

AERONAUTICAL MATERIAL SPECIFICATIONS

AMS 7229B

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

Issued 11-1-48
Revised 7-1-57

RIVETS, STEEL, CORROSION AND HEAT RESISTANT 18Cr - 11Ni - (Cb+Ta)

- 1. ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
- 2. APPLICATION:** Rivets requiring corrosion resistance, and heat and oxidation resistance up to approximately 1500 F, but not high strength at that temperature. Rivets should not be hand peened during riveting.

3. COMPOSITION:

		<u>Check Analysis</u>	
		Under	Min or Over Max
Carbon	0.08 max	--	0.01
Manganese	2.00 max	--	0.04
Silicon	1.00 max	--	0.05
Phosphorus	0.040 max	--	0.005
Sulfur	0.030 max	--	0.005
Chromium	17.00 - 19.00	0.20	0.20
Nickel	9.00 - 12.00	0.15	0.15
Columbium + Tantalum	10xC - 1.10	0.05	0.05
Molybdenum	0.50 max	--	0.03
Copper	0.50 max	--	0.03

- 4. CONDITION:** Cold headed, unless purchaser permits machining, and solution heat treated free from continuous carbide network, and descaled if necessary. Rivets shall be fabricated from wire cold drawn from hot finished wire or rod which has been previously ground or has had surface preparation (other than by pickling) for removal of seams and other injurious surface imperfections.

5. TECHNICAL REQUIREMENTS:

- 5.1 Heat Treatment:** Solution heat treatment shall be done in a furnace atmosphere which will not cause surface hardening.
- 5.2 Hardness:** Rivets shall have hardness not higher than Vickers 150 or equivalent, when determined on a flat, smooth, filed or ground surface near the midlength of the shank.
- 5.3 Embrittlement:** Rivets shall be capable of meeting the following test:

Section 7C of the SAE Technical Board rules provides that: "All technical reports including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report, in formulating and approving technical reports. The Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."