

AEROSPACE MATERIAL SPECIFICATION

SAE

AMS 3796/1A

Issued 1 JAN 1987 Revised 1 JAN 1993 Superseding AMS 3796/1

Submitted for recognition as an American National Standard

WEBBING, NYLON, AIRCRAFT ARRESTING 105,000 Pounds (467 kN)

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of July, 1992. It is recommended, therefore, that this specification not be specified for new designs.

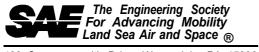
This cover sheet should be attached to the initial issue of the subject specification.

"NONCURRENT" refers to those materials which have previously been widely used and which may be required on some existing designs in the future. The Aerospace Materials Division, however, does not recommend these as standard materials for future use in new designs. Each of these "NONCURRENT" specifications is available from SAE upon request.

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400 Commonwealth Drive, Warrendale, PA 15096

AEROSPACE MATERIAL SPECIFICATION

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Issued 1-1-87

AMS 3796/1

an American National Standard

WEBBING, NYLON, AIRCRAFT ARRESTING 105,000 lb (467 kN)

- 1. SCOPE:
- 1.1 Form: This specification covers one type of nylon in the form of webbing.
- 1.2 Application: Primarily for use in land-based aircraft arresting systems.
- 1.3 <u>Classification</u>: Nylon webbing having average breaking strength of 105,000 lb (467 kN).
- 2. APPLICABLE DOCUMENTS: See AMS 3796.
- 3. TECHNICAL REQUIREMENTS:
- 3.1 <u>Basic Specification</u>: The complete requirements for procuring the webbing described herein shall consist of this document and the latest issue of the basic specification, AMS 3796.
- 3.2 Construction and Properties
- 3.2.1 Yarn: Shall be as specified in Table I and the following:
- 3.2.1.1 Fiber Identification: Shall be nylon, prepared from hexamethylene diamine and adipic acid, or its derivatives.
- 3.2.1.2 Melting Point: Shall be not lower than 245°C (475°F).
- 3.2.1.3 Denier: Shall be 840 or 1260.
- 3.2.2 Webbing: Shall be as specified in Table II and as follows:
- 3.2.2.1 Weave: Shall be as shown in Fig. 1.

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3.2.2.2 Edge Wear Markers: There shall be two yellow marker ends in the center of each selvage stuffer as shown in Fig. 1. The marker shall be an 840 denier 7-ply yarn.

3.2.2.3 Length: Shall be as specified by purchaser.

- 4. QUALITY ASSURANCE PROVISIONS: See AMS 3796.
- 5. PREPARATION FOR DELIVERY: See AMS 3796.
- 6. ACKNOWLEDGMENT: See AMS 3796.
- 7. REJECTIONS: See AMS 3796.

Filling

8. NOTES: See AMS 3796.

LEDGMENT: See AMS 3796.	•
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See AMS 3796.	1 C of am 53 106 / 8
TABLE I	amse
Characteristics of Yarn	
Requirements	O,
Characteristics of Yarr Requirements Ply, min Ground Binder Stuffer Filling	3 (840 denier) or 2 (1,260 denier)
Binder	3 (840 denier) or 2 (1,260 denier)
Stuffer	5 (840 denier) or 4 (1,260 denier)
Filling Com	6 (840 denier) <i>or</i> 4 (1,260 denier)
Twist, turns per in. (25.4 mm) Ground Binder Stuffer	2.0 to 3.0 2.0 to 3.0 1.0 to 2.0

1.0 to 2.0

TABLE II

Properties

Requirements

Width <u>1 / 2 / 3 /</u>

8.500 in., + 0.125, - 0.062 (216.0 mm, + 3.0, - 1.5)

Thickness

0.225 in. \pm 0.010 (5.70 mm \pm 0.25)

Weight, max

37 oz per linear yd (1,147 g/m)

Breaking Strength, min

Average

Single Determination

105,000 lb (467 kN) 95,000 lb (422.5 kN)

Ends in Warp, min

Ground

Binder

Stuffer

Yellow Marker

149 160

6190 (840 denier) or 991 (1260 denier)

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Filling Yarns per in. (25.4 mm), min

Extractable Matter

3.1 to 8.5% by wt.

Stiffness (angle subtended), max

35 deg

Color (after resin treatment)

Black

- 1/ Nonconformance shall be based on a length greater than 12 in. (305 mm).
- 2/ Single determination.
- 3/ A maximum of two single determinations per roll may deviate to -1/8 in. (-3 mm).