AIRBUS

BK WERKSTOFFTECHNIK PRUEFSTELLE

FUER WERKSTOFFE GMBH

ZUR AUMUNDSWIESE 2

28279, BREMEN

DE

143041

TYPE of External Shop

INDEPENDENT

Attestation letter for Qualification on Test Methods

Dear Madam, Dear Sir,

We herewith inform that the couples as detailed in the Appendix have been either registered or modified in the Official Airbus Qualified Test Methods List (QTML).

The latest valid status of all qualified couples is published by regular QTML reports :

- On Airbus homepage for Suppliers (https://www.airbus.com/be-an-airbus-supplier.html)- Only Independent Labs.
- On Airbus Supply Portal - All External Test Facilities.

A qualified couple is not linked to a specific product. It is the evidence that the External Test Facility is meeting the requirement of the M20691.2: Perform Couple Compliance and Maturity's Activities for Material Products Suppliers and/or M20691.3: Perform Couple Compliance and Maturity's Activities for Aerostructure Parts Suppliers.

- We ask you to inform AIRBUS about any modification which could affect the current qualification(s).

Airbus reserves the right to withdraw or suspend the qualification at any time for specific reason, e.g.

- Any major incident(s) detected on one or several Test processes
- Lack in quality, including the surveillance activities (PTP results, Nadcap accreditation, etc)
- Evidence Of non-compliance with the M20691.2 and/or M20691.3
- Loss of Airbus Supplier Approval
- Stop of the Business

Yours faithfully,
The Test Method Central Team

Appendix: Matrix of qualified Couples <Test Methods/ Shop>

Airbus SAS
Société par actions simplifiée au capital de 2.704.375 Euros
RCS Toulouse 383 474 81

Registered office:
1, rond-point Maurice Bellonte
31700 Blagnac, France

Attestation Issuance Date: 21/06/2022

AIRBUS

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for

BK WERKSTOFFTECHNIK PRUEFSTELLE - (143041)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
EN2562	CARBON FIBRE REINFORCED PLASTICS FLEXURAL TEST PARALLEL TO FIBRE DIRECTION	LOW	QUALIFIED		2022			
AITM1-0018	SANDWICH FLEXURAL TEST 4-POINT BENDING	LOW	QUALIFIED					
ASTME238	STANDARD TEST METHOD FOR PIN-TYPE BEARING TEST OF METALLIC MATERIALS	HIGH	QUALIFIED		2023	090556		
ISO148-1	METALLIC MATERIAL - CHARPY PENDULUM IMPACT TEST	LOW	AUTHORISED TO PROCEED-31/05/2022		2022			
ASTME9	STANDARD TEST METHODS OF COMPRESSION TESTING OF METALLIC MATERIALS AT ROOM TEMPERATURE	LOW	QUALIFIED		2022	090556		
ASTMG34	STANDARD PRACTICE FOR EVALUATING EXFOLIATION CORROSION SUSCEPTIBILITY IN 2XXX AND 7XXX SERIES ALUMINUM ALLOYS	LOW	QUALIFIED					

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AITM1-0009	FIBRE REINFORCED PLASTICS DETERMINATION OF BEARING STRENGTH BY EITHER PIN OR BOLT BEARING CONFIGURATION	HIGH	QUALIFIED		2022	090547		
AITM1-0010	FIBRE REINFORCED PLASTICS DETERMINATION OF COMPRESSION STRENGTH AFTER IMPACT	HIGH	QUALIFIED WITH LIMITATIONS	COMPRESSION TEST ONLY.	2022	131072		31/03/2022
AITM1-0007	FIBRE REINFORCED PLASTICS DETERMINATION OF PLAIN HOLE TENSILE STRENGTH COUNTERSUNK HEAD	LOW	QUALIFIED		2023			
AITM1-0019	DETERMINATION OF TENSILE LAP SHEAR STRENGTH OF COMPOSITE JOINTS	LOW	QUALIFIED		2023			
ASTMG110	STANDARD PRACTICE FOR EVALUATING INTERGRANULAR CORROSION RESISTANCE OF HEAT TREATABLE ALUMINUM ALLOYS BY IMERSION IN SODIUM CHLORIDE + HYDROGEN PEROXIDE SOLUTION	LOW	QUALIFIED					
EN6072	CONSTANT AMPLITUDE FATIGUE TESTING	HIGH	QUALIFIED WITH LIMITATIONS	"""Test Only - Speciment machining not allowed"""	2023	090560		

