

WESTMORELAND MECHANICAL
TESTING & RESEARCH LTD
19 WILDMERE ROAD
OX16 3JU, BANBURY, OXON
GB

TYPE of External Shop
INDEPENDENT

#### Attestation letter for Qualification on Test Methods

Dear Madam, Dear Sir,

257831

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 (<a href="https://www.airbus.com/be-an-airbus-supplier.html">https://www.airbus.com/be-an-airbus-supplier.html</a>)-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>

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

# Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for WESTMORELAND MECHANICAL - (257831)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ISO9227	CORROSION TESTS IN ARTIFICIAL ATMOSPHERES - SALT SPRAY TESTS	LOW	QUALIFIED		2022			
ASTME647	STANDARD TEST METHOD FOR MEASUREMENT OF FATIGUE CRACK GROWTH RATES	HIGH	AUTHORISED TO PROCEED-31/03/2022		2023			
EN6072	CONSTANT AMPLITUDE FATIGUE TESTING	HIGH	QUALIFIED		2023	ST0147		
ASTME399	STANDARD TEST METHOD FOR PLAIN STRAIN FRACTURE TOUGHNESS OF METALLIC MATERIALS	HIGH	QUALIFIED		2023			
ASTME384	TEST METHODE FOR MICROHARDNESS OF MATERIALS	LOW	QUALIFIED		2022			
ASTME18	STANDARD TEST METHODS FOR ROCKWELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			

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EN2002-2	TENSILE TESTING AT ELEVATED TEMPERATURE	LOW	QUALIFIED		2022			
EN2002-1	TENSILE TESTING AT AMBIENT TEMPERATURE	LOW	QUALIFIED		2022			
EN2002-6	METALLIC MATERIALS: BEND TESTING	LOW	QUALIFIED					
EN2832	HYDROGEN EMBRITTLEMENT OF STEELS; NOTCHED SPECIMEN TEST	LOW	QUALIFIED		2022			
ASTMB769	STANDARD TEST METHOD FOR SHEAR TESTING OF ALUMINUM ALLOYS	LOW	QUALIFIED					
ASTME9	STANDARD TEST METHODS OF COMPRESSION TESTING OF METALLIC MATERIALS AT ROOM TEMPERATURE	LOW	QUALIFIED		2022			

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ASTME238	STANDARD TEST METHOD FOR PIN-TYPE BEARING TEST OF METALLIC MATERIALS	HIGH	QUALIFIED		2021	180986		
ASTME3	STANDARD GUIDE FOR PREPARATION OF METALLOGRAPHIC SPECIMENS	LOW	QUALIFIED					
ISO4516	METALLIC AND OTHER INORGANIC COATINGS - VICKERS AND KNOOP MICROHARDNESS TESTS	LOW	QUALIFIED					
ASTME112	STANDARD TEST METHODS FOR DETERMINING AVERGAE GRAIN SIZE	LOW	QUALIFIED		2022			
ASTME45	STANDARD TEST METHODS FOR DETERMINING THE INCLUSION CONTENT OF STEEL	LOW	QUALIFIED		2022			
EN3114	AEROSPACE SERIES - MICROSTRUCTURE OF (A+?) TITANIUM ALLOYS WROUGHT PRODUCTS - PART?1 2 3 AND 4	LOW	QUALIFIED					

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ASTME407	TEST METHODE FOR MICROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME340	TEST METHODE FOR MACROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME10	STANDARD TEST METHOD FOR BRINELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			
ASTMG85	STANDARD PRACTICE FOR MODIFIED SALT SPRAY (FOG) TESTING EXPERTISE: EDSWB / MAIN USER: EDSWO	LOW	QUALIFIED					
ASTMG34	STANDARD PRACTICE FOR EVALUATING EXFOLIATION CORROSION SUSCEPTIBILITY IN 2XXX AND 7XXX SERIES ALUMINUM ALLOYS	LOW	QUALIFIED					
ASTMG66	STANDARD PRACTICE FOR VISUAL ASSESMENT OF EXFOLIATION CORROSION SUSCEPTIBILITY OF 5XXX SERIES ALUMINUM ALLOYS (ASSET TEST)	LOW	QUALIFIED					

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EN2561	CARBON FIBRE REINFORCED PLASTICS TENSILE TEST PARALLEL TO FIBRE DIRECTION	LOW	QUALIFIED		2022			
ASTME111	STANDARD TEST METHOD FOR YOUNG'S MODULUS TANGENT MODULUS AND CHORD MODULUS	HIGH	QUALIFIED					
EN2850	CARBON FIBRE REINFORCED PLASTICS COMPRESSION TEST PARALLEL TO FIBRE DIRECTION LOAD INTRODUCTION BY SHEAR	HIGH	QUALIFIED WITH LIMITATIONS	"""LIMITED TO TYPE B TEST PIECE"""	2022			
AITM1-0019	DETERMINATION OF TENSILE LAP SHEAR STRENGTH OF COMPOSITE JOINTS	LOW	QUALIFIED		2023			
EN2563	CARBON FIBRE REINFORCED PLASTICS DETERMINATION OF APPARENT INTERLAMINAR SHEAR STRENGTH	LOW	QUALIFIED		2022			
ASTMB117	STANDARD PRACTICE FOR OPERATING SALT SPRAY (FOG) APPARATUS	LOW	QUALIFIED		2022			

