ReadingAlloys
advanced engineered materials
An AMETEK Company

QUALITY ALERT

Supplier - High Density Inclusion Awareness

Reading Alloys, Inc. (RAI) is a major supplier of melt stock materials to the Aerospace Industry. Because of the critical end use of our products in aerospace and jet engine components, we operate in a controlled environment where High Density Inclusions (HDI's) cannot exist. Our customers who make these alloys require that no high density (above 7.5g/cc) and high melting point (above 1600 °C) materials contaminate their raw material supply chain. Materials such as Tungsten, Tungsten Carbide, Tantalum, Molybdenum and Niobium can lead to HDI's, which will not melt in the final alloy. An HDI in an engine part can result in catastrophic failure of an engine while the plane is in flight. It is critical that these types of materials do not contaminate the raw materials or supplies used by RAI, or the alloys we produce.

Common sources of high density / high melting materials include the following:

- **Roller ball in ball point pens.**
- **Tungsten Carbide drill bits.**
- **Saw blades with Tungsten Carbide teeth.**
- **Filaments in light bulbs.**
- **Carbide cutting or grinding tools.**
- **Heavy equipment (hardened bulldozer blades).**
- **TIG welding.**

It is vitally important that all suppliers and all members of the supplier's workforce that may come in contact with material supplied to Reading Alloys, Inc. are aware of HDI risks. Please relay this information to the appropriate personnel within your organization. Failure to comply can result in being removed from the Reading Alloys, Inc. Approved Supplier List.

The raw material shall be disqualified if it includes, or is suspected to include, contaminants known to cause high-density inclusions in titanium alloys. The supplier must notify Reading Alloys immediately if the supplied product contains, or is suspected to contain, any potential high density contamination.

Your help in the effort to avoid potential sources of contamination is greatly appreciated. If you have any questions regarding this information, please call our Quality Manager at 610-693-5822, ext. 267.

I have read and understand the information contained in this quality alert.

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Authorized Signature	Date	Company