

## 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](http://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