

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

Sturbridge Metallurgical Services Inc

8 Picker Rd Sturbridge, MA 01566 United States

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

Materials Testing Laboratories

Certificate Number: 7362214393 Expiration Date: 31 May 2025 Accreditation Length: 24 Months

Jay Solomond

Executive Vice President & Chief Operating Officer



SCOPE OF ACCREDITATION

Materials Testing Laboratories

Sturbridge Metallurgical Services Inc 8 Picker Rd Sturbridge, MA 01566

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)
 - (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

Specify the Alloy Base for Accreditation

Fe 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

(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

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- (L11) Grain Size
- (L12) Inclusion Rating
- (L13) Replication
- (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
- (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)

(M2) Rockwell Hardness

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

(Q) Salt Spray

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

AC7101/11 Rev C - Nadcap Audit Criteria for Materials Testing Laboratories – Fastener Testing (to be used on audits on/after 25 October 2015)

(40L10) Metallography – Decarburization / Carburization

(40L2) Metallography – Alloy Depletion

(40L25) Metallography – Grain Size

(40L7) Metallography - IGA / IGO

(40L8) Metallography – Alpha Case: Wrought Titanium

(6–L5) Hardness – Microindentation Hardness

(6–M2) Hardness – Rockwell

(Q) Corrosion – Salt Spray

AC7109/5 Rev H - Nadcap Audit Criteria for Coating Evaluations (Laboratory) (Req'd for all Coatings audits - except suppliers using Nadcap approved AC7109/5 labs) (to be used on audits on/AFTER 13-Feb-2022)

Bond Strength - Tensile

Metallography/Microstructure

Microindentation Hardness – Knoop

Microindentation Hardness - Vickers

Thickness - Metallographic

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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

ISO/IEC - Currently accredited by an ILAC approved source

Lab Type - Lab Type

Independent

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