

### HAYNES INTERNATIONAL INC

2000 W. Deffenbaugh St. 46902-9013 KOKOMO USA

FOR THE ATTENTION OF

Dave FLUCK Manager Production Testing

Annette O'CONNELL Manager Production Testing

Jeff SIPF Quality Assurance Manager

CERTIFICATE PREPARED BY LABARDE Damien

YOUR QTML FOCAL POINT LABARDE Damien

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DATE
08/10/2020
OUR REFERENCE
SUR2019.0104 Ind. E
ARP-ID of the External Shop
165744
TYPE of External Shop
Captive

### **Attestation letter for Qualification on Test Methods**

Dear Madam, Dear Sir,

We herewith inform that the couples <Test Methods / External Shop> as detailled 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In case of PTP results out of tolerances, the couples qualification can be downgraded to an authorisation to proceed or withdrawn and the PTP participation frequency is reduced to one year, subject to acceptance by Airbus of your Root Cause Analysis and associated Corrective Actions.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,

LABARDE Damien
Airbus Test Methods Auditor POMDS – CE
Your QTML Focal Point

SAUX Alexandra
Test Methods Coordinator POMDS- CE

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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CERTIFICATE PREPARED BY LABARDE Damien DATE 08/10/2020 **OUR REFERNCE** SUR2019.0104 Ind. E

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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
ASTM E112	Determining average grain size	Low	Qualified	2021	718 alloys
ASTM E139	Creep, creep-rupture, and stress- rupture tests of metallic materials	Low	Qualified	2022	718 alloys Elongation 5D needed in next PTP participation
ASTM E18	Standard Test Methods for Rockwell Hardness of Metallic Materials	Low	Qualified with limitations	2022	718 alloys HRC
ASTM E21	Standard test methods for elevated temperature tension tests of metallic materials	Low	Qualified with limitations	2022	Limitation: Not qualified for Young's Modulus
ASTM E3	Standard guide for preparation of metallographic specimens	Low	Qualified		718 alloys
ASTM E340	Macroetching metals and alloys	Low	Qualified		718 alloys
ASTM E407	Microetching metals and alloys	Low	Qualified		718 alloys
EN 2002-6	Metallic materials: Bend testing	Low	Qualified		718 alloys
ISO 643	Steels - Micrographic determination of the apparent grain size	Low	Qualified	2022	718 alloys
Z_Metal. Spec. prep	Metallic specimen preparation (for mechanical testing)	None	Qualified		718 alloys
Z_Opt. metallo	. Optical metallography	None	Qualified		718 alloys
Z_Spectro	Analysis by spectrometry (others)	None	Qualified	2021	analysis of Ni-based alloys by XRF spectrometry according to ASTM E2465. 718 alloys. Al, Co, Cr, Cu, Fe, La, Mn, Mo, Nb, Ni, Si, Ta, Ti, V, W, Zr
Z_Spectro. OES	Spectrometry: optical emission (OES)	None	Qualified	2021	718 alloys ASTM E 3047 Al / C / Cr / Co / Fe / Mn / Mo / Nb / N / P /Si / Ti

<sup>\*</sup> Unless otherwise specified, last issue of the standard shall apply.

<sup>\*\*</sup> 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.