



AEROSPACE MATERIAL SPECIFICATION	AMS6512™	REV. J
	Issued	1970-05
	Revised	2022-09
Superseding AMS6512H		
Steel, Maraging, Bars, Forgings, Mechanical Tubing, Rings, and Forging Stock 18Ni - 7.8Co - 4.9Mo - 0.40Ti - 0.10Al Consumable Electrode Vacuum Melted, Annealed (Composition similar to UNS K82890)		

RATIONALE

AMS6512 is the result of a Five-Year Review and update of the specification. The revision prohibits unauthorized exceptions (3.5.5.1.5, 3.8, 4.4.3, 5.2.1.1, 8.7, 8.8), aligns the size and quenchant with similar specification (1.1, 1.2), updates composition requirements (3.1), updates heat treatment (3.4), addresses hollow forgings (3.5.1.1, 3.5.1.2, 8.8), revises micro-inclusion rating method (3.5.2), aligns aging time with similar specifications (3.5.5), adds strain rate control (3.5.5.1.4), updates reporting for bar (4.2.1.2), and allows prior revisions (8.3).

1. SCOPE

1.1 Form

This specification covers a premium aircraft-quality, maraging alloy steel in the form of bars, forgings, mechanical tubing, flash welded rings up through 10.000 inches (254.00 mm), inclusive, in diameter or least distance between parallel sides and stock of any size for forging or flash welded rings.

1.2 Application

These products have been used typically for parts requiring through hardening, without liquid quenching, to a minimum yield strength of 240 ksi (1655 MPa) and where such parts may require welding during fabrication, but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

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