



Testing laboratory Approval for Independent Laboratory

MEMO N°: AM-LAB-0007-11 Rev.7

Approval Date: 13 April 2011

SUBJECT: INDEPENDENT TESTING LABORATORY APPROVAL

Revision Date: 11 December 2018

SCOPE: See sheet No.2.

Centro Tecnológico de Miranda de Ebro (CTME)
Polígono Industrial de Bayas
C/ Montañana R 60-61.
09200. Miranda de Ebro. BURGOS

In accordance with CASA1400 is hereby approved as:

INDEPENDENT TESTING LABORATORY According to CASA-1400-55-FT

LIMITATIONS:

The approval is limited to the following scope:

- Approval valid as support to internal Processes performed in CTME plant, according to Airbus Defence and Space specifications of processes for which CTME has been qualified and for the test included on sheets No.2 to 4.

COMPLEMENTARY ACTIONS TO BE PERFORMED BY CTME:

The Qualification Dossier has to be maintained by supplier as process owner.

REFERENCE DOCUMENTATION:

173488	Nadcap Doc.	Nadcap CP Audit
182516	Nadcap Doc.	Nadcap NMMT Audit
772/LE2003	ENAC Doc.	ENAC Accreditation
1-2018 Rev 0	CTME Doc.	CTME Certification Dossier
2-2018 Rev 0	CTME Doc.	CTME Certification Dossier

REMARKS:

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

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ANNEX 1

AC7122/1 Rev B - Nadcap Audit Criteria for Non Metallic Materials Testing – Mechanical Testing

- 1.13.1 Floating Roller Peel
- 1.3.1 Shear Ambient Temperature by SBS
- 1.3.5 Shear Non-ambient (any method)
- 1.9.1 Single Lap Shear Ambient Temperature

AC7122/2 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing – Physical Testing

- 2.1.3 Hardness Testing: Shore
- 2.2.1 Density/ Specific Gravity
- 2.3.1 Resin/Fiber /Void Content by: Acid Digestion
- 2.3.2 Resin/Fiber /Void Content by: Burn off
- 2.3.3 Resin/Fiber /Void Content by: Solvent wash
- 2.4.1 Water Absorption
- 2.5.1 Volatile Content
- 2.6.1 Gel Time
- 2.7.1 Flow
- 2.8.1 Fiber Areal Weight
- 2.8.2 Prepreg Areal/Adhesive
- 2.9.1. Viscosity Liquid Resin

AC7122/3 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing – Chemical Testing

- 3.1.1 IR/FTIR

AC7122/4 Rev A - Nadcap Audit Criteria for Non Metallic Materials Testing – Thermal Analysis

- 4.1.1 Dynamic Mechanical Analysis (DMA)
- 4.2.1 Thermogravimetric Analysis (TGA)
- 4.3.1 Differential Scanning Calorimetry (DSC)

NADCAP- Independent Testing Laboratories Chemical Processing AC7108/4

Solution Analysis In Support of AC7108

- Testing Performed Internally In Support of the Chemical Process Accreditation
- B16 – Coating Thickness Measurement In Support of AC7108
- B03 – Metallographic Preparation In Support of AC7108
- B05 – Salt Spray Testing In Support of AC7108
- B22 – Solvent Resistance Testing In Support of AC7108
- B23 – Other Testing In Support of AC7108
 - Powdery coating test of conversion coating
 - Hydrogen Content by LECO
 - Sealing absorption according to ISO 2143
- B10 – Adhesion Testing (Adhesion Tape Testing) In Support of AC7108
- B13 – Coating Weight Testing In Support of AC7108
- B14 – Conductivity Testing In Support of AC7108

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772/LE2003 Rev./Ed.10

Determination of the glass transition temperature (T _g) of thermosetting materials by dynamic-mechanical analysis (DMA).	AITM 1-0003
Determination of the extent of cure of thermosetting materials by modulated differential scanning calorimetry (M-DSC).	PR-457 Método interno basado en /In house method based on: ASTM E 2602 AITM 3-0008
Determination of curing characteristics and glass transition temperature of non-cured thermosetting materials by differential scanning calorimetry (DSC).	AITM 3-0002
Qualitative and semi-quantitative analysis of organic compounds by infrared spectroscopy with Fourier transform (FTIR) by transmission.	AITM 3-0003
Determination of the glass transition temperature by modulated differential scanning calorimetry (MDSC). (Method A)	ASTM E 2602
Determination of mass per unit area of prepregates of carbon fiber and glass textile fiber.	UNE-EN 2557 UNE-EN 2329
Determination of volatile substances content in prepregates of carbon fiber and textile glass fiber.	UNE-EN 2558 UNE-EN 2330
Determination of resin and fiber content and fiber mass per unit area of prepregates of carbon and textile glass fiber. (Methods A and C)	UNE-EN 2559 UNE-EN 2331
Determination of fiber and resin contents and porosity rate in carbon fiber laminates. (Method B)	UNE-EN 2564
Determination of resin flow of prepregates of carbon fiber and glass textile fiber.	UNE-EN 2560 UNE-EN 2332 ASTM D3531/D3531M
Determination of gel time of resin in thermosetting resin system. (Method C)	AITM 3-0004:1995 ASTM D3532/3532M
Determination of interlaminar shear strength of fiber reinforced plastic.	UNE -EN 2563 UNE-EN 2377 UNE-EN ISO 14130 ASTM D2344/D2344
Determination of tensile properties of fiber reinforced plastic.	UNE-EN 2561 UNE-EN ISO 527-1 UNE-EN ISO 527-4 UNE-EN ISO 527-5 ASTM D 3039/D 3039M
Determination of properties of compression parallel to fiber direction of fiber reinforced plastic. (Method B)	UNE-EN 2850 I+D-E-51
Determination of mode I fracture toughness energy of bonded joints (G _{ic} Test).	AITM 1-0053
Determination of properties of flatwise tensile of sandwich panel.	AITM 1-0025
Determination of glass transition temperature, glass transition step height and melting and/or crystallization temperatures and enthalpies by differential scanning calorimetry (DSC).	AITM 3-0027 UNE-EN ISO 11357-1 UNE-EN ISO 11357-2 UNE-EN ISO 11357-3
Qualitative determination of plastic materials by infrared spectroscopy with fourier transform and attenuated total reflectance (FTIR-ATR).	Procedimiento interno In-house method PR-460
Thermogravimetric analysis (TGA) of polymers.	UNE-EN ISO 11358-1
Determination of the density of non-cellular plastics using the immersion method. (Method A)	UNE-EN ISO 1183-1
Determination of apparent viscosity by Brookfield test method of liquid resins in liquid state, emulsion or dispersion.	UNE-EN ISO 2555

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Determination of mass per unit area of preimpregnates of carbon fiber and glass textile fiber	UNE-EN ISO 868
Determination of the density of rubber vulcanized or thermoplastic using the immersion method. (Method A)	UNE-ISO 2781
Determination of the indentation hardness by the Shore durometer method (Shore hardness). (Method A and D)	UNE-ISO 7619-1 UNE-ISO 7619-1 Erratum ASTM D2240
Determination of apparent viscosity by Brookfield test method of adhesives whose flow properties are dependent on the shear rate.	ASTM D 2556
Determination of application time	AITM 7-0003
Determination of the curing rate	AITM 1-0033
Determination of tack free time	AITM 2-0034
Determination of non-volatile content	AITM 3-0025
Determination of assembly time	AITM 1-0036
Determination of sealant adhesion by lineal debonding test	AITM 2-0013

OTHERS	
Filiform corrosion resistance test	UNE-EN 3665

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