# SCOPE OF ACCREDITATION

## Materials Testing Laboratories

**Atlas Testing Laboratories**
9820 6th St
Rancho Cucamonga, CA 91730-5714

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)
- (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

(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 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
(CT) Compression Testing
(N) Impact
(P) Fracture Toughness
(XN) Bend Testing

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
(L13) Replication
(L2) Near Surface Examinations – Alloy Depletion
(L3) Near Surface Examinations – Oxidation/Corrosion
(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
(XL) Macro Examination

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

(M1) Brinell Hardness
(M2) Rockwell Hardness
(M4) Electrical Conductivity Inspection

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

(Q) Salt Spray
(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)
  (Q1–5) Copper–Copper Sulfate–50 % Sulfuric Acid Test (mass loss)
(Q2–1) ASTM G 49
(Q2–3) ASTM G 38
(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
(Z3) Cast Specimens

AC7101/9 Rev D - Nadcap Audit Criteria for Materials Testing Laboratories – Specimen Heat Treating (to be used on audits on/AFTER 07-Sep-2025)

AC7101/11 Rev C - Nadcap Audit Criteria for Materials Testing Laboratories – Fastener Testing (to be used on audits on/after 25 October 2015)
(10) Stress Rupture
(11) Fatigue
(13) Shear Strength – Double Shear
(14) Stress Durability – Internal Threads
(18) Tensile Test – Elevated Temperature Tensile
(31) Torque – Locking, Torque–Out
(40L10) Metallography – Decarburization / Carburization
(40L2) Metallography – Alloy Depletion
(40L25) Metallography – Grain Size
(40L3) Metallography – Oxidation / Corrosion
(40L7) Metallography – IGA / IGO
(40L8) Metallography –Alpha Case: Wrought Titanium
(5) Stress Durability – External Threads
(6–L5) Hardness – Microindentation Hardness
(6–M2) Hardness – Rockwell
(8–A) Tensile Test – Axial Tensile
(8–P) Tensile Test – Proof Load (nuts / screws)
(8–W) Tensile Test – Wedge Tensile
(Q) Corrosion – Salt Spray

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 C - Nadcap Audit Criteria for Evaluation of Welds (to be used on audits on/AFTER 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)
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
Supplement F – Metallographic Evaluation of Qualification and/or Process Control Braze Joints

AC7110/13S Rev D - Nadcap Supplemental Audit Criteria for Evaluation of Welds to be used on audits ON OR AFTER 11 January 2015)
U0 User Unknown

ISO/IEC - Currently accredited by an ILAC approved source

Lab Type - Lab Type
Independent