

Abstract

H-SECTION STEEL AND METHOD FOR PRODUCING THE SAME

There is provided an H-section steel in which a number density of oxide particles having an equivalent circle diameter of $0.005\mu\text{m}$ to $2.0\mu\text{m}$ per unit area is 100 pieces/ mm^2 to 5000 pieces/ mm^2 , the oxide particles includes Ca, Al, and O as a composition, the amount of Ca is 5% or more, the amount of Al is 5% or more, and a total amount of Ca and Al is 50% or more by mass ratio excluding O in the oxide particles, a thickness of the flange is 100 mm to 150 mm, a bainite fraction in a metallographic structure of the flange is 80% or more at a strength evaluation position, and an average prior austenite grain size in the metallographic structure of the flange is $200\mu\text{m}$ or less at a toughness evaluation position.

FIG 1