



## SCOPE OF ACCREDITATION

### Materials Testing

**Element Daleville**  
9301 Innovation Drive Suite 175  
Daleville, IN 47334

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:

### AC7101/1 Rev F - Nadcap Audit Criteria for Materials Testing Laboratories – General Requirements for All Laboratories (to be used on/after 14 Sept 2014)

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

(D) Wet Chemistry (Gravimetric)

(F) Atomic or Optical Emission Spectroscopy (AES or OES)

(F1) Atomic Emission Spectroscopy – Direct Current Plasma (DCP–OES)

(F2) Atomic Emission Spectroscopy – Inductively Coupled Plasma (ICP–OES/AES)

(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)

(W) Atomic Absorption

(W2) Graphite Furnace (GFAA)

Specify the Alloy Base for Accreditation

Al Base

Co Base

Cu Base

Fe Base

Mg 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
- (B) Elevated Temperature Tensile
- (C) Stress Rupture
- (N) Impact
- (XA) Creep
- (XN) Bend Testing

**AC7101/4 Rev E - Nadcap Audit Criteria for Materials Test Laboratories – Metallography and  
Microindentation Hardness (to be used on/after 30 November 2014)**

- (L0) Metallographic Evaluation
- (L1) Microindentation (Interior)
- (L10) Near Surface Examinations – Carburization / Decarburization
- (L11) Grain Size
- (L12) Inclusion Rating
- (L2) Near Surface Examinations – Alloy Depletion
- (L3) Near Surface Examinations – Oxidation/Corrosion
- (L4) Near Surface Examinations – Casting (Mold) Reactions Layers
- (L5) Near Surface Examinations – Microindentation (Surface – Case Depth)
- (L5X) Near Surface Examinations – Microindentation (Surface) (Chord Method ARP1820)
- (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
- (XL) Macro Examination

**AC7101/5 Rev D - Nadcap Audit Criteria for Materials Test Laboratories – Hardness Testing  
(Macro) (to be used on audits on/after 22 March 2015)**

- (M1) Brinell Hardness
- (M2) Rockwell Hardness

**AC7101/6 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Corrosion (to be  
used before 1 July 2018)**

- (Q) Corrosion (General)
- (Q1) Stress Corrosion

**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
- (Z4) Special Preparation

**AC7101/9 Rev C - Nadcap Audit Criteria for Materials Test Laboratories – Specimen Heat Treating (to be used on/after 15 January 2017)**

**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)

Supplement C – Metallurgical Evaluation of Electron Beam / Laser Welds (identify if this process is used)

Supplement D – Metallurgical Evaluation of Resistance Welds (identify if this process is used)

Supplement E – Bend Test Evaluation of Electron Beam and Laser (for other testing purposes)

Supplement E – Bend Test Evaluation of Fusion Welds (for other testing purposes)

Supplement E – Bend Test Evaluation of Welder/Welding Operator Qualification Welds

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

U10 GE Aviation

U11 The Boeing Company

U13 Bombardier

U2 Pratt & Whitney

U3 Rolls–Royce plc

**ISO/IEC - Currently accredited by an ILAC approved source**

**Lab Type - Lab Type**

Independent