

ABSTRACT

A duplex stainless steel welded joint is provided that can suppress undercuts and is excellent in fatigue characteristics. The duplex stainless steel welded joint includes a base metal, and a weld metal consisting of, in mass%, C: 0.001% to 0.030%, Si: 0.05% to 0.70%, Mn: 0.05% to 0.85%, P: 0.030% or less, S: 0.0030% or less, Cr: 21.00% to 28.00%, Ni: 5.00% to 11.00%, Mo: 2.00% to 4.50%, Cu: 0.01 to 4.00%, sol. Al: 0.0010 to 0.0500%, N: 0.080% to 0.400%, and B: 0.0001 to 0.0100%, with the balance being Fe and impurities, and satisfies the content of each element in the base metal and the weld metal, and also satisfies Formula (1) and Formula (2).

$$\text{Si} + 3\text{Mn} \leq 3.00 \quad (1)$$

$$0 < \text{BH}/\text{BW} < 0.15 \quad (2)$$

FIG 2