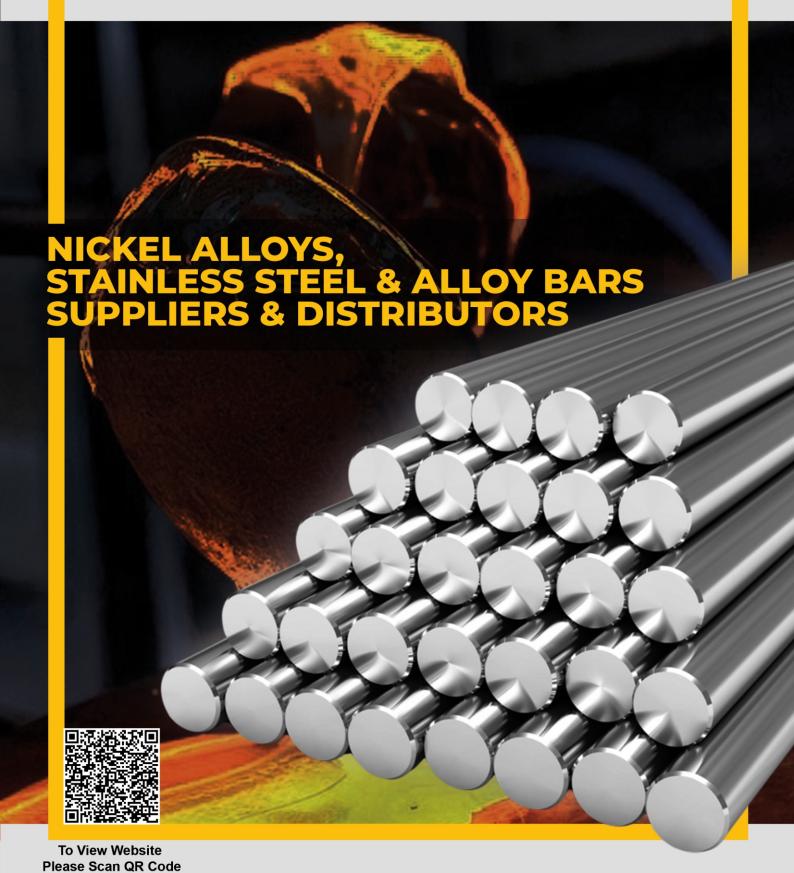


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ISO 9001:2015





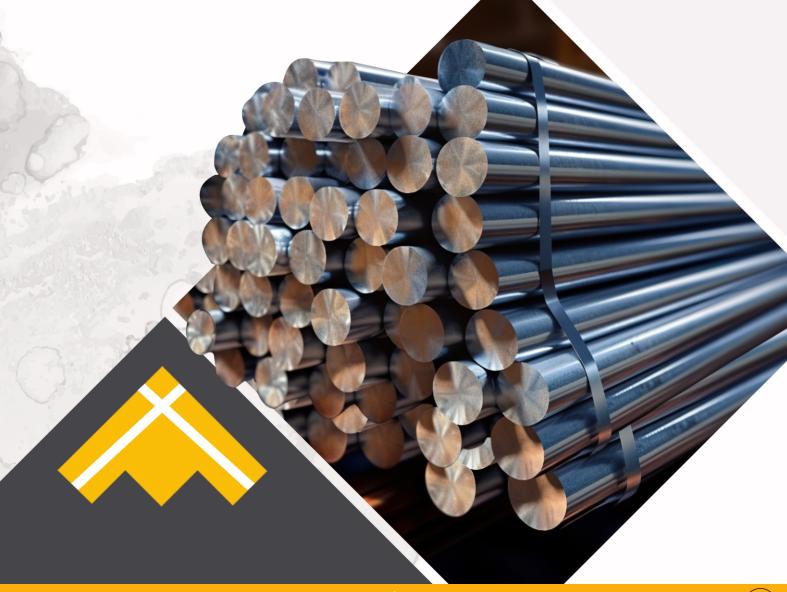
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About Us

Leading Stainless Steel, Nickel Alloy, and Alloy Bars Suppliers, Stockiest, and Distributors

Maniar and Company (India) is a trusted supplier of nickel alloys, stainless steel, and 17-4PH grade bars in Mumbai. For over a decade, we have served the aerospace, oil and gas, power generation, petrochemical, and other high-tech manufacturing industries. We meet ASME, ASTM, and AMS-certified specifications and can cross-reference most international standards, including full DIN. Our primary goal is complete customer satisfaction, ensuring products are designed and manufactured to exact specifications. With expertise in export, we offer delivered prices worldwide via air freight or ocean, ensuring a seamless supply chain for our global customers.









