

ASC2250® LDX **DUPLEX STAINLESS**



LEAN DUPLEX STAINLESS STEEL, HIGH STRENGTH, CORROSION RESISTANT SHAFT

ASC2250® LDX is a 2101 Duplex stainless steel that exhibits equal parts Austenite and Ferrite. It combines high chromium, nitrogen and molybdenum to enhance the corrosion resistance and toughness of the steel.

ASC2250® LDX offers significant improvements both in strength and corrosion as compared to commercial grade 304 and 316 stainless steels.

KEY FEATURES

- Stress Corrosion Cracking (SCC) Resistance
- Excellent Pitting Resistance (PRE26)
- Corrosion Fatigue Resistance
- Bearing-Fit Tolerances (TGP Only)
- Turned Ground & Polished Finish
- Ease of Machining and Welding
- Improved Strength Over 304L & 316L Stainless
- Service Temperature Up To 750°F
- Sour Service Approved

TYPICAL PROPERTIES*

Hardness, Brinell	290 BHN max.
Tensile Strength	94,000 PSI min.
Yield Strength	65,000 PSI min.
Elongation in 4D	35%
Reduction of Area	72%

*Based on 2" Test Piece

TYPICAL CHEMICAL ANALYSIS

CR	MN	P	N	SI
22.0	5.0	.04	.21	1.0
NI	C	MO	CU	
1.6	.04 max	.60 max	.1/.8	

Meets the following specifications: UNS S32101, ASTM A276 and A479, EN1.4162.

AGENCY CONCURRENCE

National Sanitation Foundation approval for drinking water applications (NSF Section 61).

USDA approval for dairy processing applications (3-A Format for Sanitary and Practice Standards).

AVAILABLE SIZES

- Bearing-Fit, TGP Rounds - 1/2" to 6"
- Bearing-Fit, TGP Metric Rounds - 20MM to 100MM
- Rough Turned, Oversized Rounds - 3/4" to 6"

LENGTHS

10/13 Ft R/L, 20/26 Ft R/L and Custom Cuts

INDUSTRIES SERVED

- Oil & Gas
- Food Processing
- Pulp & Paper
- Chemical
- Agricultural
- Wastewater Handling
- Steel & Iron
- Energy

VALUE-ADDED SERVICES

Associated Steel offers machining, fabrication and technical services. We can provide a complete O.E.M. replacement component that is ready for immediate installation to minimize downtime. Contact our office for further details.

GENERAL COMPARISON CHART

	ASC2250® LDX Lean Duplex Stainless	304L and 316L Commercial Grade Stainless	410 and 416 Commercial Grade Stainless
Corrosion Resistance	Excellent	Good	Moderate ¹
Sour Service Use	Excellent	Poor	Acceptable
Shock Resistance	Excellent	Excellent	Good
Wear Resistance	Excellent	Moderate	Good
Galling Resistance	Good	Poor / Parts Can Seize	Moderate / Parts Can Seize
Strength Performance	Excellent	Poor / Not Hardenable By Heat Treatment	Good
Service Temperature	Up To 750°F	304L = 1100°F 316L = 1400°F	410 = 1100°F 416 = 1100°F
Typical Tensile Strength	94,000 PSI min.	304L = 70,000 PSI 316L = 75,000 PSI	410 = 120,000 PSI 416 = 124,000 PSI
Typical Yield Strength	65,000 PSI min.	304L = 25,000 PSI 316L = 30,000 PSI	410 = 90,000 PSI 416 = 110,000 PSI
Thermal Hardenability	No	No ³	Yes
Magnetic	Yes	No	Yes
Machinability	Excellent	Poor / Will Not Typically Hold A Bright Finish	Moderate
Weldability	Excellent	Good	Moderate ²
Retained Stress	Less Retained Stress	Poor / High Degree of Memory	Moderate / High Degree of Memory

¹ Corrosion resistance is sacrificed for hardenability. ² 416 stainless steel is a resulfurized grade. Welding to be avoided. ³ Does not respond to heat treatment. Strain hardened or cold work only.



ASC2250® LDX
Lean Duplex Stainless
Bearing-Fit, TGP Shafting



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