

Stainless Steel

Precision Marshall's 304L is a T-300 series austenitic stainless steel, which has a minimum of 18% chromium and 8% nickel. It is the standardly known as "18/8 stainless". 304 L has a wide variety of general-purpose applications that benefit from the versatility of excellent corrosion resistance and ease of fabrication, weldability and formability. 304L has superior strength and toughness at cryogenic temperatures. ASTM A276

Typical Analysis

Carbon	.03 Max	Chromium	18/20
Manganese	2 Max	Nickel	8/12
Phosphorus	.045 Max	Silicon	.75
Sulfur	.03 Max		

Applications

304L has various uses in commercial and residential applications, such as chemical processing and containers, nuts, bolts, screws, construction material. 304L can be used in food and beverage processing, mining, and medical industries.

Hot Forming

Heat evenly to 2100/2300°F for the majority of hot working processes. Do not forge below 1700°F. Material should be annealed at 1900°F minimum and quenched in water for maximum corrosion resistance or rapidly cooled by air.

Cold Forming

Cold working operations will increase the strength & hardness and allows material to be drawn without immediate annealing.

Welding

304L has excellent welding properties and post weld annealing is not required.

Machinability

304L is subject to work hardening and chip breaking (the use of chip breakers is advised). The best machining results are achieved with slower speeds, heavier feeds, sharp tooling, excellent lubrication and rigid setup and machine.

Note: Variations in section size, heating rate, soak time, quench rate and tempering will cause deviations from the above values. Precision Marshall should be consulted for specific applications.

304L

DELUXE PLATES

MARSHALLOY MQ®/FM
 MARSHALLOY™ STD 4142
 MARSHALLOY™ 4140
 (Annealed)
 PRESCO O-1
 AIRTRUE A-2
 SUPER 7 MQ® S-7
 ARISTOCRAT D-2
 FIRECHROME H-13
 SUPER 7 S-7

GROUND FLAT STOCK

PRESCO O-1
 AIRTRUE A-2
 ARISTOCRAT D-2
 SUPER 7 S-7
 NUTEC 42® 4142
 FIRECHROME H-13
 PREMAR 410
 RUETOM SPECIAL 420
 PREMAR 440 C
 MARSHALLCRAT LC

DRILL ROD

WATERCRAT W-1
 OILCRAT O-1
 AIRTRUE A-2
 SUPER 7 S-7
 ARISTOCRAT D-2
 FIRECHROME H-13PH
 TRM-2 M-2
 WATERCRAT W-1 (Cold-
 drawn)



The Deluxe Company's Guarantee of Quality

Precision Marshall's conformance to specifications is the highest in the industry. Precision Marshall assumes complete liability for any costs directly relating to a deviation from our published specifications. Any such costs, properly documented, will be reimbursed. For more information, visit us at www.pmsteel.com.

HEADQUARTERS

99 Berry Road
 Washington, PA 15301
T: 800 537 7528
F: 800 350 1353

NATIONAL DISTRIBUTION CENTER

1 Northpoint Court
 Bolingbrook, IL 60440
T: 800 537 7528
E: sales@pmsteel.com