

NSSC SERIES

AUSTENITIC



High-Strength, Pitting Corrosion Resistant Austenitic Stainless Steel

NSSC 270, NSSC 270R (Super Stainless Steel)

20Cr-18Ni-6Mo-0.2N-LC / Similar grade : SUS 312L, ASTM S31254
20Cr-23Ni-6Mo-LN

Features and Applications

1. Excellent corrosion resistance to seawater.
2. Good corrosion resistance to sulfuric acid and organic acid.
3. Higher stresscorrosion cracking resistance to chlorides than that of SUS 316 austenitic stainless steel and duplex stainless steels.
4. High-strength stainless steel with yield strength of around 1.5 times that of SUS 304 and SUS 316 at room temperature.
5. Can be welded in the same manner as conventional austenitic stainless steel through use of Inconel 625 welding materials.
6. NSSC 270R is most suitable for bar and wire rods required for cold working.

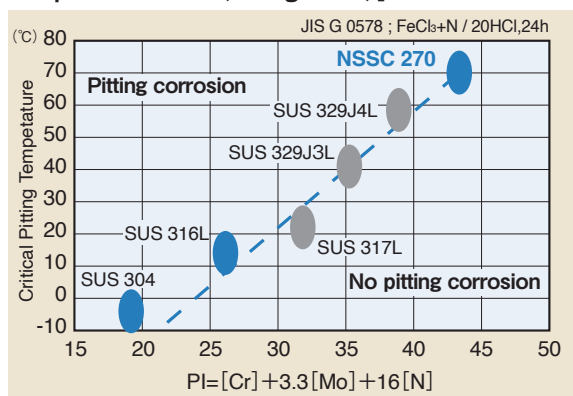
[Applications] Seawater desalination plants, Seawater heat exchangers, Roofing, Food manufacturing plants, Corrosion resistant screws, nuts and bolts, wire netting

Characteristics

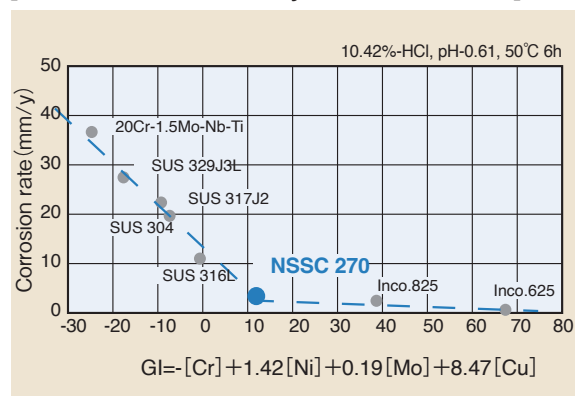
[Mechanical properties]

	Specification	Yield strength 0.2% offset N/mm ²	Tensile strength N/mm ²	Elongation %	Hardness	
					HBW	HV
NSSC 270		≥300	≥650	≥35	≤223	≤230
	Typical values					
	t=10mm	363	755	51	170	—
	t=4mm	412	804	45	175	—
NSSC 270R	t=1.2mm	461	843	39	—	192
	Typical values (Wire rod)	230	560	47	—	—

[Relationship between Critical Pitting Temperature and PI (Pitting Index)]



[Corrosion resistance in hydrochloric acid HCl]



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