Mission

To be the global leader in Stockist of Industrial products with a high-end quality and cost effective services, products and solutions.



Vision

Maniar Steel's vision is to lead the steel industry in customer satisfaction by meeting customers' specific requirements and expectations.



Maniar Steel is the right choice for your project.

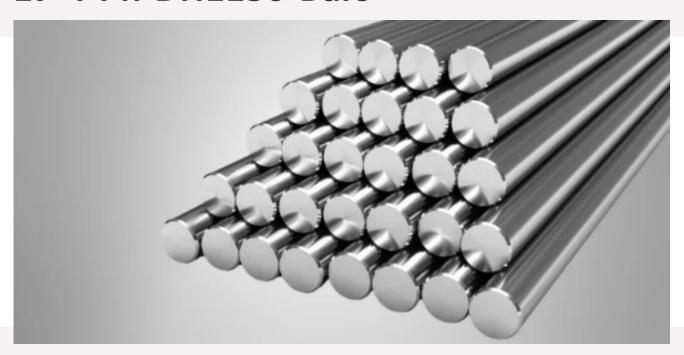
CERTIFICATE



Certificates - Trusted Stainless Steel Bars And Nickel Alloy Bars Supplier In India



17-4-Ph-DH1150-Bars



17-4 PH DH 1150 bars Supplier In Mumbai are precipitation hardened martensitic stainless steel with copper (Cu), niobium (Nb), and tantalum (Ta) (Ta). High strength and hardness qualities are combined with modest corrosion resistance in this grade.

KEY FEATURES OF 17-4 PH Round Bar Dh1150 Here Are Some of the Key Features of 17-4 PH Dh1150

- Made from precipitation-hardening stainless steel
- High strength and durability
- Excellent corrosion resistance
- Can withstand high-stress environments
- Easy to machine and weld
- Dh1150 heat treatment process enhances strength and hardness
- Versatile material for a range of industries and applications
- Biocompatible for use in medical devices
- Resistant to both atmospheric and chemical corrosion
- Widely used in aerospace, defense, oil and gas, and medical industries

17-4-Ph-DH1150-Bars







Aerospace Industry

Defense Industry

OIL & GAS Industry

Heat Treatment Conditions:

- Tested to Critical Conditions
- High Impact Strength
- Compliant to NACE, API, SAE, AMS, ASTM, MIL, EN10088-3 Standards

Stainless steel PH Grades Bars 17-4PH Condition DH1150 min Yield 105ksi **Heat Treat Requirements:**

Process Step	Temperature Range	Time at Temperature	Atmosphere
Solution Anneal	1900oF=25oF (1040oC = 15oC)	4 hours minimum see note 1	Inert gas or air
Precipitation Hardening	1150oF=25oF (620oC = 15oC)	4 hours minimum see notes 1 & 3	Inert gas or air
Precipitation Hardening	1150oF=25oF (620oC = 15oC)	4 hours minimum see note 1	Inert gas or air

Material Properties

Chemical Composition:

The Chemical composition in accordance to UNS number \$17400:

	С	Mn	Ni	Cu	Nb	Cr	Si	Р	S
Min.	-	-	3:00	3:00	0.15	15.0	-	-	-
Max.	0.07	1.0	5.00	5.00	0.45	17.5	1.00	0.030	0.030

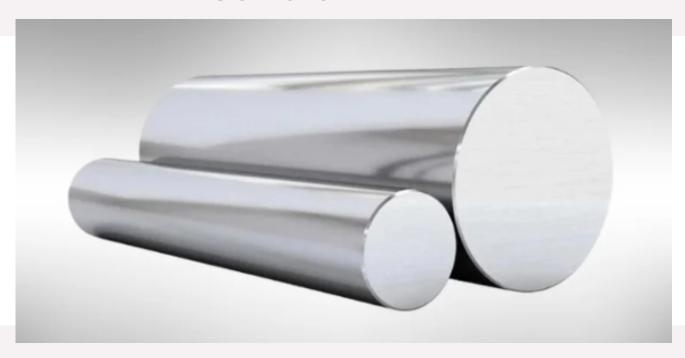
Mechanical Properties:

