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| AEROSPACE MATERIAL SPECIFICATION | AMS5884™ | REV. E |
| | Issued 1992-04 Reaffirmed 2006-04 Revised 2022-09 | |
| Superseding AMS5884D | | |
| Iron-Nickel Alloy, Bars, Forgings, and Rings 42Fe - 37.5Ni - 14Co - 4.8Cb (Nb) - 1.6Ti Solution Heat Treated, Precipitation Hardenable Multiple Melted, High Temperature, Low Expansion (Composition similar to UNS N19909) | | |

RATIONALE

AMS5884E is the result of a Five-Year review and update of the document. The revision prohibits unauthorized exceptions (3.8, 4.4.3, 5.2.1, 8.4), updates composition and reporting requirements (3.1, 3.1.1), limits hardness testing procedures (3.5.1.1.1, 3.5.1.2.2), adds strain rate control for tensile tests (3.5.1.2.1.1), revises largest allowable grain size (3.5.1.1.2), updates limiting bar sizes (4.4.1), and allows prior revisions (8.5).

1. SCOPE

1.1 Form

This specification covers an iron-nickel alloy in the form of bars, forgings, flash welded rings, and stock for forging, flash welded rings, or heading.

1.2 Application

These products have been used typically for parts requiring a combination of high strength and low expansion properties up to 1200 °F (649 °C), but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2261 Tolerances, Nickel, Nickel Alloy, and Cobalt Alloy Bars, Rods, and Wire

AMS2269 Chemical Check Analysis Limits, Nickel, Nickel Alloys, and Cobalt Alloys

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