

NSSC SERIES

AUSTENITIC



Ultra-Soft, High-Formability Austenitic Stainless Steel

NSSC 304JS

17Cr-8Ni-3Mn-3Cu-LC,N / Similar grade : SUS 304J1,J2

Features and Applications

NSSC 304JS is a new grade of austenitic stainless steel with ultrasoftness (low yield strength and restrained work hardening)

1. High performance in multistage drawing and secondary work after press forming with a minimal spring back.
2. High resistance to season cracking.
3. Extremely smaller magnetism than SUS 304 after forming.
4. The line-up includes a pre-coated, oil-free, highly lubricated sheet.

Characteristics

[Mechanical properties]

	Yield strength 0.2% offset N/mm ²	Tensile strength N/mm ²	Elongation %	Hardness HV	n value	Liquid press buldge height mm
Specification	≥155	≥450	≥40	≤200	—	—
Typical values	190	484	59	117	0.39	42.2
SUS 304- Typical values	267	655	60	170	0.49	40.3

(Surface finish: No. 2D, Thickness: 1.0mm)

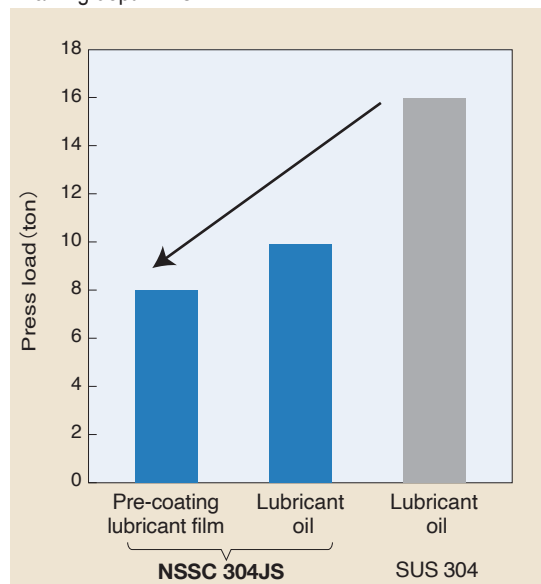
Formability

[Cup drawing formability]

Thickness : 1.5mm

Blank diameter : 90mmφ, Punch diameter: 50mmφ

Drawing depth : 25mm



[Multistage cup drawing formability]

Thickness: 0.8mm Lubricant: Johnson-Wax#122

Initial blank diameter : 96mmφ

Punch diameter : 48mmφ (1st stage) -22mmφ (7th stage)



NSSC 304JS
Seven-stage drawings
(drawing ratio: 4.4)

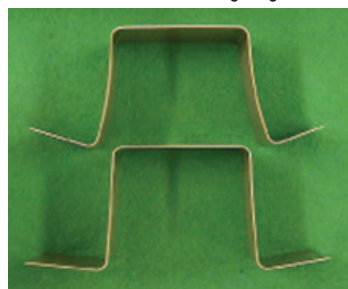


SUS 304
Two-stage drawings
(drawing ratio: 2.2)

SUS 304 exhibited a season cracking at the 3rd stage drawing.

[Shape-fixability in hat bending]

Thickness : 0.8mm Forming height : 70mm Blank holding force : 5ton



SUS 304

NSSC 304JS

(NSSC 304JS exhibits a minimal spring back after press forming.)

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Deep-Drawing Austenitic Stainless Steel

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