

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
29 West 39th Street
New York City

AMS 4290B

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ALUMINUM ALLOY CASTINGS

Die

9.5 Si - .5 Mg

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

2. COMPOSITION:

Silicon	9.0 - 10.0
Magnesium	0.4 - 0.6
Copper	0.6 max
Nickel	0.5 max
Iron	2.0 max
Zinc	0.5 max
Manganese	0.3 max
Tin	0.1 max
Total Other Impurities	0.2 max
Aluminum	remainder

3. QUALITY: (a) Castings shall be of uniform quality and condition, and free from defects detrimental to fabrication or to performance of the parts. If injurious defects are revealed during fabrication, castings shall be subject to rejection. Castings shall have smooth surfaces and shall be well cleaned.

(b) Unless otherwise specified, castings shall be produced under radiographic control. This shall consist of radiographic examination of castings until proper foundry technique, which will produce castings free from harmful internal defects, is established for each mold.

(c) Radiographic and other quality standards shall be as agreed between purchaser and vendor.

(d) Castings and parts made therefrom shall be subject to examination by any method which, in purchaser's judgment, will reveal defects.

(e) Castings shall not be repaired by plugging, welding or other methods without written permission from the purchaser.

(f) Castings shall not be impregnated, chemically treated, or coated to prevent leaking, unless specified or allowed by written permission which states the method to be used. Impregnated castings shall be marked "IMP".

(g) Castings shall be of sufficient size to allow for finishing to blueprint requirements, but excessive size or weight will not be permitted.

4. REPORTS: (a) Unless otherwise specified, the castings vendor shall supply three copies of a notarized report stating that the castings conform to the chemical requirements of this specification.