

AEROSPACE

MATERIAL SPECIFICATIONS

AMS 7236

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

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Revised

RIVETS, ALLOY, CORROSION AND HEAT RESISTANT
Cobalt Base - 20Cr - 10Ni - 15W

1. ACKNOWLEDGMENT: A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. APPLICATION: Rivets requiring high strength up to approximately 1500 F (815 C) and oxidation resistance up to 2000 F (1095 C).
3. COMPOSITION:

		Check Analysis	
		Under Min	Over Max
Carbon	0.015 - 0.15	0.01	0.01
Manganese	1.00 - 2.00	0.04	0.04
Silicon	1.00 max	--	0.05
Phosphorus	0.040 max	--	0.005
Sulfur	0.030 max	--	0.005
Chromium	19.00 - 21.00	0.25	0.25
Nickel	9.00 - 11.00	0.15	0.15
Tungsten	14.00 - 16.00	--	0.10
Iron	3.00 max	--	0.10
Cobalt	remainder		

4. CONDITION: Cold headed, unless purchaser permits machining, and solution heat treated, 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: Rivets shall be solution heat treated by heating to 2250 F $\pm$ 25 (1232.2 C $\pm$ 14), holding at heat for 10 - 20 min., and either quenching in water or rapid air cooling.
 - 5.2 Hardness: Rivets shall have hardness not higher than Vickers 285 or equivalent when determined on a flat, smooth, filed or ground surface near the midlength of the shank.
 - 5.3 Formability: Rivets shall be capable of being driven satisfactorily with a full head free from cracks; rivets may be heated for driving.
6. QUALITY: Rivets shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external imperfections detrimental to their performance.