

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

Laboratory Testing Inc.

2331 Topaz Drive Hatfield, PA 19440 United States

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

Materials Testing Laboratories

Certificate Number: 3296205111 Expiration Date: 31 May 2023 Accreditation Length: 18 Months

David L. Schutt, PhD President

Performance Review Institute (PRI) | 161 Thorn Hill Road | Warrendale, PA 15086-7527



SCOPE OF ACCREDITATION

Materials Testing Laboratories

Laboratory Testing Inc.

2331 Topaz Drive Hatfield, PA 19440

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 - AUDIT CRITERIA FOR NADCAP ACCREDITATION

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

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)

(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

(V) Mass Spectrometry

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

Laboratory Testing Inc. Hatfield, PA

- (B) Elevated Temperature Tensile
- (C) Stress Rupture
- (CT) Compression Testing
- (N) Impact
- (O) High Cycle Fatigue
- (P) Fracture Toughness
- (XA) Creep
- (XE) Crack Propagation/Crack Growth Testing
- (XN) Bend Testing
- (Y) Low Cycle Fatigue

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
- (L1) Microindentation (Interior)
- (L10) Near Surface Examinations Carburization / Decarburization
- (L11) Grain Size
- (L12) Inclusion Rating
- (L2) Near Surface Examinations Alloy Depletion
- (L5) Near Surface Examinations Microindentation (Surface–Case Depth)
- (L5X) Near Surface Examinations Microindentation (Surface) (Chord Method ARP1820)
- (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 Testing Laboratories – Hardness Testing (Macro) (to be used on audits on/after 22 March 2015)

- (M1) Brinell Hardness
- (M2) Rockwell Hardness
- (M3) Vickers Hardness

AC7101/6 Rev D - Nadcap Audit Criteria for Materials Testing Laboratories – Corrosion (to be used on/after 1 July 2018)

(Q1) Detecting susceptibility to intergranular attack in austenitic stainless steel

- (Q1-1) Oxalic Acid Etch Test
- (Q1-2) Ferric Sulfate-Sulfuric Acid Test "Streicher test" (mass loss)
- (Q1-3) Nitric Acid Test "Huey test" (mass loss)
- (Q1–4A) Copper–Copper Sulfate– 16% Sulfuric Acid Test "Strauss test" (bend test) (Q3) ASTM G 34

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

- (Z1) Low Stress Grinding
- (Z2) Low Stress Grinding and Polishing
- (Z3) Cast Specimens
- (Z4) Special Preparation

AC7101/9 Rev C - Nadcap Audit Criteria for Materials Testing Laboratories – Specimen Heat Treating (to be used on/after15 January 2017)

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

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)

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)

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 U2 Pratt & Whitney

Lab Type - Lab Type

Independent