The mechanical properties in Accordance with ASTM A370:

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction	Hardness Rockwell C
Min.	105.0 (724)	135.0 (931)	16%	45%	28
Max.		160.0 (1103)			33



17-4 Ph H1150 Bars



Stainless steel is a 17-4ph h1150 hardness alloy used in the oil and gas, petrochemical, food processing, aerospace, pump, marine, chemical, and metalworking sectors. This versatile and long-lasting stainless steel product, which comes in a variety of formulae, including the H1150 condition, is a cost-effective choice for operations and projects that demand high strength and mid-range corrosion resistance.

KEY FEATURES OF 17-4 PH H1150

Here Are Some of the Key Features of 17-4 PH H1150

- High strength
- Corrosion resistance
- Precipitation-hardening
- Biocompatibility
- Versatility
- Non-magnetic
- Heat treatable
- Durable
- Standards compliant
- Cost-effective

17-4 Ph H1150 Bars











Aerospace Industry

Chemical Processing Industry

Medical Industry

OIL & GAS Industry

Power Generation Industry

Heat Treatment Conditions:

- Tested to Critical Conditions
- High Impact Strength
- Compliant to NACE, API, SAE, AMS, ASTM, MIL, EN10088-3 Standards

Stainless steel 17 - 4 PH Condition H1150 min Yield 120ksi

Referenced Specifications:

- ASTM A370: Mechanical Testing of Steel Products

This specification pertains to UNS S17400 precipitation hardening stainless steel bars, forgings and components in the H1150 or H1100 condition.

Material Properties

Chemical Composition:

The Chemical composition in accordance to UNS number \$17400:

	С	Mn	Ni	Cu	Nb	Cr	Si	Р	S
Min.	-	-	3:00	3:00	0.15	15.0	-	-	-
Max.	0.07	1.0	5.00	5.00	0.45	17.5	1.00	0.030	0.030

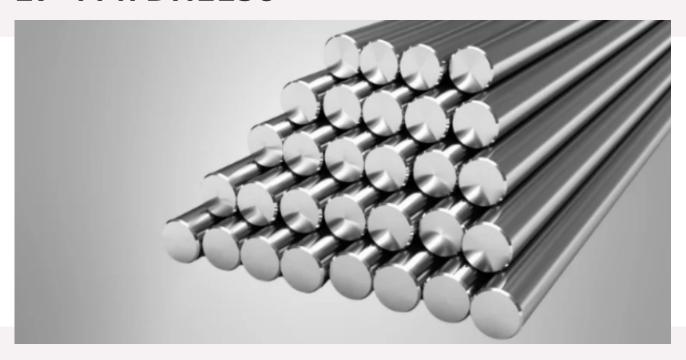
Mechanical Properties:

The mechanical properties in Accordance with ASTM A370:

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction	Hardness Rockwell C
Min.	120.0 (827)	135.0 (931)	14%	45%	31
Max.					38



17-4 Ph DH1150



REFERENCED SPECIFICATION

- 2.1 ASTM A370: Mechanical Testing of Steel Products
- **2.2 ASTM A388: Recommended Practice for Ultrasonic Examination of Heavy Steel Forgings**
- 2.3 ASTM E18: Test Methods for Rockwell and Rockwell Superficial Hardness of Metallic Materials
- 2.4 GOST 5632: Requirements to Chemical Composition for High-Alloy Steel and Corrosion-Proof, Heat-Resisting and heat Treated Alloys
- 2.5 NACE Standard MR0175: Sulfide Stress Cracking Resistant Metallic **Materials for Oilfield Equipment.**

QUALITY, INSPECTION AND TEST REQUIREMENTS

Test Required	Test Frequency	Method & Acceptance Reference
Tensile Properties	Once per heat & heat treat batch	Paragraph 3.2 or S21
Surface Hardness	Once, each length or piece	Paragraph 3.2
Composition	Once per heat	Paragraph 3.1
Volumetrc Inspection	100% each length or piece	When required by Supplement 1
Impact Toughness	One set per heat & heat treat batch	When Required by S2, S4, S26, OR S46
Surface Inspection	100% visual	Paragraph 5.2

SCOPE

17-4 Ph DH1150

1.1 This specification pertains to UNS \$17400 precipitation hardening stainless steel bars, forgings and components in the DH1150 condition. The requirements for the DH1150 condition are included in this specification. Material meeting the requirements of this specification meets the requirements of NACE MR0157 and shall exhibit a minimum yield strength of 105 ksi. This stainless steel is used primarily for wet CO2 type environments where moderate strength levels are required; this material has limited resistance to cracking in H2S containing environments. When there is an apparent conflict or difference between this specification and a referenced specification, this specification shall govern.

