



*Reading Alloys, Inc.*

220 Old West Penn Ave. Robesonia, PA 19551

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION.



## Product Specification

<b>Title:</b> 50 Aluminum - 50 Vanadium		<b>Specification No.</b> RAI-0011 <b>Revision:</b> 6
<b>Department:</b> Thermite	<i>Approved &amp; Released Product Specification</i>	<b>Implementation Date:</b> 04/20/2000
<b>Area:</b>		
<b>Type of Document:</b> RAI Product Specification		<b>Review Period - 365 Days</b>

### Product Information:

<b>Category:</b> Finished Goods	<b>Product Line:</b> Thermite Line 1
<b>Part Number:</b> 30506	<b>Revision:</b> 1
<b>Description:</b> 50 Al - 50 V	
<b>Customer Part #:</b>	<b>Engineer:</b> James Robison

### 1.0 Product Specification:

ELEMENT	SPECIFICATION
Aluminum	44-50%
Vanadium	50-55%
Boron	0.003% Max
Carbon	0.10% Max
Chromium	0.10% Max
Columbium	0.01% Max
Copper	0.05% Max
Iron	0.40% Max
Magnesium	0.25% Max
Manganese	0.05% Max
Molybdenum	0.15% Max
Nickel	0.05% Max

Phosphorus	0.03% Max
Silicon	0.35% Max
Sulfur	0.02% Max
Tantalum	0.005% Max
Tungsten	0.015% Max
Yttrium	0.005% Max
Hydrogen	0.01% Max
Nitrogen	0.04% Max
Oxygen	0.10% Max

**2.0 Special Requirements:**

**2.01 Size:**

- 1/4 Inch by 50 Mesh
- 98% Min Minus 1/4 inch (US Standard Sieve Designation)
- 2% Max to 5/16 inch
- 2% Max Minus 50 Mesh
- Other sizes available on request.

**2.02 Inspection:**

100% Visual - Whitelight, Blacklight, and Fluoroscope

**2.03 Packaging:**

- 1000 pound open-head steel drums (55 gallon)
- Other packaging available on request.

**3.0 Safety & Environmental Information:**

**4.0 Associated Documents:**

Associated Quality System Documents - None

[Click to Open an Associated Document](#)

**5.0 Document Revision History:**

<b>Revision:</b> 6	<b>Date Created:</b> 09/18/2008 <b>Date of Last Revision:</b> 09/24/2008	<b>Last Approval Date:</b> 09/24/2008
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<b>Document Author:</b> Beth Maiocchi	
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**6.0 Reason for Change:**

Revision:	Sec/Para Changed	Change Made:	Date
1	N/A	Initial Issue of Document	12/1/80
2	N/A	Unknown	8/15/89
3	N/A	Unknown	11/20/92

4	N/A	Unknown	5/13/93
5	N/A	Change to Lotus Notes Format	12/10/98
6	8	Remove Typical Analysis	above

**7 Notification List:**

**8.0 Approvals:**

**First Approver's Signature**

**Name:** James Robison/PA-ROB/Ametek  
**Title:** Director of Technology

Sep 24, 2008 03:41:20 PM EDT - Approved by: James Robison/PA-ROB/Ametek

**Document History Section**