

SCOPE OF ACCREDITATION

Materials Testing

Element 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:

AC7101/1 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories – General Requirements for All Laboratories (to be used on audits before 5 May 2019)

AC7101/2 Rev D - Nadcap Audit Criteria for Materials Test Laboratories – Chemical Analysis (to be used on audits on/after 22 March 2015)

- (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 Test Laboratories – Mechanical Testing (to be used on audits on/after 4 December 2016)

(A) Room Temperature Tensile

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

AC7101/4 Rev F - Nadcap Audit Criteria for Materials Test 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
- (L4) Near Surface Examinations Casting (Mold) Reactions Layers
- (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 D - Nadcap Audit Criteria for Materials Test Laboratories – Hardness Testing (Macro) (to be used on audits on/after 22 March 2015)

- (M2) Rockwell Hardness
- (M3) Vickers Hardness

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

- (Z) Standard Specimen Machining
- (Z3) Cast Specimens

AC7110/13 Rev B - Nadcap Audit Criteria for Evaluation of Welds to be used ON OR AFTER 5 MAY 2013

DO NOT CHECK – INFORMATION ONLY – IF YOU ARE SELECTING THE AC7110/13 CHECKLIST YOU MUST ALSO SELECT AC7101/4 – Nadcap Audit Criteria for Materials Test Laboratories – Metallography and Microhardness

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

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