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ISO643	STEELS - MICROGRAPHIC DETERMINATION OF THE APPARENT GRAIN SIZE	LOW	QUALIFIED		2022			
ASTME8	STANDARD TEST METHODS FOR TENSION TESTING OF METALLIC MATERIALS	LOW	QUALIFIED		2022			
EN2003-9	AEROSPACE SERIES - TEST METHODS - TITANIUM AND TITANIUM ALLOYS - PART 009: DETERMINATION OF SURFACE CONTAMINATION	LOW	QUALIFIED		2022			
AITM1-0009	FIBRE REINFORCED PLASTICS DETERMINATION OF BEARING STRENGTH BY EITHER PIN OR BOLT BEARING CONFIGURATION	HIGH	QUALIFIED		2022	180987		
ISO4287	GEOMETRICAL PRODUCT SPECIFICATION (GPS) - SURFACE TEXTURE: PROFILE METHOD - TERMS DEFINITIONS AND SURFACE TEXTURE PARAMETERS	LOW	QUALIFIED WITH LIMITATIONS	ACCORDING TO INTERNAL PROCEDURE WMTR/QTP/EM003 / MEASUREMENT OF RA AND RZ				11/03/2022
ASTME21	STANDARD TEST METHODS FOR ELEVATED TEMPERATURE TENSION TESTS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			

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ASTMF519	STANDARD TEST METHOD FOR MECHANICAL HYDROGEN EMBRITTLEMENT EVALUATION OF PLATING/COATING PROCESSES AND SERVICE ENVIRONMENTS	LOW	QUALIFIED		2022			
ASTMG44	STANDARD PRACTICE FOR EXPOSURE OF METALS AND ALLOYS BY ALTERNATE IMMERSION IN NEUTRAL 3.5% SODIUM CHLORIDE SOLUTION	HIGH	QUALIFIED WITH LIMITATIONS	ONLY CONSTANT STRAIN AND CONSTANT LOAD METHODS	2022	200424		22/03/2022
ASTMG47	STANDARD TEST METHOD FOR DETERMINING SUSCEPTIBILITY TO STRESS-CORROSION CRACKING OF 2XXX AND 7XXX ALUMINUM ALLOY PRODUCTS	HIGH	QUALIFIED WITH LIMITATIONS	ONLY CONSTANT STRAIN AND CONSTANT LOAD METHODS	2022	200424		22/03/2022
ASTMG49	STANDARD PRACTICE FOR PREPARATION AND USE OF DIRECT TENSION STRESS-CORROSION TEST SPECIMENS	HIGH	QUALIFIED WITH LIMITATIONS	ONLY CONSTANT STRAIN AND CONSTANT LOAD METHODS	2022	200424		22/03/2022
EN2002-7	HARDNESS TESTING	LOW	QUALIFIED		2022			
ASTME1447	STANDARD TEST METHOD FOR DETERMINATION OF HYDROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION THERMAL CONDUCTIVITY/INFRARED DETECTION METHOD	LOW	QUALIFIED		2023			

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ASTME1409	STANDARD TEST METHOD FOR DETERMINATION OF OXYGEN AND NITROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION TECHNIQUE	LOW	QUALIFIED		2023			
ASTME1019	STANDARD TEST METHOD FOR DETERMINATION OF CARBON SULFUR NITROGEN AND OXYGEN IN STEEL IRON NICKEL AND COBALT ALLOYS BY VARIOUS COMBUSTION AND FUSION TECHNIQUES	LOW	QUALIFIED		2023			
ISO6506	METALLIC MATERIALS - BRINELL HARDNESS TEST	LOW	QUALIFIED		2023			
ISO6507	METALLIC MATERIALS - VICKERS HARDNESS TEST	LOW	QUALIFIED		2022			
EN2002-5	TEST METHODS FOR METALLIC MATERIALS - PART 5 : UNINTERRUPTED CREEP AND STRESS- RUPTURE TESTING	LOW	QUALIFIED WITH LIMITATIONS	"INCLUDING CREEP STRAIN TEST WITH EXTENSOMETER METHOD AND STRESS RUPTURE TEST"				22/03/2022

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AITM1-0007	FIBRE REINFORCED PLASTICS DETERMINATION OF PLAIN HOLE TENSILE STRENGTH COUNTERSUNK HEAD	LOW	SUSPENDED	SUSPENDED AS CURRENTLY NO OPERATOR IS QUALIFIED (OPERATOR LEFT THE LAB)	2022			

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