOR COILED TUBING AND METHOD FOR
MANUFACTURING THE SAME

Provided are a hot-rolled steel sheet for coiled tubing and a method for manufacturing the steel sheet. The steel sheet has a yield strength of 480 MPa or more, a tensile strength of 600 MPa or more, a yield-strength difference (ΔYS) of 100 MPa or more, where the yield-strength difference is defined as a difference in yield strength between before and after a prestrain-heat treatment performed for simulation of a tube-making process and a stress-relief annealing heat treatment which are currently implemented, and a yield strength of 620 MPa or more after the prestrain-heat treatment.

The hot-rolled steel sheet for coiled tubing is manufactured by heating a steel slab having a predetermined chemical composition to a temperature of 1100°C or higher and 1250°C or lower, by performing rough rolling on the heated steel slab, by performing finish rolling on the rough-rolled steel slab under a condition of a finish rolling temperature of 820°C or higher and 920°C or lower, by cooling the finish-rolled steel sheet to a temperature of 600°C or lower at an average cooling rate of 30°C/s or

higher and 100°C/s or lower in terms of a temperature in a central portion in a thickness direction of the steel sheet, and by coiling the cooled steel sheet at a temperature of 450°C or higher and 600°C or lower.