

ELEMENT MATERIALS TECHNOLOGY

HUNTINGTON BEACH BRANCH

15062 BOLSA CHICA STREET

92649, HUNTINGTON

US

309680

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>

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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 - (309680)

Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
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		2022			
ASTME415	STANDARD TEST METHOD FOR ANALYSIS OF CARBON AND LOW-ALLOY STEEL BY SPARK ATOMIC EMISSION SPECTROMETRY	LOW	QUALIFIED		2022			
SAEAMS2315	DETERMINATION OF DELTA FERRITE CONTENT	LOW	QUALIFIED					
ASTME1409	STANDARD TEST METHOD FOR DETERMINATION OF OXYGEN AND NITROGEN IN TITANIUM AND TITANIUM ALLOYS BY THE INERT GAS FUSION TECHNIQUE	LOW	QUALIFIED WITH LIMITATIONS	*Nitrogen detection not included	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 WITH LIMITATIONS	*Nitrogen detection not included	2022			
ASTME2371	STANDARD TEST METHOD FOR ANALYSIS OF TITANIUM AND TITANIUM ALLOYS BY ATOMIC EMISSION PLASMA SPECTROMETRY	LOW	QUALIFIED		2022			

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ASTME34	STANDARD TEST METHODS FOR CHEMICAL ANALYSIS OF ALUMINUM AND ALUMINUM-BASE ALLOYS	LOW	QUALIFIED		2023			
ASTME572	STANDARD TEST METHOD FOR ANALYSIS OF STAINLESS AND ALLOY STEELS BY WAVELENGTH DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY	LOW	QUALIFIED		2022			
EN10276	DETERMINATION FO OXYGENIN STEEL AND IRON.	LOW	QUALIFIED		2022			
EN2003-10	AEROSPACE SERIES - TITANIUM AND TITANIUM ALLOYS - TEST METHODS - PART 010: SAMPLING FOR DETERMINATION OF HYDROGEN CONTENT	LOW	QUALIFIED		2022			
ASTMB769	STANDARD TEST METHOD FOR SHEAR TESTING OF ALUMINUM ALLOYS	LOW	QUALIFIED					
ASTME139	STANDARD TEST METHODS FOR CONDUCTING CREEP CREEP-RUPTURE AND STRESS-RUPTURE TESTS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			

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ASTME8	STANDARD TEST METHODS FOR TENSION TESTING OF METALLIC MATERIALS	LOW	QUALIFIED		2022			
ASTME9	STANDARD TEST METHODS OF COMPRESSION TESTING OF METALLIC MATERIALS AT ROOM TEMPERATURE	LOW	QUALIFIED		2022			
ISO148-1	METALLIC MATERIAL - CHARPY PENDULUM IMPACT TEST	LOW	QUALIFIED		2022			
EN2002-1	TENSILE TESTING AT AMBIENT TEMPERATURE	LOW	QUALIFIED		2022			
EN2002-2	TENSILE TESTING AT ELEVATED TEMPERATURE	LOW	QUALIFIED		2022			
EN2002-6	METALLIC MATERIALS: BEND TESTING	LOW	QUALIFIED					

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EN2832	HYDROGEN EMBRITTLEMENT OF STEELS; NOTCHED SPECIMEN TEST	LOW	QUALIFIED		2022			
EN6018	DETERMINATION OF DENSITY ACCORDING TO DISPLACEMENT METHODE	LOW	QUALIFIED					
ASTME3	STANDARD GUIDE FOR PREPARATION OF METALLOGRAPHIC SPECIMENS	LOW	QUALIFIED WITH LIMITATIONS	- Element Materials (15062, Bolsa Chica site): Limited to Longitudinal polishing. / - Element Materials (15678, Graham street site): Limited to Metallic specimen machining made for Element Materials (15062 Bolsa chica site)				
AITM4-0002	MICROSTRUCTURAL CHARACTERIZATION OF WELDED ALUMINIUM STRUCTURES	LOW	QUALIFIED					
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					

