



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

Metcut Research Associates Inc.

*3980 Rosslyn Dr
Cincinnati, OH 45209-1196
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: 3511200204
Expiration Date: 31 May 2023
Accreditation Length: 18 Months

David L. Schutt, PhD
President

SCOPE OF ACCREDITATION

Materials Testing Laboratories

Metcut Research Associates Inc.
3980 Rosslyn Dr
Cincinnati, OH 45209-1196

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)

AC7101/3 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
- (O) High Cycle Fatigue
- (P) Fracture Toughness
- (XA) Creep
- (XE) Crack Propagation/Crack Growth 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)
- (L11) Grain Size
- (L12) Inclusion Rating
- (L2) Near Surface Examinations – Alloy Depletion
- (L5) Near Surface Examinations – Microindentation (Surface–Case Depth)
- (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)

(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

(Z1) Low Stress Grinding

(Z2) Low Stress Grinding and Polishing

(Z3) Cast Specimens

AC7109/5 Rev G - 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 3 December, 2017)

Bond Strength – Bend

Bond Strength – Tensile

Coating Composition by Electron Microscopy

Erosion – Ambient

Hardness – Rockwell

Metallography/Microstructure

Microindentation Hardness – Vickers

Oxidation

Thickness – Metallographic

Lab Type - Lab Type

Independent