AEROSPACE MATERIAL SPECIFICATION

AMS2431™	REV. E
Issued 1998-04 Revised 2023-04 Superseding AMS2431D	

Peening Media,
General Requirements

RATIONALE

AMS2431E is the result of a Five-Year Review and update of this specification with the addition of AMS2431/9 to Table 1 and that the quality characteristics be visually inspected (3.2).

1. SCOPE

1.1 This specification and its detail slash specifications cover the requirements for media to be used in controlled shot peening of metal parts.

1.2 Reference to AMS2431 with the appropriate slash number on a purchase order constitutes a requirement to conform to the applicable specification in 2.1.1.

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.

AMS2431/1 Peening Media (ASR), Cast Steel Shot, Regular Hardness (45 to 52 HRC)

AMS2431/2 Peening Media (ASH), Cast Steel Shot, High Hardness (55 to 62 HRC)

AMS2431/3 Peening Media, Conditioned Carbon Steel Cut Wire Shot, Regular Hardness (45 to 52 HRC) (AWCR)

AMS2431/4 Peening Media, Conditioned Stainless Steel Cut Wire Shot (AWS)

AMS2431/5 Peening Media, Hardened Steel Peening Balls

AMS2431/6 Peening Media, Glass Shot

AMS2431/7 Peening Media, Ceramic Shot

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AMS2431E/

AMS2431/8 Peening Media (AWCH), Conditioned Carbon Steel Cut Wire Shot, High Hardness (55 to 62 HRC)

AMS2431/9 Peening Media, Ceramic Shot, High Density

AS7766 Terms Used in Aerospace Metals Specifications

SAE J445 Metallic Shot and Grit Mechanical Testing

2.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM B214 Sieve Analysis of Metal Powders

ASTM C169 Chemical Analysis of Soda-Lime and Borosilicate Glass

ASTM E11 Woven Wire Test Sieve Cloth and Test Sieves

ASTM E18 Rockwell Hardness of Metallic Materials

ASTM E29 Using Significant Digits in Test Data to Determine Conformance with Specifications

ASTM E140 Standard Hardness Conversion Tables for Metals Relationship Among Brinell Hardness, Vickers Hardness, Rockwell Hardness, Superficial Hardness, Knoop Hardness, Scleroscope Hardness, and Leeb Hardness

ASTM E353 Chemical Analysis of Stainless, Heat-Resisting, Maraging, and Other Similar Chromium-Nickel-Iron Alloys

ASTM E384 Microindentation Hardness of Materials

ASTM E415 Analysis of Carbon and Low-Alloy Steel by Spark Atomic Emission Spectrometry

ASTM E1019 Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel, Iron, Nickel, and Cobalt Alloys by Various Combustion and Gas Fusion Techniques

ASTM E1086 Analysis of Austenitic Stainless Steel by Spark Atomic Emission Spectrometry

2.3 ISO Publications

Copies of these documents are available online at https://webstore.ansi.org/.

ISO 3310-1 Test sieves - Technical requirements and testing - Part 1: Test sieves of metal wire cloth

2.4 Definitions

Terms used in AMS2431 are defined in AS7766 and as follows:

2.4.1 PARTS

Finished or semifinished metal parts.

2.4.2 PEENING MEDIA

Spherical or quasi-spherical material used in the controlled shot peening process. See Table 1 for descriptions, specifications, and codes.