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AEROSPACE MATERIAL SPECIFICATION

AMS 3798/10

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Revised

WEBBING, LOW MODULUS ARAMID
1 (25) Wide, 6,000 (26,700) Breaking Strength
Herringbone Twill

1. SCOPE:

1.1 Form: This specification covers one width and one strength of low-modulus aramid webbing.

1.2 Application: Primarily for use in construction of parachutes.

1.3 Classification: 1 in. (25 mm) wide low-modulus aramid webbing having 6,000 lb (26,700 N) breaking strength.

2. APPLICABLE DOCUMENTS: Shall be as shown in AMS 3798.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification: The complete requirements for procuring the webbing described herein shall consist of this document and the latest issue of the basic specification, AMS 3798.

3.2 Construction and Properties:

3.2.1 Yarn: Yarn used in weaving the webbing shall be low-modulus aramid with a carbonization (char) temperature not lower than 355°C (670°F).

3.2.1.1 Denier and Filament Count: The yarn shall be 1,200 denier ± 15 and shall consist of 600 filaments ± 15.

3.2.1.2 Ply: Final warp yarn shall be not less than 2 ply and filling yarn shall be not less than 2 ply.

3.2.1.3 Twist: The final ply of yarn shall have not less than 2.5 turns per in. (25 mm) twist. The required denier and number of single yarns shall be twisted together (plied) in one operation.

3.2.2 Webbing: Shall conform to the following requirements:

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3.2.2.1 Weave: Shall be a 5-up, 1-down, 1-up, 5-down herringbone twill with 1 reversal at the center of the webbing. The weave is shown in Fig. 1.

3.2.2.2 Color: Shall be FED-STD-595, Olive Green 106 solution dyed, unless otherwise specified.

3.2.2.3 Width: Shall be 1.0 in. ± 0.06 (25.0 mm ± 1.5).

3.2.2.4 Thickness: Shall be 0.140 to 0.175 in. (3.55 to 4.45 mm).

3.2.2.5 Weight: Shall not exceed 2.70 oz per yd (84 g/m).

3.2.2.6 Breaking Strength: Shall be not less than 6,000 lb (26,700 N) unaged and not less than 85% of the unaged strength after aging (See 4.1).

3.2.2.7 Thread Count: Total warp ends (face and back) shall be not less than 252. Filling picks shall be not less than 17 per in. (25 mm).

3.3 Length and Put-up: Unless otherwise specified, webbing shall be furnished in rolls containing 90 - 110 yd (82 - 100 m). No roll shall contain more than 3 pieces and no piece shall be less than 10 yd (9 m) in length.

4. QUALITY ASSURANCE PROVISIONS: Shall be as in AMS 3798 and as follows:

4.1 Except for breaking strength, the physical and chemical values specified apply to the average of the determinations made on a sample unit for test purposes as specified in the applicable test methods. For breaking strength, the lot shall be rejected if the value of any individual determination is lower than the required minimum. The sample unit shall be as specified in the basic specification.

5. PREPARATION FOR DELIVERY: See AMS 3798.

6. ACKNOWLEDGMENT: See AMS 3798.

7. REJECTIONS: See AMS 3798.

8. NOTES: See AMS 3798.

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