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AEROSPACE MATERIAL SPECIFICATION

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AMS 2807

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Submitted for recognition as an American National Standard

IDENTIFICATION

Carbon and Low-Alloy Steels, Corrosion and Heat Resistant Steels and Alloys
Sheet, Strip, Plate, and Aircraft Tubing

1. SCOPE: This specification covers procedures for identifying carbon and low-alloy steels, corrosion and heat resistant steels and alloys, maraging and other highly-alloyed steels, and iron alloy sheet, strip, and plate, and aircraft tubing.
2. APPLICABLE DOCUMENTS: Not applicable.
3. TECHNICAL REQUIREMENTS:
 - 3.1 Carbon and Low-Alloy Steels:
 - 3.1.1 Sheet, Strip, and Plate: Shall be identified as in 3.1.1.1 unless purchaser permits a method from 3.1.1.2.
 - 3.1.1.1 Each sheet, strip, and plate shall be legibly marked on one face, in the respective location indicated below, with AMS XXXX (See 8.1), lot number, (See 3.1.1.3), manufacturer's identification, and nominal thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the product or its performance and shall be sufficiently stable to withstand normal handling. The specification number, manufacturer's identification, and nominal thickness shall be continuously line marked; the lot number (See 3.1.1.3) may be included in the line marking or may be marked at one location on each piece.
 - 3.1.1.1.1 Flat Strip 6 Inches (152 mm) and Under in Width: Shall be marked in one or more lengthwise rows of characters recurring at intervals not greater than 3 feet (914 mm).

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- 3.1.1.1.2 Flat Sheet, Flat Strip Over 6 Inches (152 mm) in Width, and Plate: Shall be marked in lengthwise rows of characters recurring at intervals not greater than 3 feet (914 mm), the rows being spaced not more than 6 inches (152 mm) apart and alternately staggered.
- 3.1.1.1.3 Coiled Sheet and Strip: Shall be marked near both the outside and inside ends of the coil; the markings shall be applied as in 3.1.1.1 or shall appear on a durable tag or label attached to the coil and marked with the information of 3.1.1.1. When the product is wound on cores, the tag or label may be attached to the core.
- 3.1.1.2 Each sheet, strip, and plate shall be marked near one end, coils being marked near the outside end, with AMS XXXX (See 8.1), lot number (See 3.1.1.3), manufacturer's identification, and nominal thickness, using any suitable marking fluid. As an alternate method, individual pieces and bundles shall have attached a durable tag marked with the above information or shall be boxed and the box marked with the same information.
- 3.1.1.3 In specifications for carbon steel having less than 0.35% nominal carbon content, omit "lot number" from 3.1.1.1 and 3.1.1.2 and omit from 3.1.1.1 the clause "the lot number.....on each piece."
- 3.1.2 Aircraft Tubing Other Than Hydraulic Tubing: Shall be identified as follows:
- 3.1.2.1 Straight Tubes 0.029 Inch (0.74 mm) and Over in Wall Thickness and 0.500 Inch (12.70 mm) and Over in OD, Minor Axis, or Least Width of Flat Surface: Shall be marked in a row of characters recurring at intervals not greater than 3 feet (914 mm) with AMS XXXX, lot number (See 3.1.1.3), manufacturer's identification, and wall thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.
- 3.1.2.2 Straight Tubes Under 0.029 Inch (0.74 mm) in Wall Thickness or Under 0.500 Inch (12.70 mm) in OD, Minor Axis, or Least Width of Flat Surface: Shall be securely bundled and identified by a durable tag marked with the information of 3.1.2.1 and the nominal OD and attached to each bundle or shall be boxed and the box marked with the same information.
- 3.1.2.3 Coiled Tubing: Shall be securely bundled and identified by a durable tag marked with the purchase order number, AMS XXXX, lot number (See 3.1.1.3), nominal OD and wall thickness, and manufacturer's identification and attached to each coil or shall be boxed and the box marked with the same information.

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3.1.3 Aircraft Hydraulic Tubing:

3.1.3.1 Straight Tubes 0.029 Inch (0.74 mm) and Over in Wall Thickness and 0.250 Inch (6.35 mm) and Over in OD, Minor Axis, or Least Width of Flat Surface: Shall be marked in a row of characters recurring at intervals not greater than 3 feet (914 mm) with AMS XXXX, lot number (See 3.1.1.3), manufacturer's identification, and wall thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.

