Maraging 350 Datasheet

Maraging 350 provides extremely high strength and good toughness for critical aerospace, defense, and tooling components.

Alloy / Grade	Maraging 350
Common Forms	Round Bar , Forged Billet.
Key Feature	Extreme Yield Strength (350 ksi).
Service Focus	Achieves yield strengths of 350,000 psi, making it one of the strongest structural metals available.

1. Product Overview

Maraging 350 offers the highest strength of the 18% nickel maraging steel family. It is an ultra-high-strength steel that contains Cobalt and Molybdenum, and higher Titanium content than the 300 grade. It provides a nominal yield strength of 350,000 psi (2415 MPa).

Grade	Core Description	Typical Service Focus
Maraging 350	Maraging 350 offers the highest strength of the 18% nickel maraging steel family. It is an ultra-high-strength...	Select Maraging 350 when your design demands the absolute maximum tensile and yield strength available in a...
Supply Capability	Round Bar , Forged Billet.	Standard mill forms, cut-to-size material and project supply
Technical Review	Confirm final values by product form, heat treatment and material certificate	Achieves yield strengths of 350,000 psi, making it one of the strongest structural metals available.

2. Key Features

- Select Maraging 350 when your design demands the absolute maximum tensile and yield strength available in a maraging alloy. While it sacrifices...
- Achieves yield strengths of 350,000 psi, making it one of the strongest structural metals available.
- Can be age-hardened to approximately 57-60 Rockwell C, providing excellent resistance to surface wear and deformation.
- Maintains substantial strength up to 800 deg F (427 deg C), allowing it to perform in high-stress, high-temperature environments.

Further information under:	https://www.nickelcasting.com/nickel-alloys/vascomax-maraging-steel/maraging-350/
Home page:	www.nickelcasting.com
Email:	ni@Nickelcasting.com

Technical Data

The following values are provided as general reference data for engineering review and procurement planning. Confirm final values against the applicable specification, product form, heat treatment condition and material certificate.

3. Chemical Composition (%)

Element	Content (%)
Nickel (Ni)	18.0 - 19.0
Cobalt (Co)	11.5 - 12.5
Molybdenum (Mo)	4.6 - 5.2
Titanium (Ti)	1.3 - 1.6
Aluminum (Al)	0.05 - 0.15
Iron (Fe)	Balance

4. Standard Specifications

Product Form	Standards (AMS / ASTM / MIL)
Bar, Forgings	AMS 6515
Military Spec	MIL-S-46850 Type IV
Chemical Comp	ASTM A538 (Grade C)

5. Mechanical Properties - Typical at Room Temperature

Property	Typical Values (Room Temp)
Yield Strength (0.2% Offset)	340 - 360 ksi (2344 - 2482 MPa)
Ultimate Tensile Strength	350 - 370 ksi (2415 - 2550 MPa)
Elongation	6 - 8 %
Reduction of Area	30 - 40 %
Hardness (Rockwell C)	57 - 60 HRC
Fracture Toughness (KIC)	~40 ksi√in

Note: Values are typical or specification reference values. Purchase requirements should be confirmed against the required standard, drawing and material test report.

Applications and Ordering Information

Use this section to define inquiry requirements and accelerate technical confirmation for Maraging 350 products.

6. Typical Applications

Industry / Area	Typical Components
Industrial Service	Ultra-high-speed rotors for isotope separation requiring extreme tensile strength and balance.
Chemical / Process Equipment	Solid propellant motor cases and structural components where weight savings are critical.
Oil, Gas & Marine	Core pins and extrusion dies for aluminum and zinc casting that require high hot hardness.
High-Temperature / Power	Kinetic energy storage systems operating at extreme RPMs.
Precision Components	We supply high-quality Maraging 350 bar and billet. Due to the critical nature of this material, full mill certification is provided.

7. Available Supply Forms

Pipe & Tube	Plate & Sheet	Bar & Rod
Pipe Fittings	Flanges	Wire & Strip
Forgings	Custom Cutting	Project Supply

8. Information to Include When Requesting a Quote

- Required grade: Maraging 350, with ASTM / ASME / AMS specification if applicable.
- Product form: pipe, tube, plate, sheet, bar, fittings, flanges, forgings or machined parts.
- Dimensions: outside diameter, wall thickness, length, width, thickness or drawing number.
- Quantity, delivery destination and required delivery schedule.
- Special requirements: cutting, machining, heat treatment, NDT, PMI, test report or material certificate.

Company Information	
Address	Shanghai, China
Email	ni@Nickelcasting.com
Home Page	www.nickelcasting.com
Product Page	https://www.nickelcasting.com/nickel-alloys/vascomax-maraging-steel/maraging-350/

Disclaimer

This datasheet is provided for general reference only. Actual values may vary by product form, heat treatment, manufacturing condition and applicable specification. Please contact us for confirmed specifications, test reports and material certificates before ordering.