

NSSC SERIES

FERRITIC



High-Rust Resistant Ferritic Stainless Steel

NSSC 432

17Cr-0.5Mo-0.2Ti-LC,N / Similar grade : SUS 436J1L

Features and Applications

NSSC 432 is a low-cost grade of NSSC 436S, due to reduction of Mo content.

1. Application performance (condensate corrosion resistance, salt corrosion resistance and others) slightly below those of NSSC 436S, but offers excellent workability similar to that of NSSC 409L.

[Applications] Automotive exhaust systems, Kitchen furnishings, Home appliances, Building interior materials, Gates, Handrails

Characteristics

[Mechanical properties]

	Yield strength 0.2% offset N/mm ²	Tensile strength N/mm ²	Elongation %	Hardness HV
Specification	≥205	≥390	≥25	≤170
Typical values	245	450	34	134

[Formability]

	r value	n value
NSSC 432	1.74	0.26
NSSC 436S	1.61	0.24
NSSC 409L	1.30	0.24

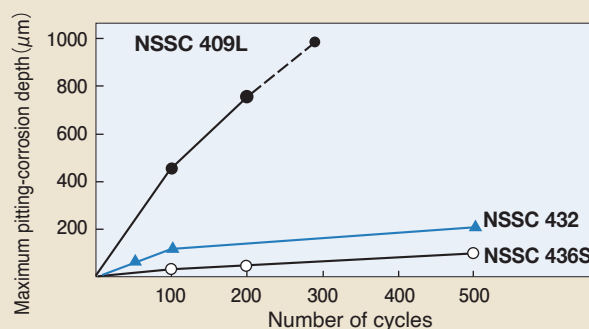
[Corrosion resistance]

(1) Saltwater spraying test

(Test conditions)

Artificial seawater/ASTM standard

One cycle consists of 'spraying for 4 hours, drying for 2 hours and wetting for 2 hours'

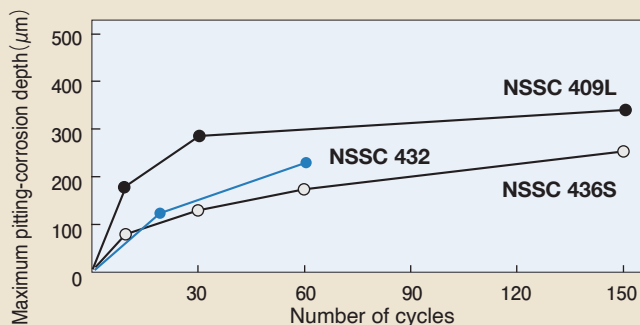


(2) Tests using condensate prepared by simulating automotive exhaust gas

(Test conditions)

One cycle consists of 'partial immersion in condensate, heating at 130°C for 4 hours and cooling'

Condensate: 50ppm [Cl⁻], 100ppm [SO₄²⁻],
5000ppm [CO₃²⁻], 220ppm [NH₄],
pH8.5



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