3.1.3.2 Straight Tubes Under 0.029 Inch (0.74 mm) in Wall Thickness or Under 0.250 Inch (6.35 mm) in OD, Minor Axis, or Least Width of Flat Surface: Shall be securely bundled and identified by a durable tag marked with the information of 3.1.3.1 and the nominal OD and attached to each bundle or shall be boxed and the box marked with the same information.

3.1.3.3 Coiled Tubing: Shall be securely bundled and identified by a durable tag marked with the purchase order number, AMS XXXX, lot number (See 3.1.1.3), nominal OD and wall thickness, and manufacturer's identification and attached to each coil or shall be boxed and the box marked with the same information.

3.2 Corrosion and Heat Resistant Steels and Alloys, Maraging and Other Highly Alloyed Steels, and Iron Alloys: Shall be identified as follows:

3.2.1 Sheet, Strip, and Plate: Each sheet, strip, and plate shall be legibly marked on one face, in the respective location indicated below, with AMS XXXX, lot number, manufacturer's identification, and nominal thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the product or its performance and shall be sufficiently stable to withstand normal handling.

3.2.1.1 Flat Strip 6 Inches (152 mm) and Under in Width: Shall be marked on one or more lengthwise rows of characters recurring at intervals not greater than 3 feet (914 mm).

3.2.1.2 Flat Sheet, Flat Strip Over 6 Inches (152 mm) in Width, and Plate: Shall be marked in lengthwise rows of characters recurring at intervals not greater than 3 feet (914 mm), the rows being spaced not more than 6 inches (152 mm) apart and alternately staggered.

3.2.1.3 Coiled Sheet and Strip: Shall be marked near both the outside and inside ends of the coil; the markings shall be applied as in 3.2.1 or shall appear on a durable tag or label attached to the coil and marked with the information of 3.2.1. When the product is wound on cores, the tag or label may be attached to the core.

3.2.2 Aircraft Tubing Other Than Hydraulic Tubing: Shall be identified as follows:

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- 3.2.2.1 Straight Tubes 0.029 Inch (0.74 mm) and Over in Wall Thickness and 0.500 Inch (12.70 mm) and Over in OD, Minor Axis, or Least Width of Flat Surface: Shall be marked in a row of characters recurring at intervals not greater than 3 feet (914 mm) with AMS XXXX, lot number, manufacturer's identification, and wall thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.
- 3.2.2.2 Straight Tubes Under 0.029 Inch (0.74 mm) in Wall Thickness or Under 0.500 Inch (12.70 mm) in OD, Minor Axis, or Least Width of Flat Surface: Shall be securely bundled and identified by a durable tag marked with the information of 3.2.2.1 and the nominal OD and attached to each bundle or shall be boxed and the box marked with the same information.
- 3.2.2.3 Coiled Tubing: Shall be securely bundled and identified by a durable tag marked with the purchase order number, AMS XXXX, lot number, nominal OD and wall thickness, and manufacturer's identification and attached to each coil or shall be boxed and the box marked with the same information.
- 3.2.3 Aircraft Hydraulic Tubing:
- 3.2.3.1 Straight Tubes 0.029 Inch (0.74 mm) and Over in Wall Thickness and 0.250 Inch (6.35 mm) and Over in OD, Minor Axis, or Least Width of Flat Surface: Shall be marked in a row of characters recurring at intervals not greater than 3 feet (914 mm) with AMS XXXX, lot number, manufacturer's identification, and wall thickness. The characters shall be applied using a suitable marking fluid removable in hot alkaline cleaning solution without rubbing. The markings shall have no deleterious effect on the tubing or its performance and shall be sufficiently stable to withstand normal handling.
- 3.2.3.2 Straight Tubes Under 0.029 Inch (0.74 mm) in Wall Thickness or Under 0.250 Inch (6.35 mm) in OD, Minor Axis, or Least Width of Flat Surface: Shall be securely bundled and identified by a durable tag marked with the information of 3.2.3.1 and the nominal OD and attached to each bundle or shall be boxed and the box marked with same information.
- 3.2.3.3 Coiled Tubing: Shall be securely bundled and identified by a durable tag marked with the purchase order number, AMS 2807, lot number, nominal OD and wall thickness, and manufacturer's identification and attached to each coil or shall be boxed and the box marked with same information.
4. QUALITY ASSURANCE PROVISIONS: Not applicable.
5. PREPARATION FOR DELIVERY: Not applicable.
6. ACKNOWLEDGMENT: Not applicable.
7. REJECTIONS: Product not identified in accordance with this specification, or with modifications authorized by purchaser, will be subject to rejection.