



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Markland Industries, Inc.

1111 E. McFadden Ave., Santa Ana, CA 92705
 Miguel Armenta Phone: 714-245-2850 x-145

TESTING

Valid to: December 18, 2012

Certificate Number: AT-1250

I. Mechanical

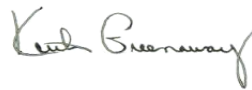
ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Chrome Plated Aluminum, Steel and Plastic	Plating Thickness	ASTM B504-90, Kocour Manual GM 4374M ISO 2177	Kucour Electronic Thickness Tester (0.075 to 50) µm
Chrome Plated Aluminum, Steel and Plastic	Nickel Electrochemical Potential	ASTM B764 GM 4374M	Kucour Electronic Thickness Tester with STEP Electrode (0 to 2 000) mV
Chrome Plated Aluminum, Steel and Plastic	CASS Test	ASTM B368 GM 4476P GM 4374M GMW 14458 ISO 9227	Type II Chamber, Singleton Type
Chrome Plated Aluminum, Steel, and Painted Parts	Salt Spray	ASTM B117 GM 4298 ISO 9227	Type II Chamber, Singleton Type
Chrome Plated Aluminum, Steel and Plastic	Adhesion of Metallic Coatings by Reverse Saw Test	ASTM B571-97, GM 264M Appendix A GM 4374M GMW 14668 GMW 14672	No separation between layers of plating or to base metal Band Saw
Chrome Plated Aluminum and Plastic Parts	Adhesion of Metallic Coatings by Heat-Quench Test	ASTM B571 GMW 14672 3.3.2.2 GMW 14668 GMW 14672	No evidence of blistering / Convection Oven
Painted Parts	Adhesion by Tape Test	ASTM D3359 Method A/B GMW 14829, GM 9071	No peeling or lifting
Painted and Plated Parts	Water Resistance of Coatings in 100 % Relative Humidity	ASTM D2247, Singleton Chamber Manual GM 4465P	Chamber Singleton Type II No peeling or blistering of paint



ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	*DETECTION LIMIT/ RANGE/ EQUIPMENT
Chrome Plated Aluminum, Steel and Plastic	Pore Count (Dubpernell Test) in Electroplated Chromium	ASTM B456 Motic Images Plus Manual GM 4374M GMW 14668 ASTM B604	Accu-Scope Metallographic Microscope, Moticom 1000 digital camera, Motic Images Plus Image Analysis Software
Chrome Plated Aluminum, Steel and Plastic	Active Sites in Electroplated Chromium	ASTM B456 Motic Images Plus Manual GM 4374M	Accu-Scope Metallographic Microscope, Moticom 1000 digital camera, Motic Images Plus Image Analysis Software
Chrome Plated Aluminum, Steel and Plastic	Elongation Test	ASTM B456 ASTM B604	Plated strip mandrel No cracking of plated coating
Painted Parts	Performance of Painted Components under the sequence of Test Flow 1	ES805-07011 (Harley-Davidson Standard) Test Flow 1	3M 898 tape Chamber Singleton Type II / No peeling or blistering of paint
Chrome Plated Aluminum, Steel and Plastic	Micrometer Bend Test	ASTM B490	Micrometer Plated test strips
Plated Plastic Parts	Decorative Chromium Plated Plastic Part Testing requirements	GMW 14668 ASTM B604	Oven, No evidence of blistering
Plated Plastic Parts	Stone chip Gravelometer	GMW 14668 GMW 14700	No plating separation from substrate and no blistering
Plated Plastic Parts	Peel Strength	ASTM B533, Procedure B GMW 14668	Force Gage HF200

Notes:

1. * = As Applicable
2. This scope is part of and must be included with the Certificate of Accreditation No. AT-1250



Vice President