



THE AMERICAN ASSOCIATION FOR
LABORATORY ACCREDITATION

ACCREDITED LABORATORY

A2LA has accredited

MGA RESEARCH CORPORATION
Greer, SC

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 29th day of May 2009.

Peter Abney

President

For the Accreditation Council

Certificate Number 0850.02

Valid to May 31, 2011

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

MGA RESEARCH CORPORATION
820 Suburban Park Drive
Greer, SC 29651
P. Michael Miller II Phone: 1-888-MGA-LAB1

MECHANICAL

Valid Until: May 31, 2011

Certificate Number: 0850.02

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

<u>Test Name</u>	<u>Test Description/Test Methods</u>
Airbag Deployment	PF-11014, PF-10827; GMW3112, GMW3109; BMW PR7 007 983
Custom Static	FMVSS 207, 210, 225 (NHTSA) Compliance
Durability/Door Slam	Cycling of Various Types of Vehicle Components (i.e., Seats, Doors, IPs)
Extreme Temperature	GM9505P Cycle M, PF-11029, PF-11084; BMW TP303.4, PR 308; ASTM D5427 (Section 8.4-8.6); FLTM BN151-05
Ingress/Egress	Durability Cycling of Seat Backs, Cushions, Bolsters
Vibration Testing Sine, Random, Shock and Time History 25mm displacement peak to peak; up to 3,000 Hz, 4000 lbf sine	MIL-STD 810
<u>Material Testing:</u>	
20°, 60° & 85° Gloss Evaluation	ASTM D523
Adhesion	ASTM D3359; GM9071P, GM9502P
Adhesive Peels	ASTM D903; GM9193P, GM3602M, Excluding Impact; SAE J1907
Chemical Resistance	ASTM D1308; GM9900P, GMN10033, GMW3402; FLTM BN112-08
Compatibility/Stability	AATCC TM107; GM9141P, GM9231P, GMN8170; SAE J912, J913 (Method 3C); FLTM AN101-01

Crocking /Colorfastness to Rubbing	AATCC TM8; GM9033P; SAE J861
Dime Hardness	GM9506P
Dimensional Measurement of Fabric	ASTM D3774, Option B
Dimensional Stability	GM9330P, GM9452P; ISO 2796; SAE J883
Door Lock and Retention Components (Component Level only)	FMVSS 206 (NHTSA) Compliance
Flammability (Horizontal and Vertical)	FMVSS 302 (NHTSA) Compliance; GM9070P, GMW3232; SAE J369; HES C206, D6003; TB117 (Section A, Part 1), FAR 25.853; CFR1500.44, 1615, 1616; BS 5852; TSM0500G; GB 8410; GS97038; DIN 75 200
Fogging	GM9305P, GMW3235; LP-463 DB-12-01; SAE J1756
Hex Bar Abrasion	FMVSS 209 (TP 209 1B); FMVSS 213 (TP-213 B.2.3); SAE J386 5.2.8
Immersion - Determine Water Absorption	ASTM D570, D2842, D3575 Test L
Mass Per Unit Area	ASTM D3776; GMW3182; SAE J860
Materials Characteristics (Plastics, Foams, Fabrics) – Tension, Compression, Seam Strength, Stitch Strength, Stretch & Set, Tear Strength, Flexural, Friction	ASTM D624, Type T, D790, D1056, D1388, Option B – Heart Loop Method, D1894, D2261, D3574 Test B-F, D3575 Test B, D, G, T, D5034, D5035, D5587; FLTM BN015-02; GM9193P, GM9336P, GMW3010, GMW3326; ISO 3386-1, 3386-2; SAE J386 (5.2.6, 5.2.7), J815, J855; FMVSS 209 (TP-209 A1-A3), FMVSS 213 (TP-213 B2.2)
Odor	SAE J1351
Pencil Hardness	ASTM D3363
Resistance to Pilling	ASTM D3511; FLTM BN 108-03
Resistance to Scratching	FLTM BN 108-13; LP-463DD-18-01, PF-10938
Scuffing Determination	SAE J365
Shore A, Durometer	ASTM D2240
Specific Gravity and Density	ASTM D792, D3574 Test A, D3575 Test W; ISO 845
Structural Density	ASTM D3775
Taber Abrasion – Rotary Platform	ASTM D3884; GM9515P, GMW3208; SAE J948, J1530; ISO 5470-1

Thread Testing (Tensile, Twist, Balance,
Dye, Color Transfer, Yardage, Crocking,
Heat Aging)

ASTM D204, D1422, D1423; MS-JZ-3-20, MS-JZ-12-20;
GMW 14129

Thumbnail Hardness

GM9507P

Wyzenbeek Abrasion – Oscillatory
Cylinder Abrasion

ASTM D4157; SAE J1530, SAE J948

Dimensional Testing:

Parameter	Technique	Range	Best Uncertainty* (\pm)
Length	Calipers	0-305 mm (0-12")	0.184 mm (0.007 in)
	Ruler	Up to 18 in Up to 457 mm	0.183 in 4.658 mm

*"Best Uncertainty" is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine inspections of nearly ideal measurement standards with nearly ideal measuring equipment. Best uncertainties represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The best uncertainty of a specific test performed by the laboratory may be greater than the best uncertainty due to the behavior of the customer's test piece, to the environment (if the dimensional inspection is performed in the field) and to influences from the circumstances of the specific test.

In addition, customer-supplied test methods and industry-accepted methods may be used in conjunction with all of the above procedures. These Methods include:

AATCC, ASTM, ISO, MIL-STD, SAE, DIN, JIS

Chrysler PF and LP requirements (Materials)

GM GMN/GMW/MTL/P/M

Ford DVM for IP (Interiors), ST (Seats), MA (Materials) and FLTM (Materials)

Other OEM methods from Nissan, Honda, Toyota, Mazda, BMW, VW and Audi