AEROSPACE
MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York, N.Y. 10017

AMS 4362A

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MAGNESIUM ALLOY FORGINGS
5.5Zn - 0.45Zr (ZK60A-T5)

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:

	min	max
Zinc	4.8	6.2
Zirconium	0.45	--
Other Impurities, total	--	0.30
Magnesium	remainder	

4. CONDITION:

4.1 Die and Hand Forgings: Precipitation heat treated.

4.2 Forging Stock: As fabricated.

5. TECHNICAL REQUIREMENTS:

5.1 Die Forgings:

Ø 5.1.1 Tensile Properties:

5.1.1.1 Forgings 3 in. and Under in Thickness: Test specimens machined from forgings after heat treatment with axes approximately parallel to forging flow lines or from prolongations on the heat
Ø treated forgings shall conform to the following requirements:

Tensile Strength, psi	42,000 min
Yield Strength at 0.2% Offset or at 0.0120 in. in 2 in. Extension Under Load (E = 6,500,000), psi	26,000 min
Elongation, % in 2 in. or 4D	7 min

5.1.1.1.1 Tensile properties in directions other than parallel to the forging flow lines shall be as agreed
Ø upon by purchaser and vendor.

5.1.1.2 Tensile properties of die forgings over 3 in. in thickness shall be as agreed upon by purchaser
Ø and vendor.

5.2 Hand Forgings:

5.2.1 Tensile Properties:

5.2.1.1 Forgings 6 in. and Under in Thickness: Test specimens taken with axes parallel to the forging
Ø flow lines in such a manner as to represent the center of the forgings shall conform to the following requirements: