

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4803

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Revised

Z I N C A L L O Y D I E C A S T I N G S

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

2. COMPOSITION:

Aluminum	3.50 - 4.30
Magnesium	0.03 - 0.08
Copper	0.10 max
Iron	0.10 max
Lead	0.007 max
Cadmium	0.005 max
Tin	0.005 max
Zinc	remainder

3. QUALITY: Castings shall have smooth surfaces and shall be substantially free from blowholes, porosity, hard spots, shrinkage defects, cracks, or other injurious defects.

4. STABILITY: When specified, test specimens representing the alloy shall conform to the following requirements as to physical properties after being exposed to water vapor at 95°C for ten days:

Tensile Strength, psi	30,000 min
Elongation, % in 2 in.	1.5 min
Charpy Impact, ft-lb	12.0 min

The humidity cabinet shall be vented, and shall contain no wood or organic matter exposed to the water vapor. The specimens shall be supported at points outside of the test section by glass, porcelain, zinc, or zinc-coated metal.

5. REPORTS: (a) The casting manufacturer shall furnish three copies of a notarized report of the chemical analysis of each shipment. This report shall include the purchase order number, material specification number, part numbers or size, and quantity in the shipment.

(b) Unless otherwise specified, the parts manufacturer shall furnish with each shipment three copies of a notarized report showing the purchase order number, material specification number, part number, and quantity. When castings for making parts are supplied by the parts manufacturer, the parts manufacturer shall inspect each lot of castings to determine conformance with this specification and shall include in the report a certification that the castings conform to the specification.

6. IDENTIFICATION: Each castings shall be identified in accordance with AMS 2804.

7. REJECTIONS: Castings not conforming to this specification, or modifications specified on the drawing or the purchase order, are subject to rejection. If samples for verification are desired by the vendor, they shall be claimed within three weeks. Rejected material or parts will be held a reasonable time, at vendor's risk, awaiting shipping instructions for the return of same for credit or replacement, as specified. Vendor shall pay all transportation charges.