MATERIAL PROPERTIES

	С	Mn	Ni	Cu	Nb	Cr	Si	Р	S
Min.	-	-	3:00	3:00	0.15	15.0	-	-	-
Max.	0.07	1.0	5.00	5.00	0.45	17.5	1.00	0.030	0.030

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction	Hardness Rockwell C
Min.	105.0 (724)	135.0 (931)	16%	45%	28
Max.		160.0 (1103)			33

Process Step	Process Step Temperature Range		Atmosphere				
Solution Anneal	1900oF=25oF (1040oC = 15oC)	1½ hour – see notes 1,2 And 3	Water, polymer, oil, inert gas or air				
Precipitation Hardening	1150oF=25oF (620oC = 15oC)	4 hours minimum see notes 1 & 3	Inert gas or air				
Precipitation Hardening 1150oF=25oF (620oC = 15oC) 4 hours minimum see note 1 Inert gas or air							
Note 1: At temperature	Note 1: At temperature does not include time required to ensure that part(s) have reached and stabilized at the set temperature						

Note 2: Time s generally calculated by adding 30 minutes to 30 minutes per inch of metal thickness (bar diameter or tube wall thickness).

Note 3: A required cooling to below 90°F (32 deg * C) is required prior to the next process step being performed.



PRODUCT 9CR-1-Mo-L80



REFERENCED SPECIFICATION

- 2.1 API 5CT: Specification for Casing and Tubing
- 2.2 ASTM A29: General requirements for Steels Bar, Carbon and Alloy, **Hot-Wrought and Cold-Finished**
- 2.3 ASTM A370: Mechanical Testing of Steel Products
- 2.4 ASTM A388: Recommended Practice For Ultrasonic Examination of Heavy **Steel Forgings**
- **2.5 ASTM E18: Test Methods for Rockwell and Rockwell Superficial Hardness** of Metallic Materials
- 2.6 ASTM E213: Standard Practice for Ultrasonic Examination of Metal Pipe & **Tubing**
- **2.7 NAC 1R0175/ISO 15156: Petroleum and Natural Gas Industries Materials** for use in H2S Containing Environments in Oil and Gas Production

QUALITY, INSPECTION AND TEST REQUIREMENTS

Test Required	Test Frequency	Method & Acceptance Reference
Chemical Composition	Once per heat	Paragraph 3.1
Tensile Properties	Once per heat & heat treat batch	Paragraph 3.2 as required by Supplement 10
Surface Hardness	Once, each length or piece	Paragraph 3.2
Impact Toughness	One set per heat & heat treat batch	Paragraph 3.3
Volumetric Inspection	100% Volumetric	When required by Supplement 1
Low Temperature Toughness	One set per heat & heat treat batch	When required by Supplement 2 or 4
Surface Inspection	100% visual on each bar	Paragraph 4.2

SCOPE

9CR-1-Mo-L80

1.1 This specification pertains to 9% chromium- 1% molybdenum high alloy steel bar and tubing with a minimum yield strength of 80 ksi. Tubular products meeting the requirements of API 5CT L80 Type 9Cr meet the requirements of this specification. Bars and tubulars required to meet cold weather impact requirements shall be tested in accordance with the Supplemental Requirements. The 9% chromium steels are used primarily for downhole applications where wet CO2 is present: this material, though listed in NACE MR0175 has limited resistance to cracking in H2S containing environments.

MATERIAL PROPERTIES

	С	Mn	Si	Р	S	Ni	Мо	Cr	Cu/strong>
Min.	ı	0.30	•	-	-	-	0.90	8.00	-
Max.	0.15	0.60	1.00	0.020	0.010	0.50	1.10	10.00	0.25

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction	Hardness Rockwell C
Min.	80.0 (552)	95.0 (655)	16%	35.0%	-
Max.	95.0 (655)	120.0(827)			23.0 (L80Tubing) 22.0 (Bar Product)

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction	Hardness Rockwell C				
Min.	80.0 (552)	95.0 (655)	16%	35.0%		-			
Max.	95.0 (655)	120.0(827)			23.0 (L80Tubing)	22.0 (Bar Product)			
	Note 1: Yield strength to be 0.2% offset for bars and 0.5% by extension for tubulars.								
	Note 2: For tubular products, there is no requirement for reduction of area.								



PRODUCT 13-Cr-l80-80



REFERENCED SPECIFICATION

- 2.1 API 5CT:Specification for Casing and Tuing
- 2.2 ASTM A29: General requirements for Steel Bars, Carbon and Alloy, Hot-Wrought and Cold-Finished
- 2.3 ASTM A370: Mechanical Testing of Steel Product
- 2.4 ASTM E10: Test Methods for Brinell Hardness of Metallic Materials
- 2.5 ASTM E18: Test Methods for Rockwell and Rockwell Superficial Hardness of Metallic Materials
- **2.6 ASTM E165: Standard Practice for Liquid Penetrate Inspection**
- 2.7 ASTM E709: Standard Practice for Magnetic Particle Inspection
- 2.8 NACE MR0175/ISO 15156: Petroleum and Natural Gas Industries Materials for use in H2S Containing Environments in Oil and Gas Production
- 2.9 NACE TM0177: Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking in H2S Environments

QUALITY, INSPECTION AND TEST REQUIREMENTS

Test Required	Test Frequency	Method & Acceptance Reference	
Chemical Composition	Once per heat	Paragraph 3.1	
Tensile Properties	Once per heat & heat treat batch	As required by Paragraphs 3.2 or Supplement 10	
Surface Hardness	Once, each length or piece	Paragraph 3.2	
Impact Toughness	One set per heat & heat treat batch	As required by Paragraph 3.3 or Supplement 4 or 53	
Volumetric Inspection	100% Volumetric	When required by Supplement 1	
Electromagnetic Inspection	100%	When required by Supplement 53	
Surface NDE Inspection	100% machined surfaces	When required by Supplement 3	
Surface Inspection	100% visual on each bar	Paragraph 4.2	
SSC Testing	One set per heat & heat treat batch	When required by Supplement 7or 58	

SCOPE

9CR-1-Mo-L80-80

- 1.1 This specification pertains to 13% chromium stainless steel bar and tubing with a minimum yield strength of 80 ksi. This material is often referred to as a 420type stainless steel with a restricted carbon range or a 420 modified. Tubular products meeting the requirements of API 5CT L80 13Cr meet the requirements of this specification. The 13% chromium stainless steel are used primarily for downhole applications where wet CO2 is present; this material, though listed in NACE MR0175/ISO 15156, has limited resistance to cracking in H2S containing environments.
- 1.2 When required by Purchase Order or Engineering Document, There are Supplement Requirements that are applicable and defined herein.

MATERIAL REQUIREMENTS

	С	Mn	Si	Р	S	Ni	Cr	Cu/strong>
Min.	0.15	0.25	-	-	-	-	12.00	-
Max.	0.22	1.00	1.00	0.020	0.010	0.50	14.00	0.25

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Reduction Of Area2	Hardness Rockwell C
Min.	80.0 (552)	95.0 (655)	16%	35.0%	-
Max.	95.0 (655)	120.0(827)			23.0 (see note 3)

Note 1: Yield strength may be either the offset or extension methods. Generally, the 0.2% offset method is used for bars and 0.5% by extension method is used for tubulars. Yield strength for API 5CT 13 Cr materials shall be measured by 0..5% elongation under load.

Note 2: For tubular products, there is no requirement for reduction of area.

Note 3: For bar products (SS-303), the maximum hardness is 22.0 HRC.



Monel Nickel Alloy 400 Bars



Alloy 400 is a nickel-copper alloy with good strength and excellent corrosion resistance in a range of media especially sea water, hydrofluoric acid, sulfuric acid, and alkalis.

