

NSSC SERIES

FERRITIC



High Rust-Resistant Ferritic Stainless Steel

NSSC 220M

22Cr-1.6Mo-Nb,Ti- LC,N / Similar grade : SUS 445J2

Features and Applications

High performance of rust resistance is available in this grade, which has been developed by combined addition of Ti and Nb to 22%Cr-1.6% Mo ferritic base material.

1. Rust resistance superior to that of SUS 316.
2. Lower thermal expansion coefficient suitable for such applications as roofs and exterior walls in which thermal expansion and contraction are problematic.
3. Slightly higher hardness than SUS 304 due to high chromium content.

[Applications] Exteriors of buildings, such as roofing, siding, or others.

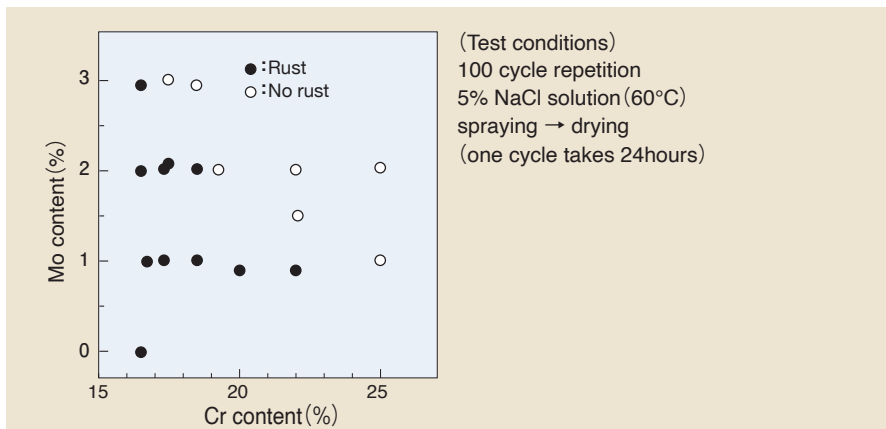
Characteristics

[Mechanical and physical properties]

	Yield strength 0.2% offset N/mm ²	Tensile strength N/mm ²	Elongation %	Hardness HV	Bending 180°	Average thermal expansion coefficient (multiplied by 10 ⁻⁶ /°C)
Specification	≥295	≥470	≥22	≤200	1.0t	—
Typical values	370	516	30	175	No cracking	10.4 (30—100°C)

[Corrosion resistance]

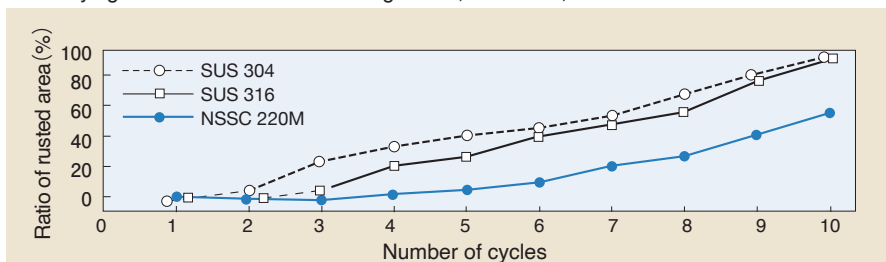
(1) Rust resistance and content of Cr and Mo



(2) Accelerated corrosion test with cyclic dry and wet

(Test method)

10-cycle repetition : Seawater spraying (room temperature)
→ Drying (60°C×15 minutes) → Wetting (50°C, 100%RH, 30 minutes)



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