

ELEMENT MATERIALS TECHNOLOGY

CLEVELAND

5405 EAST SCHAAF ROAD

44131, CLEVELAND

US

298998

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, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (298998)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
AITM4-0002	MICROSTRUCTURAL CHARACTERIZATION OF WELDED ALUMINIUM STRUCTURES	LOW	AUTHORISED TO PROCEED-31/01/2024					13/12/2023
ASTMA262	STANDARD PRACTICES FOR DETECTING SUSCEPTIBILITY TO INTERGRANULAR ATTACK IN AUSTENITIC STAINLESS STEELS	LOW	QUALIFIED					28/11/2022
ASTMA604	STANDARD PRACTICE FOR MACROETCH TESTING OF CONSUMABLE ELECTRODE REMELTED STEEL BARS AND BILLETS	LOW	QUALIFIED					28/11/2022
ASTMB487	TEST METHOD FOR MEASUREMENT OF METAL AND OXIDE COATING THICKNESSES BY MICROSCOPICAL EXAMINATION OF A CROSS-SECTION	LOW	QUALIFIED WITH LIMITATIONS	MICROSCOPIE NOT APPLIED ON FASTENER				28/11/2022
ASTMB645	STANDARD PRACTICE FOR LINEAR-ELASTIC PLANE-STRAIN FRACTURE TOUGHNESS TESTING OF ALUMINIUM ALLOYS	HIGH	QUALIFIED		2025			28/11/2022
ASTME10	STANDARD TEST METHOD FOR BRINELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2025			21/11/2022

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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: 26/01/2024

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (298998)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTME112	STANDARD TEST METHODS FOR DETERMINING AVERAGE GRAIN SIZE	LOW	QUALIFIED		2025			28/11/2022
ASTME139	STANDARD TEST METHODS FOR CONDUCTING CREEP CREEP-RUPTURE AND STRESS-RUPTURE TESTS OF METALLIC MATERIALS	LOW	QUALIFIED		2024			21/11/2022
ASTME1409	STANDARD TEST METHOD FOR DETERMINATION OF OXYGEN AND NITROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION TECHNIQUE	LOW	AUTHORISED TO PROCEED-31/03/2024		2024			04/10/2023
ASTME1447	STANDARD TEST METHOD FOR DETERMINATION OF HYDROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION THERMAL CONDUCTIVITY/INFRARED DETECTION METHOD	LOW	AUTHORISED TO PROCEED-31/03/2024		2024			04/10/2023
ASTME18	STANDARD TEST METHODS FOR ROCKWELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2024			21/11/2022
ASTME2371	STANDARD TEST METHOD FOR ANALYSIS OF TITANIUM AND TITANIUM ALLOYS BY ATOMIC EMISSION PLASMA SPECTROMETRY	LOW	AUTHORISED TO PROCEED-31/03/2024		2024			15/01/2024

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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: 26/01/2024

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (298998)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTME3	STANDARD GUIDE FOR PREPARATION OF METALLOGRAPHIC SPECIMENS	LOW	QUALIFIED					28/11/2022
ASTME34	STANDARD TEST METHODS FOR CHEMICAL ANALYSIS OF ALUMINUM AND ALUMINUM-BASE ALLOYS	LOW	AUTHORISED TO PROCEED-31/03/2024		2024			13/09/2022
ASTME340	TEST METHODE FOR MACROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					21/11/2022
ASTME399	STANDARD TEST METHOD FOR PLAIN STRAIN FRACTURE TOUGHNESS OF METALLIC MATERIALS	HIGH	QUALIFIED		2025	180692		20/12/2022
ASTME407	TEST METHODE FOR MICROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					21/11/2022
EN10276	DETERMINATION FO OXYGENIN STEEL AND IRON.	LOW	AUTHORISED TO PROCEED WITH LIMITATIONS-31/03/2024	THE COMPOSITION OF SULFUR ELEMENT (S) CAN NOT BE DETERMINED UNDER 0.0002% BY COMBUSTION	2024			28/11/2022

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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: 26/01/2024

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (298998)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
EN2002-1	TENSILE TESTING AT AMBIENT TEMPERATURE	LOW	QUALIFIED WITH LIMITATIONS	LIMITATION 1:- FLAT COUPON TESTING NOT AUTHORISED / - YOUNG'S MODULUS NOT INCLUDED / - ALL ALLOYS LIMITATION 2: INTERCHANGEABILITY PER 19772-ICY-CS NOTE- 2 WAYS WITH ASTM B 557 AND ASTM E8	2025			29/09/2023
EN2002-6	METALLIC MATERIALS: BEND TESTING	LOW	QUALIFIED					21/11/2022
EN2003-10	AEROSPACE SERIES - TITANIUM AND TITANIUM ALLOYS - TEST METHODS - PART 010: SAMPLING FOR DETERMINATION OF HYDROGEN CONTENT	LOW	AUTHORISED TO PROCEED-31/03/2024		2024			15/01/2024
EN2003-9	AEROSPACE SERIES - TEST METHODS - TITANIUM AND TITANIUM ALLOYS - PART 009: DETERMINATION OF SURFACE CONTAMINATION	LOW	QUALIFIED WITH LIMITATIONS	"LIMITED TO METHOD "A"	2025			23/08/2023
ISO148-1	METALLIC MATERIAL - CHARPY PENDULUM IMPACT TEST	LOW	QUALIFIED WITH LIMITATIONS	ONLY AT ROOM TEMPERATURE	2025			20/09/2023
SAEAMS2315	DETERMINATION OF DELTA FERRITE CONTENT	LOW	QUALIFIED					21/11/2022

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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: 26/01/2024

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (298998)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTME8	STANDARD TEST METHODS FOR TENSION TESTING OF METALLIC MATERIALS	LOW	WITHDRAWN	- FLAT COUPON TESTING NOT AUTHORISED / - YOUNG'S MODULUS NOT INCLUDED				24/03/2023

© Airbus SAS, 2014. All rights reserved. Confidential and proprietary document. This document and all information contained herein is the sole property of Airbus SAS. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to a third party without the express written consent of Airbus SAS. This document and its content shall not be used for any purpose other than that for which it is supplied.

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