

ELEMENT MATERIALS TECHNOLOGY - LANCASTER

Crosslands House
White Cross, South Road
LA1 4XQ LANCASTER
United Kingdom

FOR THE ATTENTION OF

Andy ARCHER Business Development Director Europe
Raphael LEON Quality Manager
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CERTIFICATE PREPARED BY
NUNEZ Cesar

YOUR QTML FOCAL POINT
NUNEZ Cesar

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DATE
09/03/2020

OUR REFERENCE
SUR2020.0034 Ind. B

ARP-ID of the External Shop
143441

TYPE of External Shop
Independent

Attestation letter for Qualification on Test Methods

Dear Madam, Dear Sir,

We herewith inform that the couples <Test Methods / External Shop> 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 <Test Methods / External Shop> 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 A2QS - All External Shops.

A qualified couple is not linked to a specific product. It is the proof that the External Shop is meeting the requirement of the M20691.2: Perform Couple <Product/Supplier Site> Compliance and Maturity's Activities for Material Products Suppliers and/or M20691.3: Perform Couple <Product/Supplier Site> Compliance and Maturity's Activities for Aerostructure Parts Suppliers.

- On a quality aspect: we kindly ask you to indicate us any modification which could have a quality impact.
- Concerning technical requirements:
 - * We kindly ask you to participate at least every 2 years to the PTP for the tests you perform on Airbus Products (see Appendix for details on next PTP participation requirements).
You can find all necessary information about PTP participation process on the website: <https://ptpscheme.com>.
In case of PTP results out of tolerances, the couples qualification can be downgraded to an authorisation to proceed or withdrawn and the PTP participation frequency is reduced to one year, subject to acceptance by Airbus of your Root Cause Analysis and associated Corrective Actions.
 - * On the other hand, you shall supply at least every 2 years the results of your Internal Homogeneity Studies per Test Families.

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
- Evidence non-compliance with the M20691.2 and/or M20691.3
- Loss of Airbus Supplier Approval
- Stop of the Business

Yours faithfully,

NUNEZ Cesar
Airbus Test Methods Auditor POMDS – CE
Your QTML Focal Point



SAUX Alexandra
Test Methods Coordinator POMDS– CE
Your Quality Responsible



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

APPENDIX: Matrix of qualified Couples <Test Methods / External Shop>

We hereby declare the External Shop:

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Qualified or Authorised to proceed for the following Test processes:

Test Standard(s) *	Test label	Complex.	Qualif. Status	Next PTP part. **	QCS Ref.	Remark
AITM 1-0042	Determination of Fatigue Crack Growth Rates for Clad Sheet and Clad Plate up to 12 mm in Constant-Load-Amplitude Tests	High	Qualified with limitations	2023	150077	Alloys of Al, Ti, Ni, Steels Limited to CT Specimens and DCPD (Direct Current Potential Difference) method to monitor the crack length
ASTM E399	Linear-elastic plane-strain fracture toughness K _{Ic} of metallic materials	High	Qualified	2021	171307	Qualified on 14/01/2020
ASTM E647	Measurement of fatigue crack growth rates (da/dn)	High	Qualified with limitations	2023	150077	Limited to CT Specimens and DCPD (Direct Current Potential Difference) method to monitor the crack length Alloys of Al, Ti, Ni, Steels 100KN to 500KN test frames & Clip Gauges
EN 6072	Constant amplitude fatigue testing (HCF)	High	Authorised to Proceed July 2020	2021		Alloys of Al, Ti, Ni, Steels
EN 6072 (machining)	Fatigue test specimen machining (NADCAP test code O)	None	Authorised to Proceed July 2020			Alloys of Al, Ti, Ni, Steels
Z_Metal. Spec. prep	Metallic specimen preparation (for mechanical testing)	None	Qualified			Alloys of Al, Ti, Ni, Steels

* Unless otherwise specified, last issue of the standard shall apply.

** Next PTP participation year is given for information - It is the External Shop's responsibility to check every year on the PTP Website (<https://ptpscheme.com/>) which kits are proposed.