



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

PRIDGEON & CLAY ADVANCED ENGINEERING LAB
50 Cottage Grove SW
Grand Rapids, MI 49507
Brandon Luxford Phone: 616 252 2384

MECHANICAL

Valid To: July 31, 2024

Certificate Number: 1516.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on automotive metal stampings, automotive exhaust system components, metal stampings, and automotive structural components, using Chrysler, Ford, GM, Toyota, and tier one accounts specifications and standards:

<u>Test</u>	<u>Test Methods¹</u>
Adhesion	ASTM B571 (para 8), D3359; FLTM BI 106-01; GMW14829
Air Flow	
Leak Rate (Up to 100 SLPM @ 80 psi)	WI-034
Bend Test	ASTM A370 (Section 15), B571 (para 3)
Chemical	
Optical Emission Spectroscopy (CS, SS) (Al, B, C, Co, Cr, Cu, Mn, Mo, N, Nb, Ni, P, Pb, S, Si, Ti, Va, W)	ASTM E415, E1086; WI-035
Coating Weight	ASTM A90/A90M, A428/A428M, A924/A924M; WI-015
Corrosion Creepback	ASTM B117, D610, D1654; GM9102P (inactive 2010) ¹ ; GMW15282
Environmental	
Humidity	ASTM D1735, D2247; WI-028, -029
Salt Spray	ASTM B117; FLTM BI 103-01; ISO 9227(NSS); JIS Z2371
High Heat Exposure (Up to 700° F)	WI-038
Metallographic Evaluation	
Case Depth	ASTM E3, E407; SAE J423; WI-010, -012, -013, -022
Depth of Decarburization	ASTM E3, E407, E1077; WI-010, -012, -013, -022
Grain Size (Comparison Only)	ASTM E3, E112, E407; WI-010, -012, -013, -021
Inclusion Content	ASTM E3, E45, E340, E407; SAE J422; WI-010, -012, -013, -014
Metallographic Photomicrography	ASTM E3, E407, E883; WI-012, -013
Macroetch	ASTM E340
Microetch	ASTM E3, E407; WI-012
Plating Thickness	ASTM B487, E3, E407; WI-010, -012, -013, -020

Test

Test Methods¹

Pushout
 Rockwell Hardness (B, C, T)
 Tensile, Yield, Elongation, n Value, r Value
 Torque
 Vibration
 High Temperature
 (1900° F (1037° C) Up to 180 CFM)
 Mechanical Cycling
 (Load Driven Up to 1000 lbs max;
 Stroke Driven to ±0.5 in)
 Servo Hydraulic
 (Closed or Open Loop, Up to 100 Hz)
 Weld Evaluations

WI-005, -009
 ASTM E18, E140; WI-008
 ASTM A370 (sections 7 to 14), E8/E8M, E517,
 E646; WI-026, -027
 WI-023, -042
 Ford CETP 09.03-E-300; WI-033
 Ford CETP 09.03-E-300; WI-033
 Ford CETP 09.03-E-300; WI-033
 ASTM E340; PS-9184; WI-011

I. Dimensional Testing²

Parameter	Range	CMC ³ (±)	Technique / Method
Length ⁴ - 1D	Up to 8 in	1 in: 0.00059 in 8 in: 0.00146 in	Blue Light System (GOM ATOS) / MIL-STD-120 (Cancelled 1996) ¹ WI-104

¹ 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.

² This laboratory offers commercial dimensional testing service only.

³ Calibration and Measurement Capability (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine measurements of nearly ideal measurement standards or nearly ideal measuring equipment. Calibration and Measurement Capabilities represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific measurement performed by the laboratory may be greater than the CMC due to the behavior of the customer’s device and to influences from the circumstances of the specific measurement.

⁴ This test is not equivalent to that of a calibration.





Accredited Laboratory

A2LA has accredited

PRIDGEON & CLAY ADVANCED ENGINEERING LAB

Grand Rapids, MI

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 25th day of July 2022.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1516.01
Valid to July 31, 2024

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