

ELEMENT MATERIALS TECHNOLOGY

TEESSIDE

HOLWICK ROAD RIVERSIDE PARK

TS2 1QS, MIDDLESBROUGH

GB

318843

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 - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTMA262	STANDARD PRACTICES FOR DETECTING SUSCEPTIBILITY TO INTERGRANULAR ATTACK IN AUSTENITIC STAINLESS STEELS	LOW	QUALIFIED					
ASTMA604	STANDARD PRACTICE FOR MACROETCH TESTING OF CONSUMABLE ELECTRODE REMELTED STEEL BARS AND BILLETS	LOW	QUALIFIED					
ASTMB213	STANDARD TEST METHODS FOR FLOW RATE OF METAL POWDERS USING THE HALL FLOW METER FUNNEL	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023
ASTMB214	SIEVE ANALYSIS OF METAL POWDERS	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023
ASTMB215	STANDARD PRACTICES FOR SAMPLING METAL POWDERS	LOW	QUALIFIED		2023			24/04/2023
ASTMB417	APPARENT DENSITY OF NON-FREE-FLOWING METAL POWDERS USING THE CARNEY FUNNEL	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023

© 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

Attestation Issuance Date: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTMB527	STANDARD TEST METHOD FOR DETERMINATION OF TAP DENSITY OF METALLIC POWDERS AND COMPOUNDS	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023
ASTMB822	STANDARD TEST METHOD FOR PARTICLE SIZE DISTRIBUTION OF METAL POWDERS AND RELATED COMPOUNDS BY LIGHT SCATTERING	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023
ASTME10	STANDARD TEST METHOD FOR BRINELL HARDNESS OF METALLIC MATERIALS	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			
ASTME1077	STANDARD TEST METHODS FOR ESTIMATING THE DEPTH OF DECARBURIZATION OF STEEL SPECIMENS	LOW	QUALIFIED					
ASTME112	STANDARD TEST METHODS FOR DETERMINING AVERAGE GRAIN SIZE	LOW	QUALIFIED		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

Attestation Issuance Date: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTME1409	STANDARD TEST METHOD FOR DETERMINATION OF OXYGEN AND NITROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION TECHNIQUE	LOW	QUALIFIED		2024			
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		2024			
ASTME18	STANDARD TEST METHODS FOR ROCKWELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2023			
ASTME1941	DETERMINATION OF CARBON IN REFRACTORY AND REACTIVE METALS AND THEIR ALLOYS BY COMBUSTION ANALYSIS	LOW	QUALIFIED		2024			
ASTME21	STANDARD TEST METHODS FOR ELEVATED TEMPERATURE TENSION TESTS OF METALLIC MATERIALS	LOW	QUALIFIED		2023			
ASTME2371	STANDARD TEST METHOD FOR ANALYSIS OF TITANIUM AND TITANIUM ALLOYS BY ATOMIC EMISSION PLASMA SPECTROMETRY	LOW	QUALIFIED		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: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ASTME2465	STANDARD TEST METHOD FOR ANALYSIS OF NI-BASE ALLOYS BY WAVELENGTH DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY	LOW	QUALIFIED		2024			
ASTME3	STANDARD GUIDE FOR PREPARATION OF METALLOGRAPHIC SPECIMENS	LOW	QUALIFIED					
ASTME340	TEST METHODE FOR MACROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME384	TEST METHODE FOR MICROHARDNESS OF MATERIALS	LOW	QUALIFIED		2023			
ASTME407	TEST METHODE FOR MICROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME45	STANDARD TEST METHODS FOR DETERMINING THE INCLUSION CONTENT OF STEEL	LOW	QUALIFIED WITH LIMITATIONS	Limited to methods A and D	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: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

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	QUALIFIED		2023			
ASTME930	STANDARD TEST METHODS FOR ESTIMATING THE LARGEST GRAIN OBSERVED IN A METALLOGRAPHIC SECTION (ALA GRAIN SIZE)	LOW	QUALIFIED					
EN2002-1	TENSILE TESTING AT AMBIENT TEMPERATURE	LOW	AUTHORISED TO PROCEED WITH LIMITATIONS-30/09/2023	INTERCHANGEABILITY PER 19772-ICY-CS NOTE- 2 WAYS WITH ASTM B 557	2023			14/09/2022
EN2002-2	TENSILE TESTING AT ELEVATED TEMPERATURE	LOW	QUALIFIED		2023			
EN2003-9	AEROSPACE SERIES - TEST METHODS - TITANIUM AND TITANIUM ALLOYS - PART 009: DETERMINATION OF SURFACE CONTAMINATION	LOW	QUALIFIED		2024			
ISO13320	PARTICLE SIZE ANALYSIS ? LASER DIFFRACTION METHODS	LOW	AUTHORISED TO PROCEED-31/10/2023		2023			24/04/2023

© 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

Attestation Issuance Date: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ISO148-1	METALLIC MATERIAL - CHARPY PENDULUM IMPACT TEST	LOW	QUALIFIED		2023			28/09/2022
ISO17639	DESTRUCTIVE TESTS ON WELDS IN METALLIC MATERIALS - MACROSCOPIC AND MICROSCOPIC EXAMINATION OF WELDS	LOW	QUALIFIED					
ISO5173	DESTRUCTIVE TESTS ON WELDS IN METALLIC MATERIALS ?BEND TESTS	LOW	QUALIFIED					
ISO6506	METALLIC MATERIALS - BRINELL HARDNESS TEST	LOW	QUALIFIED		2023			
ISO6507	METALLIC MATERIALS - VICKERS HARDNESS TEST	LOW	QUALIFIED		2023			
ISO6508	METALLIC MATERIALS - ROCKWELL HARDNESS TEST	LOW	QUALIFIED		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

Attestation Issuance Date: 03/07/2023

Test Methods (TM) as listed in Airbus Commercial Aircraft QTML for ELEMENT MATERIALS TECHNOLOGY - (318843)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
ISO6892	METALLIC MATERIALS - TENSILE TESTING - PART 1: METHOD OF TEST AT ROOM TEMPERATURE PART 2: METHOD OF TEST AT ELEVATED TEMPERATURE PART 3: METHOD OF TEST AT LOW TEMPERATURE	LOW	QUALIFIED		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

Attestation Issuance Date: 03/07/2023