KEY FEATURES OF MONEL NICKEL ALLOY 400

Here Are the Key Features of Monel Nickel Alloy 400 in Short Pointers:

- High Corrosion Resistance in Seawater, Acids, and Alkalis
- Maintains Strength at High Temperatures
- Good Ductility and Toughness
- Excellent Resistance to Stress Corrosion Cracking and Pitting
- Good Electrical Conductivity
- Resistant to Hydrofluoric Acid
- Easily Weldable and Formable
- Suitable for Various Applications in Marine, Chemical, Oil and Gas,

Aerospace, and Medical Industries.

Monel Nickel Alloy 400 Bars







Marine Applications

Chemical Processing Equipment

OIL & GAS Industry







Aerospace Industry

Electrical and Electronic Components

Medical Industry

SPECIFICATIONS FOR MONEL - ALLOY 400 UNS No 4400

This specification of alloy 400 nickel alloy bar, UNS N04400 in the cold-worked and stress-relived condition.

Chemical Composition:

	С	Mn	Cu	Si	S	Ni	Fe
Min.	-	-	28.0	-	-	63.00	-
Max.	0.03	2.0	34.0	0.05	0.024	Bal.	2.5

Material Properties

	Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation
Min.	70.0 (483)	90.0 (621)	15%
Max.	100.0 (690)	130.0 (896)	-



Nickel Alloy K500 Bars



Although we supply Nickel Alloy K500 Bars (NA18) we predominantly supply material in the Hot Worked and Aged condition, which offers the optimum combination of high strength and ductility across the size range, all our material is manufactured to meet the most demanding of the Offshore and Energy Industry customer requirements

KEY FEATURES OF MONEL K500

Here Are Some of the Key Features of Alloy K500

- High Strength and Toughness
- Excellent Corrosion Resistance, Particularly to Seawater and Salt Spray
- Good Dimensional Stability
- Resistance to Hydrogen Embrittlement and Sulfide Stress Cracking
- Biocompatibility and Non-Toxicity
- Good Electrical Conductivity
- Low Coefficient of Thermal Expansion
- Good Thermal Conductivity
- **Excellent Resistance to Erosion and Bio fouling**
- Resistance to a Wide Range of Chemicals, Including Acids and Alkalis

Nickel Alloy K500 Bars







Marine Applications

OIL & GAS Industry

Aerospace Industry







Chemical Processing Equipment

Medical Industry

Electrical and Electronic Components

SPECIFICATIONS FOR MONEL K500

Here Are the Common Specifications of Alloy K500:

Chemical Composition:

	С	Mn	Cu	Si	S	Ni	A1	Ti	Fe
Min.	-	-	-	-	-	63:0	2:30	0:35	-
Max.	0.18	1.50	Bal	0.50	0.010	70.0	3.15	0.85	2.00

Material Properties

Bar Diameter		Yield Strength Ksi (Mpa)	Tensile Strength ksi (Mpa)	Elongation	Hardness Rockwell C
	Min.	-	-		35.0
	Max.	85.0 (586)	130.0 (896)	20%	30.0



Inconel 718 Round Bars



Inconel 718 Is a High-Strength, Corrosion-Resistant Nickel-Based Superalloy That Is Commonly Used in Extreme Temperature and Pressure Environments. It Has Excellent Mechanical Properties, Including High Tensile and Yield Strengths, as well as Good Fatigue Resistance. Inconel 718 Is Also Known For Its Exceptional Resistance to Oxidation and Its Ability to Maintain Its Strength at High Temperatures, Making It a Popular Choice for Use in Gas Turbine Engines, Aircraft Components, and Other Critical Applications.

KEY FEATURES OF INCONEL 718

Here Are Some of the Key Features of Inconel 718

- Inconel 718 Is a Nickel-Based Superalloy
- It Has Excellent Mechanical Properties and Corrosion Resistance
- It Is Widely Used in Various Industries Due to Its Unique Combination of Features
- Key Features Include High Strength, Corrosion Resistance, High-Temperature Performance, Excellent Fatigue Resistance, and Good Formability
- It Is Easily Weldable and Has Good Biocompatibility, Making It Suitable for **Use in Medical Applications**
- Common Applications Include Aerospace and Defense, Gas Turbine Engines, Nuclear Power, Oil and Gas, Medical, and Chemical Processing.

