

ALUMINUM ALLOY FORGINGS
7.5Zn - 1.6Mg - 0.7Cu - 0.55Mn (76S-T6)

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 11-18-66. It is recommended that this specification not be specified for new designs.

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

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of 7- 1-81. By this action, subject specification number and title will be deleted from the active specification index of Aerospace Material Specifications.

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AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
400 COMMONWEALTH DRIVE WARRENDALE PA 15096

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1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. FORM: Die forgings, hand forgings, and forging stock.

3. COMPOSITION:

Zinc	7.0 - 8.0
Magnesium	1.2 - 2.0
Copper	0.30 - 1.0
Manganese	0.30 - 0.8
Iron	0.6 max
Silicon	0.40 max
Titanium	0.20 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max
Aluminum	remainder

4. CONDITION:

4.1 Die Forgings: Unless otherwise specified, solution and precipitation heat treated. Quenching from the solution temperature shall be at a rate fast enough for the material to meet the following requirements, but shall be as slow as practicable in order to keep internal stresses at a minimum.

4.2 Hand Forgings: As forged, unless otherwise specified.

4.3 Forging Stock: As fabricated.

5. TECHNICAL REQUIREMENTS:

5.1 Die Forgings:

5.1.1 Tensile Properties:

5.1.1.1 Test Specimens: Test specimens, machined from separately forged coupons or from forging stock representing the forgings and in either case heat treated with the forgings, or machined from prolongations on heat treated forgings, shall conform to the following requirements:

Tensile Strength, psi	70,000 min
Yield Strength at 0.2% Offset or at 0.0156 in. in 2 in. Extension Under Load ($E = 10,300,000$), psi	60,000 min
Elongation, % in 4D	14 min