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AEROSPACE MATERIAL SPECIFICATION

AMS^{5727B}

Issued 9-1-48
Revised 10-1-82

STEEL FORGINGS, CORROSION AND HEAT RESISTANT 16Cr - 25Ni - 6Mo

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 10-29-68. It is recommended, therefore, that this specification not be specified for new designs.

This cover sheet should be attached to the "B" 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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CANCELED

AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. Two Pennsylvania Plaza, New York, N. Y. 10001

AMS 5727B

Issued 9-1-48

Revised 7-1-56

STEEL FORGINGS, CORROSION AND HEAT RESISTANT 16Cr - 25Ni - 6Mo

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. FORM: Forgings and forging stock.
3. APPLICATION: Primarily for parts, such as turbine wheels and discs, for use up to 1350 F.
4. COMPOSITION:

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Check Analysis
Under Min or Over Max

Carbon	0.08	max	--	0.01
Manganese	2.00	max	--	0.04
Silicon	1.00	max	--	0.05
Phosphorus	0.030	max	--	0.005
Sulfur	0.030	max	--	0.005
Chromium	15.00 - 17.50		0.20	0.20
Nickel	24.00 - 27.00		0.20	0.20
Molybdenum	5.50 - 7.00		0.10	0.10
Nitrogen	0.10 - 0.20		0.03	0.03
Copper	0.50	max	--	0.03

5. CONDITION:

- 5.1 Forging Stock: As ordered by the forging manufacturer.
- 5.2 Forgings: Unless otherwise specified, forgings shall be hot forged, hot-cold worked, and stress relieved as follows:
 - 5.2.1 Hot forging of blooms, billets, or shapes into required configuration for subsequent hot-cold working shall be done by pressing or hammering.
 - Ø The temperature at which stock for pressing or hammering shall be heated shall not exceed 2000 F and stock shall be thoroughly and uniformly heated throughout the sections before any working is done. The temperature at which hot working shall cease shall not be lower than 1780 F.
 - 5.2.2 When a forging has been finished to desired hot shape, it shall be cooled in still air to room temperature and inspected for surface imperfections. Imperfections such as small cracks or seams, which would not affect the final hot-cold working operation or use of the forging for service requirements, may be removed by grinding or other suitable means.

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