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AEROSPACE MATERIAL SPECIFICATION

AMS 5722C

Issued 7-1-48
Revised 10-1-82

UNS K63198
STEEL BARS, FORGINGS, AND RINGS, CORROSION AND HEAT RESISTANT
19.5Cr - 9.5Ni - 1.4Mo - 1.4W - 0.42(Cb + Ta) - 0.22Ti

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 9-27-72. It is recommended, therefore, that this specification not be specified for new designs.

This cover sheet should be attached to the "C" revision of the subject specification.

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This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of 10-1-82. By this action, subject specification number and title will be deleted from the active specification index of Aerospace Material Specifications.

This specification is under the jurisdiction of AMS Committee "F".

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AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
TWO PENNSYLVANIA PLAZA NEW YORK N Y 1000

AMS 5722C

Superseding AMS 5722B

Issued 7-1-48
Revised 11-1-68

STEEL BARS, FORGINGS, AND RINGS, CORROSION AND HEAT RESISTANT

19.5Cr - 9.5Ni - 1.4Mo - 1.4W - 0.42(Cb + Ta) - 0.22Ti

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. FORM: Bars, forgings, flash welded rings, and stock for forgings or flash welded rings.
3. APPLICATION: Parts and assemblies, such as bolts, dowels, fittings, turbine rotor wheels and discs, and turbine nozzle assemblies, requiring high strength up to 1200 F (649 C).
4. COMPOSITION:

	min	max
Carbon	0.28	0.35
Manganese	0.75	1.50
Silicon	0.30	0.80
Phosphorus	--	0.040
Sulfur	--	0.030
Chromium	18.00	21.00
Nickel	8.00	11.00
Molybdenum	1.00	1.75
Tungsten	1.00	1.75
Columbium + Tantalum	0.25	0.60
Titanium	0.10	0.35
Copper	--	0.50

- 4.1 Check Analysis: Composition variations shall meet the requirements of the latest issue of AMS 2248.
5. CONDITION:
 - 5.1 Bars, Forgings, and Stock for Flash Welded Rings: Hot worked, with final working done at a temperature not lower than 1400 F (760 C) and stress relieved at not lower than 1200 F (649 C) for not less than 4 hours.
 - 5.2 Flash Welded Rings: Stress relieved at not lower than 1200 F (649 C) for not less than 4 hours.
 - 5.2.1 Flash welded rings shall not be supplied unless specified on purchaser's part drawing. When supplied, they shall be manufactured in accordance with the latest issue of AMS 7490, unless otherwise specified.
 - 5.3 Forging Stock: As ordered by the forging manufacturer.
6. TECHNICAL REQUIREMENTS: When ASTM 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 and Flash Welded Rings: Specimens taken from bars and from parent metal of flash welded rings shall conform to the requirements of 6.1.1 and 6.1.2 and shall be capable of meeting the requirements of 6.1.3.

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