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AITM1-0005	FIBRE REINFORCED PLASTICS DETERMINATION OF INTERLAMINAR FRACTURE TOUGHNESS ENERGY MODE I	HIGH	QUALIFIED WITH LIMITATIONS	Also according to ASTM D5528	2022	090554		
AITM1-0006	FIBRE REINFORCED PLASTICS DETERMINATION OF INTERLAMINAR FRACTURE TOUGHNESS ENERGY MODE II	HIGH	QUALIFIED			090555		
ASTME384	TEST METHODE FOR MICROHARDNESS OF MATERIALS	LOW	QUALIFIED		2023			
ISO6506	METALLIC MATERIALS - BRINELL HARDNESS TEST	LOW	QUALIFIED		2023			
ISO6507	METALLIC MATERIALS - VICKERS HARDNESS TEST	LOW	QUALIFIED WITH LIMITATIONS	Also in accordance with AIPI04-00-005	2022			
ASTME407	TEST METHODE FOR MICROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED WITH LIMITATIONS	Also according to AIPI04-00-005				

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ASTME112	STANDARD TEST METHODS FOR DETERMINING AVERGAE GRAIN SIZE	LOW	QUALIFIED		2022			
AITM4-0002	MICROSTRUCTURAL CHARACTERIZATION OF WELDED ALUMINIUM STRUCTURES	LOW	QUALIFIED					
EN2002-1	TENSILE TESTING AT AMBIENT TEMPERATURE	LOW	QUALIFIED		2023			
EN2561	CARBON FIBRE REINFORCED PLASTICS TENSILE TEST PARALLEL TO FIBRE DIRECTION	LOW	QUALIFIED		2023			
EN2747	GLASS FIBRE REINFORCED PLASTICS TENSILE TEST	LOW	QUALIFIED					
AITM4-0003	TEST METHOD FOR DETERMINING THE PORE CONTENT OF FIBER REINFORCED PLASTICS USING AUTOMATIC IMAGE ANALYSIS	HIGH	QUALIFIED		2023	090257		

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ASTME340	TEST METHODE FOR MACROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
EN2597	CARBON FIBRE REINFORCED PLASTICS TENSILE TEST PERPENDICULAR TO THE FIBRE DIRECTION	LOW	QUALIFIED					
AITM1-0008	FIBRE REINFORCED PLASTICS DETERMINATION OF FILLED HOLE COMPRESSION STRENGTH COUNTERSUNK HEAD	HIGH	QUALIFIED WITH LIMITATIONS	*Limited to specimen type A1, A2 (Up to 250 kN), B, C & D	2022	110519-V02		
EN2850	CARBON FIBRE REINFORCED PLASTICS COMPRESSION TEST PARALLEL TO FIBRE DIRECTION LOAD INTRODUCTION BY SHEAR	HIGH	QUALIFIED		2022			
AITM1-0069	FIBRE REINFORCED PLASTICS DETERMINATION OF CURVED-BEAM FAILURE LOAD	HIGH	QUALIFIED		2022	150836		
EN2243-1	STRUCTURAL ADHESIVES SINGLE LAP SHEAR	LOW	QUALIFIED		2023			

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AITM1-0053	CARBON FIBRE REINFORCED PLASTIC-DETERMINATION OF FRACTURE TOUGHNESS ENERGY OF BONDED JOINTS-MODE I-G1C	HIGH	QUALIFIED WITH LIMITATIONS	Including Load Introduction using Blocks	2023	090554		
AITM1-0065	FIBER REINFORCED PLASTICS DETERMINATION OF JOINT STRENGTH OF MECHANICALLY FASTENED JOINTS	HIGH	QUALIFIED WITH LIMITATIONS	-No specimen type restriction, both types I, II and III are covered. / -Only pre-assembled specimens are covered. / -Full test temperature range is covered, typically -60ºC to 180ºC.	2022	180540		
AITM1-0066	FIBRE REINFORCED PLASTICS - DETERMINATION OF PULL-OUT/ PULL-THROUGH STRENGTH ON RIVETED JOINTS	LOW	QUALIFIED					
AITM1-0067	DETERMINATION OF TENSION THROUGH THE HOLE STRENGTH ON FASTENED JOINTS	LOW	QUALIFIED					
ISO643	STEELS - MICROGRAPHIC DETERMINATION OF THE APPARENT GRAIN SIZE	LOW	QUALIFIED		2022			
ASTME3	STANDARD GUIDE FOR PREPARATION OF METALLOGRAPHIC SPECIMENS	LOW	QUALIFIED WITH LIMITATIONS	Also according to AIPI04-00-005				

