



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

QC METALLURGICAL LABORATORY
17048 215th Street
Davenport, IA 52804
Todd Bloodsworth Phone: 563 386 7827

MECHANICAL

Valid To: July 31, 2021

Certificate Number: 1238.01

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 metals (or materials):

Test:

Test Methods:

Mechanical

Hardness (Rockwell: B, C)
Brinell Hardness (500 kg, 3000 kg)
Hydrogen Embrittlement
Plastic Strain Ratio (r Value)
Proof (External Threaded)
Strain Hardening Exponent (n Value)
Tension (Complete, Axial \leq 60 klbs at room temp.)
Charpy Impact (-90 °F to room temp.), (10 to 300) ft-lbs
Tape Adhesion

ASTM E18
ASTM E10
ASTM F519
ASTM E517
ASTM F606/F606M
ASTM E646
ASTM E8/E8M, A370, F606/F606M
ASTM E23, A370
ASTM D3359

Metallographic Evaluation

Case Depth by Microhardness
Depth of Decarburization
Grain Size
Inclusions
Microhardness – Knoop/Vickers
(HK100, HK500, HV 0.3, HV 1)
Plating Thickness
Macroetch
Microstructure Analysis
Standard Guide for Qualitative Analysis by
Energy-Dispersive Spectroscopy (EDS, SEM)

SAE J423
ASTM E1077, F2328
ASTM E112 (Intercept Method Only)
ASTM E45 (Method A)
ASTM E384

ASTM B487
ASTM E381
ASM Metals Handbooks
ASTM E1508 (Standardless Technique)

Corrosion

Salt Spray
Susceptibility to Inter-Granular Corrosion

ASTM B117
ASTM A262 (Method A)

Chemical Spectroscopy

Atomic Absorption
(Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Fe, Hg, K, Mg,
Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Ti, Tl, V, Zn)

ASTM E1452 (Withdrawn 2005),
E1812 (Withdrawn 2004),
E1024 (Withdrawn 2004)

Test:

Test Methods:

Optical Emission (Al, C, Co, Cr, Cu, Fe, Mn, Mg, Mo, Nb, Ni, P, Pb, S, Si, Ti, V, Zn, W)	ASTM E415, E1086, E1251, E1999
Portable X-ray Fluorescence*	ASTM E572
General Techniques for Obtaining Infrared Spectra for Qualitative Analysis	ASTM E1252
Standard Test Methods for Rubber-Identification by Infrared Spectrometry	ASTM D3677
ICP-AES (Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Ti, V, Zn)	SOP #203
Failure Analysis	ASM HDBK 11 (Using the methods listed above)

* This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these tests. This analysis can be performed at their facility or in the field.

NOTE: This laboratory’s scope contains withdrawn or superseded methods.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

QC METALLURGICAL LABORATORY

Davenport, IA

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 26th day of November 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1238.01
Valid to July 31, 2021

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