



This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Element Materials Technology Portland - Milwaukie

***4949 SE Johnson Creek Blvd
Portland, OR 97222
United States***

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturer's List (QML), to the revision in effect at the time of the audit for:

Materials Testing Laboratories

Certificate Number: 3513235437
Expiration Date: 31 August 2027
Accreditation Length: 18 Months

Jay Solomond
Executive Vice President & Chief Operating Officer

SCOPE OF ACCREDITATION

Materials Testing Laboratories

Element Materials Technology Portland - Milwaukie
4949 SE Johnson Creek Blvd
Portland, OR 97222

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7000 Rev A - AUDIT CRITERIA FOR NADCAP ACCREDITATION

AC7101/1 Rev H - Nadcap Audit Criteria for Materials Testing Laboratories – General Requirements for All Laboratories (to be used on audits on/AFTER 10-Dec-2023)

AC7101/2 Rev E - Nadcap Audit Criteria for Materials Testing Laboratories – Chemical Analysis (to be used on audits on/after 30 August 2020)

- (F) Atomic or Optical Emission Spectroscopy (AES or OES)
 - (F3) Atomic Emission Spectroscopy – Spark/Arc (S/A–OES)
- (G) Elemental Analysis (Combustion or Fusion)
 - (G1) Carbon
 - (G2) Hydrogen
 - (G3) Nitrogen
 - (G4) Oxygen
 - (G5) Sulfur

(S) X–Ray Fluorescence (XRF)

(V) Mass Spectrometry

Specify the Alloy Base for Accreditation

- Co Base
- Fe Base
- Ni Base
- Ti Base

AC7101/3 Rev D - Nadcap Audit Criteria for Materials Testing Laboratories – Mechanical Testing (to be used on audits on/after 4 December 2016)

- (A) Room Temperature Tensile
- (B) Elevated Temperature Tensile
- (C) Stress Rupture
- (N) Impact

AC7101/4 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories – Metallography and Microindentation Hardness (to be used on/after 14 August, 2016)

(L0) Metallographic Evaluation

(L11) Grain Size

(L2) Near Surface Examinations – Alloy Depletion

(L3) Near Surface Examinations – Oxidation/Corrosion

(L4) Near Surface Examinations – Casting (Mold) Reactions Layers

(L6) Near Surface Examinations – Nitriding

(L7) Near Surface Examinations – IGA, IGO

(L8) Near Surface Examinations – Alpha Case: Wrought Titanium

(L9) Near Surface Examinations – Alpha Case: Cast Titanium

AC7101/5 Rev E - Nadcap Audit Criteria for Materials Testing Laboratories – Hardness Testing (Macro) (to be used on audits on/AFTER 07-May-2023)

(M2) Rockwell Hardness

AC7101/7 Rev D - Nadcap Audit Criteria for Materials Testing Laboratories – Mechanical Testing Specimen Preparation (to be used on audits on/after 15 May 2016)

(Z) Standard Specimen Machining

(Z3) Cast Specimens

AC7101/14 Rev NA - Nadcap Audit Criteria for Materials Testing Laboratories – Proficiency Testing and Internal Round Robin Requirements for ALL Laboratories (to be used on audits on/AFTER 10-Dec-2023)

AC7110/13 Rev B - Nadcap Audit Criteria for Evaluation of Welds (to be used on audits BEFORE 05-May-2024)

NOTE: IF YOU ARE SELECTING THE AC7110/13 CHECKLIST YOU MUST ALSO SELECT AC7101/4 – Nadcap Audit Criteria for Materials Testing Laboratories – Metallography and Microhardness. You must also select AC7110/13S

Supplement A – Metallurgical Evaluation of Welder / Welding Operator Qualifications (identify if this process is used)

Supplement B – Metallurgical Evaluation of Fusion Welds (identify if this process is used)

AC7110/13S Rev D - Nadcap Supplemental Audit Criteria for Evaluation of Welds to be used on audits ON OR AFTER 11 January 2015)

U11 The Boeing Company

ISO/IEC - Currently accredited by an ILAC approved source

Lab Type - Lab Type

Independent

Uncontrolled If Printed