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AITM1-0001	FIBER REINFORCED PLASTICS DETERMINATION OF MECHANICAL DEGRADATION DUE TO CHEMICAL PAINT STRIPPERS	LOW	QUALIFIED					
AITM1-0002	FIBRE REINFORCED PLASTICSDETERMINATION OF IN-PLANE-SHEAR PROPERTIES	LOW	AUTHORISED TO PROCEED-30/11/2022		2022			
AITM1-0029	DETERMINATION OF TENSILE STRENGTH OF TAPERED OR STEPPED JOINTS	LOW	QUALIFIED					
ISO14130	FIBRE REINFORCED PLASTIC COMPOSITES: DETERMINATION OF APPARENT INTERLAMINAR SHEAR STRENGTH BY SHORT BEAM METHOD	LOW	QUALIFIED					
EN2563	CARBON FIBRE REINFORCED PLASTICS DETERMINATION OF APPARENT INTERLAMINAR SHEAR STRENGTH	LOW	QUALIFIED		2023			
NASM1312-4	FASTENER TEST METHODS LAP JOINT SHEAR TEST COMPOSITE	LOW	QUALIFIED					

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AITM4-0005	MACROSCOPIC AND MICROSCOPIC EXAMINATION OF FIBER REINFORCED PLASTICS	LOW	QUALIFIED					
EN2850	CARBON FIBRE REINFORCED PLASTICS COMPRESSION TEST PARALLEL TO FIBRE DIRECTION LOAD INTRODUCTION BY SHEAR	HIGH	QUALIFIED		2023	126629		
EN2564	AEROSPACE SERIES - CARBON FIBRE LAMINATES - DETERMINATION OF THE FIBRE RESIN AND VOID CONTENTS	LOW	QUALIFIED WITH LIMITATIONS	Also according to QVA-Z10-46-12	2023			
EN2823	FIBRE REINFORCED PLASTICS - DETERMINATION OF THE EFFECT OF EXPOSURE TO HUMID ATMOSPHERE	LOW	QUALIFIED					
EN2243-2	STRUCTURAL ADHESIVES PEEL METAL-METAL FLOATING ROLLER	LOW	QUALIFIED WITH LIMITATIONS	Also according to QVA-Z10-46-03	2023			
ISO178	PLASTICS ? DETERMINATION OF FLEXURAL PROPERTIES	LOW	QUALIFIED					

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ISO604	PLASTICS ? DETERMINATION OF COMPRESSIVE PROPERTIES	LOW	QUALIFIED					
ISO527-4	PLASTICS - DETERMINATION OF TENSILE PROPERTIES - PART 4: TEST CONDITIONS FOR ISOTROPIC AND ORTHOTROPIC FIBER REINFORCED PLASTIC COMPOSITES	LOW	QUALIFIED					
AITM1-0003	DETERMINATION OF THE GLASS TRANSITION TEMPERATURES	HIGH	QUALIFIED		2022	170021		
AITM3-0027	DETERMINATION OF THE MELTING BEHAVIOUR AND THE EXTENT OF CRYSTALLINITY OF SEMI-CRYSTALLINE MATERIALS BY DIFFERENTIAL SCANNING CALORIMETRY (DSC)	HIGH	QUALIFIED		2024	QCS220069		
AITM3-0008	DETERMINATION OF THE EXTENT OF CURE BY DIFFERENTIAL SCANNING CALORIMETRY	HIGH	QUALIFIED		2022	170023		
AITM3-0002	ANALYSE NICHTMETALLISCHER WERKSTOFFE (UNGEH?RTET) MITTELS DYNAMISCHER DIFFERENZKALORIMETRIE	HIGH	QUALIFIED		2022	170022		

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ISO4578	ADHESIVES ? DETERMINATION OF PEEL RESISTANCE OF HIGH-STRENGTH ADHESIVE BONDS ? FLOATING ROLLER METHOD	LOW	QUALIFIED					
EN2378	AEROSPACE SERIES - FIBRE REINFORCED PLASTICS - DETERMINATION OF WATER ABSORPTION BY IMMERSION	LOW	QUALIFIED					
ISO4587	ADHESIVE ? DETERMINATION OF TENSILE LAP-SHEAR STRENGTH OF RIGID-TO-RIGID BONDED ASSEMBLIES	LOW	QUALIFIED					
EN6018	DETERMINATION OF DENSITY ACCORDING TO DISPLACEMENT METHODE	LOW	QUALIFIED					
EN2003-9	AEROSPACE SERIES - TEST METHODS - TITANIUM AND TITANIUM ALLOYS - PART 009: DETERMINATION OF SURFACE CONTAMINATION	LOW	QUALIFIED WITH LIMITATIONS	Also according to AIPI04-00-005	2023			

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ISO6508	METALLIC MATERIALS - ROCKWELL HARDNESS TEST	LOW	SUSPENDED		2020			
EN2243-3	STRUCTURAL ADHESIVES PEELING TEST METAL HONEYCOMB-CORE DRUM PEEL TEST	LOW	SUSPENDED					

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