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ASTME112	STANDARD TEST METHODS FOR DETERMINING AVERAGE GRAIN SIZE	LOW	QUALIFIED		2023			
ASTME340	TEST METHODE FOR MACROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME384	TEST METHODE FOR MICROHARDNESS OF MATERIALS	LOW	QUALIFIED		2022			
ASTME407	TEST METHODE FOR MICROETCHING OF METALS AND ALLOYS	LOW	QUALIFIED					
ASTME45	STANDARD TEST METHODS FOR DETERMINING THE INCLUSION CONTENT OF STEEL	LOW	QUALIFIED		2022			
ISO6507	METALLIC MATERIALS - VICKERS HARDNESS TEST	LOW	QUALIFIED		2022			

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ISO6508	METALLIC MATERIALS - ROCKWELL HARDNESS TEST	LOW	QUALIFIED		2022			
ASTMB117	STANDARD PRACTICE FOR OPERATING SALT SPRAY (FOG) APPARATUS	LOW	AUTHORISED TO PROCEED-30/09/2022		2022			
ISO9227	CORROSION TESTS IN ARTIFICIAL ATMOSPHERES - SALT SPRAY TESTS	LOW	QUALIFIED		2022			
ASTMG85	STANDARD PRACTICE FOR MODIFIED SALT SPRAY (FOG) TESTING EXPERTISE: EDSWB / MAIN USER: EDSWO	LOW	QUALIFIED					
NASM1312-1	FASTENER TEST METHODS SALT SPRAY	LOW	QUALIFIED					
NASM1312-3	FASTENER TEST METHODS HUMIDITY	LOW	QUALIFIED					

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NASM1312-5	FASTENER TEST METHODS STRESS DURABILITY	LOW	QUALIFIED					
NASM1312-6	FASTENER TEST METHODS HARDNESS	LOW	QUALIFIED					
NASM1312-8	FASTENER TEST METHODS TENSILE STRENGTH	LOW	QUALIFIED		2022			
NASM1312-9	FASTENER TEST METHODS STRESS CORROSION	LOW	QUALIFIED					
NASM1312-10	FASTENER TEST METHODS STRESS RUPTURE	LOW	QUALIFIED					
NASM1312-12	FASTENER TEST METHODS THICKNESS OF METALLIC COATINGS	LOW	QUALIFIED					

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Test Standard(s)*	Test label	Complexity	Qualification Status	Limitation	Next External comparison test Participation. **	Technical Qualification Reference	Deviation Reference	Last Qualification Update date
NASM1312-13	FASTENER TEST METHODS DOUBLE SHEAR TEST	LOW	QUALIFIED		2022			
NASM1312-14	FASTENER TEST METHODS STRESS DURABILITY (INTERNALLY THREADED FASTENERS)	LOW	QUALIFIED					
NASM1312-18	FASTENER TEST METHODS ELEVATED TEMPERATURE TENSILE STRENGTH	LOW	QUALIFIED					
NASM1312-20	FASTENER TEST METHODS SINGLE SHEAR	LOW	QUALIFIED					
NASM1312-25	FASTENER TEST METHODS DRIVING RECESS TORQUE QUALITY CONFORMANCE TEST	LOW	QUALIFIED					
NASM1312-31	FASTENER TEST METHODS TORQUE	LOW	QUALIFIED					

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ASTME1941	DETERMINATION OF CARBON IN REFRACTORY AND REACTIVE METALS AND THEIR ALLOYS BY COMBUSTION ANALYSIS	LOW	QUALIFIED WITH LIMITATIONS	*Sulphur Detection Capability: higher than 0.0010%	2022			
ASTMG34	STANDARD PRACTICE FOR EVALUATING EXFOLIATION CORROSION SUSCEPTIBILITY IN 2XXX AND 7XXX SERIES ALUMINUM ALLOYS	LOW	QUALIFIED					
ISO2409	PAINTS AND VARNISHES - CROSS-CUT TEST	LOW	AUTHORISED TO PROCEED-31/10/2022		2023			
ASTME2465	STANDARD TEST METHOD FOR ANALYSIS OF NI-BASE ALLOYS BY WAVELENGTH DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY	LOW	QUALIFIED		2023			
ASTME322	STANDARD TEST METHOD FOR ANALYSIS OF LOW-ALLOY STEELS AND CAST IRONS BY WAVELENGTH DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY	LOW	QUALIFIED		2022			
ASTME1086	STANDARD TEST METHOD FOR ANALYSIS OF AUSTENITIC STAINLESS STEEL BY SPARK ATOMIC EMISSION SPECTROMETRY	LOW	QUALIFIED		2022			

