



## SCOPE OF ACCREDITATION

### Materials Testing

#### Tensile Testing Metallurgical Lab

4520 Willow Parkway  
Cleveland, OH 44125

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: [www.eAuditNet.com](http://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)**

- (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

- Al Base
- Cu Base
- Fe Base
- Ni Base
- Ti 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
- (C) Stress Rupture
- (N) Impact

(P) Fracture Toughness  
(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)**

(L1) Microindentation (Interior)  
(L10) Near Surface Examinations – Carburization / Decarburization  
(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 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 on/after 28 August, 2011)**

(Q) Corrosion (General)  
(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  
(Z3) Cast Specimens  
(Z4) Special Preparation

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

**AC7101/11 Rev B - Nadcap Audit Criteria for Materials Test Laboratories - Fastener Testing**

**ISO/IEC - Currently accredited by an ILAC approved source**

**Lab Type - Lab Type**

Independent



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

## ***Tensile Testing Metallurgical Lab***

*4520 Willow Parkway  
Cleveland, OH 44125  
United States*

*This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in [www.eAuditNet.com](http://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: 4097170970  
Expiration Date: 30 April 2018

Joseph G. Pinto  
*Executive Vice President and Chief Operating Officer*