



Testing Laboratory Approval

for Independent Laboratory

MEMO Nº: AM-LAB-001-19 Rev.1

Approval Date : 13/09/2011

SUBJECT: INDEPENDENT TESTING LABORATORY APPROVAL

Revision Date: 29/06/2023

SCOPE: See Annex 1

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ENAC Doc.

ENAC Accreditation

REMARKS:

Airbus Defense and Space does not consider as valid any deviation not expressly stated in this document.



ANNEX 1

x METALLIC . MECHANICAL TESTING

| Test / Analysis | Method/ Test Procedure |
|--|---|
| Tensile test | ASTM E8/E8M / ASTM B557M / ASTM B557 / ASTM A370 / EN 2002-001 / UNE-EN ISO 6892-1 / UNE-EN ISO 6892-2 |
| Axial fatigue (HCF) | EN 6072 |
| Fracture toughness (K1c) | ASTM E399 |
| Rockwell Hardness (Scales HRA, HRB, HRC y HR15T) | ASTM E18 |
| Brinell Hardness | ASTM E10 |
| Pin-Type Bearing T | |



x COMPOSITES, ADHESIVES AND PLASTICS. MECHANICAL TESTING

| Test / Analysis | Method/ Test Procedure |
|--|---|
| Tensile Test | UNE-EN 2561 / UNE-EN ISO 527-1 / UNE-EN ISO 527-4 / UNE-EN ISO 527-5 / ASTM D3039/D3039M / EN 2597 / UNE EN 2597 / AITM 1-0007 / ASTM D638 / ASTM D882 / I+D-E-026 / I+D-E-253 / I+D-P-284 |
| Open Hole and Filled Hole Tensile Strength | AITM 1-0007 / ASTM D5766/D5766M |
| Compression test | UNE-EN 2850 / AITM 1-0008 / ASTM D6484/D6484M / ASTM D1621 / I+D-E-051 / UNE-EN ISO 14126 |
| Open Hole and Filled Hole Compression Strength | AITM 1-0008 / ASTM D6484/D6484M |
| Interlaminar Shear Strength | ASTM D2344/D2344 / UNE-EN 2563 / UNE-EN ISO 14130 / ABT 1-0006 / I+D-E-031 / I+D-E-255 / I+D-E-352 QVA-Z10-46-09 |
| Flexure | UNE-EN ISO 14125 / UNE-EN ISO 14125 / UNE-EN 2562 / ASTM D790 |
| In Plane Shear Strength | ASTM D3518/D3518M / EN 6031 / AITM 1-0002 / |



x COMPOSITES, ADHESIVES AND PLASTICS. MECHANICAL TESTING (Cont.)

| Test / Analysis | Method/ Test Procedure |
|---|--|
| Compressive tube shear | prEN 2667-2 |
| Determination of Pull-Out/ Pull-Through Strength on Riveted Joints | AITM 1-0066 |
| Bearing strength of composite laminates | I+D-E-325 / ASTM D5961/D5961M |
| Bearing/ Bypass interaction response of Polymer Laminates Using 2-Fasteners Specimens | ASTM D7248/D7248M |
| Compressive Residual Strenght Properties of Damage Polymer | ASTM D7137/D7137M |
| Tension Fatigue of Polymer Matrix Composite Materials | ASTM D3479/D3479M |
| Uniaxial Fatigue Properties of Plastics | ASTM D7791 |
| Flexural Fatigue Properties of Plastics | ASTM D7774 |
| Open-Hole Fatigue Response of Polymer Matrix Composite Laminates | ASTM D7615/D7615M |
| Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials by Four-Point Bending | ASTM D6272 |
| Flexural Properties of Polymer Matrix Composites Materials | ASTM D7264/D7264M |
| Fibre-Reinforced Plastic Composites. Determination of Flexural Properties | UNE-EN ISO 14125 |
| Facesheet Properties of Sandwich Constructions by Long Beam Flexure | ASTM D7249/D7249M |
| Interlaminar Fracture Toughness of Unidirectional Fiber-Reinforced Polymer Matrix Composites | ASTM D5528 / ISO 15024 / ASTM D7905/D7905M / ASTM D6671/D6671M |
| Determination of Fatigue of Fasteners in Mechanically Fastened Joints under Constant Amplitude Loading | AITM 1-0074 |
| Constant Amplitude Fatigue Testing on Coupons | AITM 1-0075 |
| Measuring the Damage Resistance of a Fiber-Reinforced Polymer Matrix Composite to a Drop-Weight Impact Event | ASTM D7136/D7136M |
| Measuring the Fastener Pull-Through Resistance of a Fiber-Reinforced Polymer Matrix Composite | ASTM D7332/ D7332M |
| Determination of Curved-Beam Failure Load | AITM 1-0069 |
| Bond or Cohesive Strength of Sheet Plastics and Electrical Insulating Materials | ASTM D952 |



x COMPOSITES, ADHESIVES AND PLASTICS. PHYSICAL, CHEMICAL, THERMAL AND OTHERS TESTING (Cont.)

| Test / Analysis | Method/ Test Procedure |
|--|---|
| Density of Sandwich Core Materials | ASTM C271/ 271M |
| Determination of the Laminate Ply Thickness | I+D-E-123 / I+D-E-124 / I+D-E-243 / ISO 4593 |
| End (Warp) and Pick (Filling) Count of Woven Fabrics | ASTM D3775 |
| Crack propagation test | I+D-E-301 |

x ELECTRICAL PROCESSES

| Test / Analysis | Method/ Test Procedure |
|-----------------|---------------------------|
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0. INDEX OF REVISIONS.

0.1 REVISIONS LOG

| Rev. | Date | Revised Pages. |
|--------------------|------|----------------|
| Signature Approval | | |

| 1 | 29/06/2023 | New approval is issued due to a general revision. |
|--|------------|---|
| <p>Daniel Sanchez Vivat TEPMS Certifier</p> | | |