

ABSTRACT

H-SECTION STEEL AND METHOD OF PRODUCING THE SAME

In an H-section steel, which has a predetermined chemical composition, a thickness of the flange is from 25 to 140 mm; an average crystal grain diameter is 38 μm or less and the area fraction of a martensite-austenite constituent is 1.2% or less, in a plane orthogonal to the width direction of the flange, centering on a measurement position 7 that is a position separated, in the width direction of the flange, from the end face in the width direction of the flange by $(1/6)F$, and separated, in the thickness direction of the flange, from the outer face in the thickness direction of the flange by $(1/4)t_2$, when the width direction length of the flange is F and the thickness of the flange is t_2 ; a yield strength or 0.2% proof stress is 385 MPa or more and a tensile strength is 490 MPa or more, in the rolling direction of the flange, when measured with respect to the entire thickness in the thickness direction of the flange at a position separated in the width direction of the flange from the end face in the width direction of the flange by $(1/6)F$; and the absorbed energy in a Charpy test at the measurement position 7 at -20°C is 200 J or more.

FIG. 1