

PREMAR 440C



Stainless Steel

Precision Marshall's Premar 440C is a high carbon and chromium martensitic stainless steel with best edge holding quality. Premar 440C is known for its high corrosion resistance, wear resistance, strength, and the highest attainable hardness of any martensitic stainless. Meets ASTM A276.

Typical Analysis

Carbon	1.05
Manganese	0.4
Silicon	0.4
Chromium	17
Molybdenum	0.4

Applications

Premar 440C applications include bearings, bushings, valve parts and cutlery.

Annealing

Heat slowly and uniformly to 1650°F, hold two hours and cool at a maximum rate of 25°F per hour to below 1200°F then air cool.

Heat Treating

Premar 440C can be heat treated by oil quenching or air cooling from 1850°F to 1900°F. Preheat to 1100°F/1200°F and equalize and for large sections 1400°F/1450°F and equalize.

Tempering

Tempering should be at the proper temperature to achieve the desired hardness. Tempering between 800°F and 1100°F should be avoided due to a decrease in corrosion resistance and toughness.

Tempering Temperature ((°F)	Rockwell Hardness (RC)
AS QUENCHED	59
212	59
400	56
600	54
800	55
1000	51

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.

PREMAR 440C

The following additional products are available through our authorized distributors.

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 440C
 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.

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