



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

A-LAB CORPORATION  
 3050 Dryden Road  
 Dayton, OH 45439  
 John E. Williams Phone: 937 293 0333

MECHANICAL

Valid To: July 31, 2018

Certificate Number: 0291.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metals, alloys and fasteners:

<u>Test</u>	<u>Test Method</u>
Microhardness - Knoop & Vickers (100 & 500 HK, 100 & 500 HV)	ASTM E384
Hardness Rockwell (A, B, C, 15N, 30N, 45N, 15T, 30T, 45T)	ASTM E18, E140
Brinell 500, 1500, 3000 Kg	ASTM E10
Tensile (Room Temperature, Up to 200k lbs)	ASTM A370, B557, E8/E8M
Impact (Charpy) (-320 to 212° F, Up to 127 ft-lbs)	ASTM E23
Salt Spray	ASTM B117
Bend	ASTM E290
Weld/Welder Qualification	Using the methods listed on this scope and scope 0291.03 in accordance with ASME Sec. IX; AMS 1595 (Canceled 2002) <sup>1</sup> ; AWS: D1.1/D1.1M, D1.2/D1.2M, D1.5/D1.5M, D17.1/D17.1M
<u>Metallographic Evaluation</u>	
Preparation	ASTM E3
Microetch	ASTM E407
Macroetch	ASTM E340

**Test**

**Test Method**

**Metallographic Evaluation (cont.)**

Decarburization	ASTM E1077, F2328; SAE J121(Canceled 2013) <sup>1</sup> , J423
Grain Size	ASTM E112, E1181, E930
Case Depth	SAE J423
Nodularity	ASTM A247
Inclusion Ratings	ASTM E45 (Methods A, E)
Plating Thickness	ASTM B487
IG Corrosion Susceptibility	ASTM A262 (Methods A, E)
Macrostructure	ASTM E381
Density/Porosity	ASTM B328 (Canceled 2006) <sup>1</sup> , B962, B963
Failure Analysis	Using the methods listed on this scope and on scopes 0291.02 and 0291.03 in accordance with ASM Handbook 11

**Scanning Electron Microscopy**

SEM/EDS Materials Analysis and Characterization	A-Lab QP 2-24, 2-25; ASTM E1508
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<sup>1</sup> NOTE: This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.



## *Accredited Laboratory*

A2LA has accredited

### **A-LAB CORPORATION**

*Dayton, OH*

for technical competence in the field of

### **Mechanical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 1<sup>st</sup> day of September 2016.

A handwritten signature in blue ink, appearing to read "Jim C. Bunt".

Senior Director of Quality and Communications  
For the Accreditation Council  
Certificate Number 0291.01  
Valid to July 31, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.*

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## CHEMICAL

Valid To: July 31, 2018

Certificate Number: 0291.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metals, alloys and fasteners:

TestTest MethodSpectroscopy

ICP (Be, B, Mg, Al, Si, P, Ca, V, Cr,  
Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Y,  
Nb, Mo, Ag, Cd, Sn, Sb, Te, Hf, Ta,  
W, Pb, Bi, La, Ce)

A-Lab Procedure OP 1-9

Wet chemistry

Cr (Titration)

ASTM E353, Section 2.12 to 2.20

Cu (Electro Deposition)

ASTM E53

Combustion – Carbon, Sulfur

ASTM E1019

Inert Gas Fusion – Nitrogen

ASTM E1019

Galvanized Coating Weight

ASTM A90/A90M

On the following materials:

Low and medium alloy steels, stainless steels, aluminum alloys, copper alloys and magnesium alloys



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*Dayton, OH*

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### **Chemical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 1<sup>st</sup> day of September 2016.

A handwritten signature in blue ink, reading "Jim C. Bunt".

Senior Director of Quality and Communications  
For the Accreditation Council  
Certificate Number 0291.02  
Valid to July 31, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.*



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NONDESTRUCTIVE

Valid To: July 31, 2018

Certificate Number: 0291.03

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's R212 – Specific Requirements: Nondestructive Testing and Inspections), accreditation is granted to this laboratory to perform the following tests on metals, alloys and fasteners:

<u>Test</u>	<u>Test Method</u>
Liquid Penetrant (Fluorescent)	ASTM E165/E165M, E1417/E1417M, E1418; MIL-STD-6866 (Canceled 1996) <sup>1</sup> ; RRP 58003; P3TF2, P3TF47
Magnetic Particle (Bench Wet Fluorescent) (Yoke Dry Visible and Wet Fluorescent)	AMS 2640J (Canceled 1996) <sup>1</sup> ; ASTM E709, E1444/E1444M; P3TF9, P3TF48; IFC40-932-01E
Radiography (X-ray Film)	ASTM E94, E1742/E1742M, E2104; P3TF5; RRP58006
Computed Radiography	ASTM E1453, E2002, E2007, E2339, E2445/E2445M
Ultrasonic (Contact Straight and Angle Beam)	AMS STD-2154 Rev. A; ASTM A745/A745M, A388/A388M, A609

On the following materials:

Steel, cast iron, aluminum, titanium, magnesium, inconel, and monel

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## Accredited Laboratory

A2LA has accredited

### A-LAB CORPORATION

*Dayton, OH*

for technical competence in the field of

### Nondestructive Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirement of A2LA R212 – Specific Requirements – Nondestructive Testing and Inspections. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009*).

Presented this 1<sup>st</sup> day of September 2016.



A handwritten signature in blue ink, appearing to read "J. C. Bunt".

Senior Director of Quality and Communications  
For the Accreditation Council  
Certificate Number 0291.03  
Valid to July 31, 2018

*For the tests to which this accreditation applies, please refer to the laboratory's Nondestructive Scope of Accreditation.*