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ASTME1834	STANDARD TEST METHOD FOR ANALYSIS OF NICKEL ALLOYS BY GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROMETRY	LOW	QUALIFIED		2023			
ASTME1181	STANDARD TEST METHODS FOR CHARACTERIZING DUPLEX GRAIN SIZES	LOW	QUALIFIED					
ASTME930	STANDARD TEST METHODS FOR ESTIMATING THE LARGEST GRAIN OBSERVED IN A METALLOGRAPHIC SECTION (ALA GRAIN SIZE)	LOW	QUALIFIED					
ASTME10	STANDARD TEST METHOD FOR BRINELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			
EN2003-7	AEROSPACE SERIES - TEST METHODS FOR METALLIC MATERIALS ?PART 8 : MACROGRAPHIC TEST	NA	QUALIFIED					
ASTME18	STANDARD TEST METHODS FOR ROCKWELL HARDNESS OF METALLIC MATERIALS	LOW	QUALIFIED		2022			

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ASTMB923	STANDARD TEST METHOD FOR METAL POWDER SKELETAL DENSITY BY HELIUM OR NITROGEN PYCNOMETRY	LOW	QUALIFIED					
NASM1312-11	FASTENER TEST METHODS TENSION FATIGUE	HIGH	QUALIFIED		2022	210997		07/06/2022

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EN2831	HYDROGEN EMBRITTLEMENT OF STEELS - TEST BY SLOW BENDING	LOW	SUSPENDED					
NASM1312-2	FASTENER TEST METHODS INTERACTION	LOW	SUSPENDED					
NASM1312-4	FASTENER TEST METHODS LAP JOINT SHEAR TEST COMPOSITE	LOW	SUSPENDED					
NASM1312-7	FASTENER TEST METHODS VIBRATION	LOW	SUSPENDED					
NASM1312-15	FASTENER TEST METHODS TORQUE - TENSION	LOW	SUSPENDED					
NASM1312-16	FASTENER TEST METHODS CLAMPING FORCE FOR INSTALLATION	LOW	SUSPENDED					

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NASM1312-17	FASTENER TEST METHODS STRESS RELAXATION	LOW	SUSPENDED					
NASM1312-19	FASTENER TEST METHODS FASTENER SEALING	LOW	SUSPENDED					
NASM1312-22	FASTENER TEST METHODS RECEPTACLE PUSH-OUT PANEL FASTENERS	LOW	SUSPENDED					
NASM1312-23	FASTENER TEST METHODS TENSILE STRENGTH OF PANEL FASTENERS	LOW	SUSPENDED					
NASM1312-24	FASTENER TEST METHODS RECEPTACLE TORQUE-OUT PANEL FASTENERS	LOW	SUSPENDED					
NASM1312-26	FASTENER TEST METHODS STRUCTURAL PANEL FASTENER LAP JOINT SHEAR.	LOW	SUSPENDED					

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NASM1312-27	FASTENER TEST METHODS PANEL FASTENER SHEET PULL-UP	LOW	SUSPENDED					
NASM1312-28	FASTENER TEST METHODS ELEVATED TEMPERATURE DOUBLE SHEAR	LOW	SUSPENDED					
NASM1312-29	MEASUREMENT TECHNIQUES FOR DETERMINING SHANK EXPANDING CHARACTERISTICS OF DEFORMABLE FASTENERS	LOW	SUSPENDED					
NASM1312-30	FASTENER TEST METHODS SHEET PULL-UP OF BLIND FASTENERS	LOW	SUSPENDED					

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