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400 COMMONWEALTH DRIVE WARRENDALE PA 15096

AEROSPACE MATERIAL SPECIFICATION

AMS 3892/6

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Revised

TOW OR YARN, CARBON (GRAPHITE) FIBERS
For Structural Composites
GF 325 (2240) Tensile Strength, 57 (395) Tensile Modulus

1. SCOPE:

1.1 Form: This specification covers one type of continuous multifilament carbon (graphite) fibers in the form of a tow or yarn (when twisted). The weight per unit length of the tow or yarn is governed by the filament count which is identified by the supplier's grade or material designation.

1.2 Classification: Carbon (graphite) tow or yarn, derived from polyacrylonitrile precursor, with typical 325,000 psi (2240 MPa) tensile strength and 57,000,000 psi (395 GPa) tensile modulus for use in general purpose structural composite requiring moderately high tensile strength and high modulus of elasticity in tension.

2. APPLICABLE DOCUMENTS: See AMS 3892.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification: The complete requirements for procuring the carbon (graphite) tow or yarn described herein shall consist of this document and the latest issue of the basic specification, AMS 3892.

3.2 Storage Life: The product shall meet the interlaminar shear strength requirements of this specification when tested at any time up to 6 months from date of receipt by purchaser provided it has been stored at room temperature in the original closed container.

3.3 Properties: Shall be as follows; the requirements of 3.3.1, 3.3.2, and 3.3.3 apply to the average of the number of determinations indicated in the basic specification but no individual value shall be less than 90% of the specified minimum average unless due to an obvious testing problem, in which case a substitute specimen may be tested: