



Reading Alloys, Inc.

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THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION.



## Product Specification

<b>Title:</b> 35 Aluminum - 65 Vanadium with Ruthenium		<b>Specification No.</b> RAI-0086 <b>Revision:</b> 3
<b>Department:</b> Thermite	<i>Approved &amp; Released Product Specification</i>	<b>Implementation Date:</b> 06/15/2005
<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> 30504	<b>Revision:</b> 1
<b>Description:</b> 35 Al - 65 V - Ru	
<b>Customer Part #:</b>	<b>Engineer:</b> James Robison

### 1.0 Product Specification:

ELEMENT	SPECIFICATION
Aluminum	31 - 38%
Vanadium	59 - 66%
Ruthenium	4% Min
Boron	0.005% Max
Carbon	0.18% Max
Chromium	0.10% Max
Copper	0.05% Max
Iron	0.45% Max
Magnesium	0.25% Max
Manganese	0.05% Max
Molybdenum	0.15% Max
Nickel	0.05% Max
Phosphorus	0.035% Max

Silicon	0.30% Max
Sulfur	0.024% Max
Tungsten	0.015% Max
Hydrogen	0.010% Max
Nitrogen	0.05% Max
Oxygen	0.10% Max

**\* NOTE: Ru level may be dictated on Purchase Order**

**Material Size:**

1/4 Inch by Down  
 + 5/16 = 0%  
 5/16 x + 1/4 Inch = 2% Max  
 Other sizes available on request

**2.0 Special Requirements:**

**A. Inspection:**

All material is 100% visually inspected to verify metal is clean and free of debris.

**B. Packaging:**

Standard packaging is 1000 pounds in open-head steel drums (55 gallon)  
 Other packaging available on request.

\* Indicates change from last revision

**3.0 Safety & Environmental Information:**

MSDS-061

**4.0 Associated Documents:**

Associated Quality System Documents - None

Click to Open an Associated Document

**5.0 Document Revision History:**

<b>Revision:</b> 3	<b>Date Created:</b> 09/19/2008 <b>Date of Last Revision:</b> 09/24/2008	<b>Last Approval Date:</b> 09/24/2008
<b>Document Author:</b> Beth Maiocchi		

**6.0 Reason for Change:**

Revision:	Sec/Para Changed	Change Made:	Date
1	N/A	Initial Issue of Document	12/10/98
2	Sect 8	Additional Signatory	6/9/99
3	1	Added note regarding Ru; changed sizing	above



**7 Notification List:**

**8.0 Approvals:**

**First Approver's Signature**

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

Sep 24, 2008 04:31:28 PM EDT - Approved by: James Robison/PA-ROB/Ametek

**Document History Section**