

	AEROSPACE MATERIAL SPECIFICATION	AMS 4237B	
		Issued APR 1980 Revised OCT 1987 Reaffirmed OCT 2000 Cancelled APR 2007 Superseding AMS 4237A	
Aluminum Alloy Castings, Sand 4.6Cu - 0.35Mn - 0.25Mg - 0.22Ti (206.0-T71) Solution Heat Treated and Naturally Aged UNS A02060			

RATIONALE

AMS 4237B has been designated cancelled because survey of aerospace users and producers determined that this product is not produced to this specification.

CANCELLATION NOTICE

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of April, 2007. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications, indicating that it has been "CANCELLED".

Cancelled specifications are available from SAE.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2007 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
 Tel: 724-776-4970 (outside USA)
 Fax: 724-776-0790
 Email: CustomerService@sae.org
 http://www.sae.org

SAE WEB ADDRESS:

Full document details: SAE AMS4237B

Issued	APR 1980
Revised	OCT 1987
Reaffirmed	OCT 2000
Cancelled	APR 2007
Superseding	AMS 4237A

Aluminum Alloy Castings, Sand
4.6Cu - 0.35Mn - 0.25Mg - 0.22Ti (206.0-T71)
Solution Heat Treated and Naturally Aged

UNS A02060

1. SCOPE:

1.1 Form:

This specification covers an aluminum alloy in the form of sand castings.

1.2 Application:

Primarily for components requiring a combination of high strength with good ductility and impact strength. Certain design and processing procedures (See 8.5) may cause these castings to become susceptible to stress-corrosion cracking.

2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of Aerospace Material Specifications shall apply. The applicable issue of other documents shall be as specified in AMS 2350.

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096.

2.1.1 Aerospace Material Specifications:

AMS 2350	Standards and Test Methods
AMS 2360	Room Temperature Tensile Properties of Castings
AMS 2635	Radiographic Inspection
AMS 2645	Fluorescent Penetrant Inspection
AMS 2646	Contrast Dye Penetrant Inspection
AMS 2694	Repair Welding of Aerospace Castings
AMS 2804	Identification, Castings

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2007 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: <http://www.sae.org>

2.2 ASTM Publications:

Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia PA 19103.

ASTM B557	Tension Testing Wrought and Cast Aluminum- and Magnesium- Alloy Products
ASTM B660	Packaging/Packing of Aluminum and Magnesium Products
ASTM E10	Brinell Hardness of Metallic Materials
ASTM E34	Chemical Analysis of Aluminum and Aluminum Alloys
ASTM E155	Reference Radiographs for Inspection of Aluminum and Magnesium Castings
ASTM G44	Alternate Immersion Stress Corrosion Testing in 3.5% Sodium Chloride Solution

2.3 U.S. Government Publications:

Available from Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.

2.3.1 Military Standards:

MIL-H-6088 Heat Treatment of Aluminum Alloys

3. TECHNICAL REQUIREMENTS:

3.1 Composition:

Shall conform to the following percentages by weight, determined by wet chemical methods in accordance with ASTM E34 or by spectrographic or other analytical methods approved by purchaser:

	min	max
Carbon	4.2	- 5.0
Manganese	0.20	- 0.50
Magnesium	0.15	- 0.35
Titanium	0.15	- 0.30
Iron	--	0.15
Silicon	--	0.10
Zinc	--	0.10
Nickel	--	0.05
Tin	--	0.05
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15
Aluminum	remainder	