

NSSC SERIES

FERRITIC



High-Formability Ferritic Stainless Steel

NSSC PDX

17Cr-0.2Ti-ULC,N / Similar grade : SUS 430LX

Features and Applications

NSSC PDX is a 17% Cr ferritic stainless steel in which high formability has been realized owing to technological advancement both for steel refining and for steel sheet producing.

1. High forming limits and minimal press ridging (surface streaks).
2. Metal molds for carbon steel can be applicable, owing to its softness.
3. Rust resistance superior to that of SUS 430.
4. High performance of weldability and excellent corrosion resistance and formability at weld zones.

[Applications] Combustion components, Front doors of refrigerators, Battery cases, Structural fittings.

Characteristics

[Mechanical properties]

(Thickness:1.0mm)

Grade		Yield strength 0.2% offset N/mm ²	Tensile strength N/mm ²	Elongation %	Hardness HV
NSSC PDX	Specification	≥175	≥360	≥30	≤180
	Typical values	237	386	38	130
SUS 430	Specification	≥205	≥420	≥22	≤200
	Typical values	319	486	28	151

[Formability]

(Thickness:0.5mm)

Grade	r value	n value	Erichsen value mm	Ridging rank
NSSC PDX	2.0	0.27	11.2	A
SUS 430	1.1	0.18	9.3	B

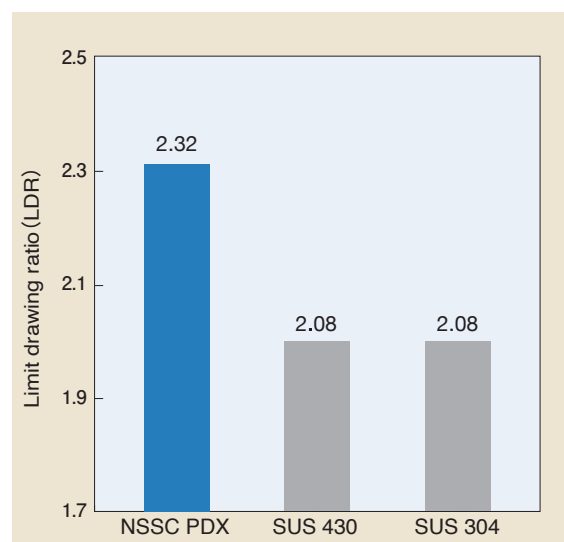
Ridging rank A: surface streaks of ≤10μm at tensile test

[Characteristics of welded portion (in case of TIG weld)]

	Erichsen value (mm)	Results of intergranular corrosion resistance test (Strauss test)
NSSC PDX	10.2	No intergranular corrosion
SUS 430	3.0	Generation of intergranular corrosion (desulfurization)

[Limit drawing ratio -TZP test-]

(Test conditions) •Thickness of test specimens : 0.5mm
•Blank diameter : 80—130mmφ
•Punch diameter : 50mmφ
•Punch shoulder R : 5mm



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