

# **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 17025:2017

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 April 2017).



Presented this 28th day of July 2020.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 0291.01 Valid to July 31, 2022



#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

# A-LAB CORPORATION 3050 Dryden Road Dayton, OH 45439

John E. Williams Phone: 937 293 0333

#### **MECHANICAL**

Valid To: July 31, 2022 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 types of tests on <u>metals</u>, <u>alloys and fasteners</u>:

<u>Test Method(s)</u>

Microhardness - Knoop & Vickers (100 & 500 HK, 100 & 500 HV)

Hardness

Rockwell

ASTM E18, E140

(A, B, C, 15N, 30N, 45N, 15T, 30T, 45T)

Brinell 500, 1500, 3000 Kg

ASTM E10

ASTM E384

Tensile

(Room Temperature, Up to 200k lbs)

ASTM A370, B557, E8/E8M

ASTM A370 Sect. A 2.5.1.3

Compression

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

Metallographic Evaluation

Preparation ASTM E3

Microetch ASTM E407

Macroetch ASTM E340

(A2LA Cert. No. 0291.01) Revised 05/13/2021

Page 1 of 2

<u>Test Method(s)</u>

Metallographic Evaluation (cont.)

Decarburization ASTM E1077, F2328;

SAE J121(Canceled 2013)<sup>1</sup>, J423

Grain Size ASTM E112 Practice A & D, E930, E1181

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 B963

Volume Fraction (Optical Density) ASTM E562

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 A-Lab QP 2-24, 2-25; ASTM E1508

and Characterization

<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.

Page 2 of 2



# Accredited Laboratory

A2LA has accredited

### **A-LAB CORPORATION**

Dayton, OH

for technical competence in the field of

# **Chemical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 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 April 2017).



Presented this 28th day of July 2020.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 0291.02

Valid to July 31, 2022



#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

#### A-LAB CORPORATION 3050 Dryden Road Dayton, OH 45439

John E. Williams Phone: 937 293 0333

#### **CHEMICAL**

Valid To: July 31, 2022 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 <u>metals</u>, <u>alloys and fasteners</u>:

<u>Test Method(s)</u>

Spectroscopy

ICP (Ag, Al, As, B, Be, Bi, Ca, Cd, Co, Cr, Cu, A-Lab Procedure OP 1-9

Fe, Mg, Mn, Mo, Nb, Ni, P, Pb, Sb, Se, Si, Sn, Sr,

Ta, Te, V, W, Y, Zn)

**Wet Chemistry** 

Cr (Titration) ASTM E353, Sections 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

Page 1 of 1



# **Accredited Laboratory**

A2LA has accredited

A-LAB CORP.

Dayton, OH

for technical competence in the field of

# Nondestructive Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 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 April 2017).



Presented this 28th day of July 2020.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 0291.03 Valid to July 31, 2022



#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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

#### NONDESTRUCTIVE

Valid To: July 31, 2022 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 <u>metals</u>, alloys and fasteners:

<u>Test</u>	Test Method(s)
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/E94M, E1742/E1742M, E2104; P3TF5; RRP58006
Computed Radiography	ASTM E1453, E2002, E2007, E2339, E2445/E2445M
Gamma Radiography Ir-192	ASTM E1742/E1742M, E94/E94M
Ultrasonic (Contact Straight and Angle Beam)	AMS STD-2154; ASTM A745/A745M, A388/A388M, A609/A609M

#### On the following materials:

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

<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.

Page 1 of 1