

STEEL BARS, FORGINGS, AND RINGS, CORROSION RESISTANT
14Cr - 13.5Co - 5.0Mo - 0.50Ni - 0.20V
Premium Quality, Consumable Electrode Melted

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 10-13-80. It is recommended that this specification not be specified for new designs.

This cover sheet should be attached to the initial issue of the subject specification.

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AEROSPACE MATERIAL

Society of Automotive Engineers, Inc.
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 10001

SPECIFICATION

AMS 5748

Issued 11-1-69
Revised

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1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. FORM: Bars, wire, forgings, flash welded rings, and stock for forging or flash welded rings.
3. APPLICATION: Primarily for parts requiring good corrosion resistance and high strength at temperatures up to 1100 F (593 C).
4. COMPOSITION:

	min	max
Carbon	0.12	0.17
Manganese	--	0.30
Silicon	--	0.25
Phosphorus	--	0.015
Sulfur	--	0.015
Chromium	13.50	14.50
Nickel	0.30	0.70
Cobalt	13.00	14.00
Molybdenum	4.50	5.50
Vanadium	0.10	0.30

- 4.1 Check Analysis: Composition variations shall meet the requirements of the latest issue of AMS 2248.
5. CONDITION: Unless otherwise ordered, the product shall be supplied in the following condition:
 - 5.1 Bars: Hot rolled, annealed as in 6.1.1, and descaled.
 - 5.2 Wire: Cold finished, annealed as in 6.1.1, and descaled.
 - 5.3 Forgings and Flash Welded Rings: Annealed as in 6.1.1 and descaled.
 - 5.3.1 Flash welded rings shall not be supplied unless specified or permitted on purchaser's part drawing. When supplied, they shall be manufactured in accordance with the latest issue of AMS 7490, unless otherwise specified.
 - 5.4 Stock for Forging or Flash Welded Rings: As ordered by the forging or flash welded ring manufacturer.
6. TECHNICAL REQUIREMENTS: When ASTM test methods are specified for determining conformance to the following requirements, tests shall be conducted in accordance with the issue of the ASTM method listed in the latest issue of AMS 2350.
 - 6.1 Bars, Wire, Forgings, and Flash Welded Rings:
 - 6.1.1 Heat Treatment: Product shall be annealed by heating to 1400 F $\pm$ 25 (760 C $\pm$ 14), holding at heat for 4 hr, and cooling in air.

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