



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

Carpenter Technology Corp

101 W Bern St
Reading, PA 19601
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

Certificate Number: 3546178158
Expiration Date: 31 October 2019

Joseph G. Pinto
Executive Vice President and Chief Operating Officer



SCOPE OF ACCREDITATION

Materials Testing

Carpenter Technology Corp
101 W Bern St
Reading, PA 19601

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:

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)

(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

(G3) – Nitrogen

(G4) – Oxygen

(G5) – Sulfur

(S) X–Ray Fluorescence (XRF)

(V) Mass Spectrometry

(W) Atomic Absorption

(W1) Flame (AA)

(W2) Graphite Furnace (GFAA)

Specify the Alloy Base for Accreditation

Co Base

Fe Base

Ni 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
- (P) Fracture Toughness
- (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
- (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
- (M3) Vickers Hardness

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

- (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
- (Z1) Low Stress Grinding

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

Lab Type - Lab Type

Captive