Inconel 718 Round Bars







Aerospace and Defense

Gas Turbine Engines

Nuclear Power







OIL & GAS Industry

Medical Industry

Chemical Processing

SPECIFICATIONS FOR INCONEL 718

Chemical Composition:

Inconel 718 Typically Contains 50-55% Nickel, 17-21% Chromium, 4.75-5.5% Niobium, 2.8-3.3% Molybdenum, 0.65-1.15% Titanium, 0.3-0.65% Aluminum, and Small Amounts of Other Elements Such as Iron, Cobalt, and Manganese.

Physical Properties:

Inconel 718 Has a Density of 8.19 G/cm3, a Melting Point of 1,318-1,343°c (2,404-2,449°f), and a Specific Heat Capacity of 427 J/kg-K.

Material Properties:

Inconel 718 Has a Tensile Strength of 1,240 Mpa (180 Ksi), a Yield Strength of 1,030 Mpa (150 Ksi), and an Elongation of 20-30%.

Corrosion Resistance:

Inconel 718 Is Highly Resistant to Corrosion from Seawater, Acids, and Alkalis. **Heat Treatment:**

Inconel 718 Can Be Heat Treated to Enhance Its Mechanical Properties, Including Strength, Ductility, and Toughness.

Weldability:

Inconel 718 Is Easily Weldable and Can Be Joined Using a Variety of Welding Techniques.

Standards:

Inconel 718 Typically Meets Standards Such as Ams 5662, Ams 5663, Ams 5664, Astm B637, and Nace Mr0175.



Alloy 4130



Alloy 4130 Is a Chromium-Molybdenum Alloy Steel That Is Widely Used in Various Industries Due to Its Excellent Strength, Toughness, and Resistance to Wear and Tear. This Versatile Alloy Is a Popular Choice for Applications That Require High Performance and Durability, Such as Aircraft Parts, Bicycle Frames, and Automotive Components.

KEY FEATURES OF ALLOY 4130

Here Are Some of the Key Features of Alloy 4130

- Chromium-Molybdenum Alloy Steel
- Excellent Strength-To-Weight Ratio
- High Tensile Strength and Hardness
- Good Toughness and Ductility
- Resistance to Wear and Fatigue
- Corrosion Resistance
- Easily Welded and Machined
- Versatile and Customizable for Different Applications
- Used in Aerospace, Automotive, Oil and Gas, Bicycle,

and Manufacturing Industries.

Alloy 4130







Aerospace Industry

Automotive Industry

OIL & GAS Industry





Bicycle Industry

Manufacturing Industry

SPECIFICATIONS FOR ALLOY 4130

Chemical Composition:

Typically Contains 0.28-0.33% Carbon, 0.15-0.35% Silicon, 0.4-0.6% Manganese, 0.8-1.1% Chromium, 0.15-0.25% Molybdenum, and Trace Amounts of Other Elements

Tensile Strength:

97,000-160,000 Psi (670-1103 Mpa)

Yield Strength

63,000-105,000 Psi (434-724 Mpa)

Elongation

25-30%

Hardness

217-235 Brinell

Heat Treatment:

Can Be Heat Treated to Improve Strength and Hardness

Weldability:

Good Weldability Using Conventional Welding Methods **Machinability:**

Easily Machined Using Conventional Methods

Standards:

Meets ASTM A519 and Sae Ams Specifications



PRODUCT APPLICATIONS



Petrochemicals

PRODUCT APPLICATIONS

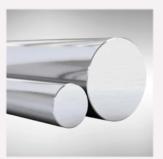




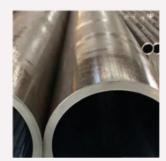
Bio-Medical



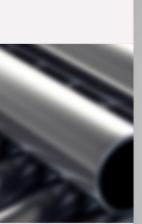
GALLERY

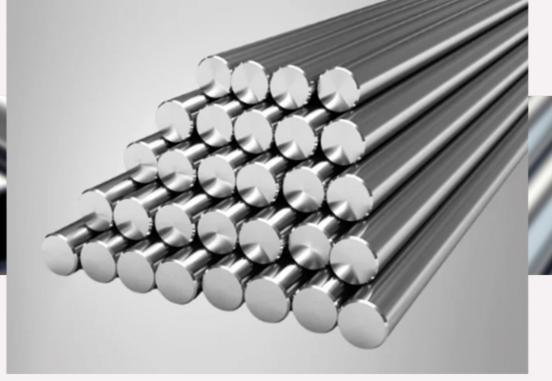


























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