



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## Certificate of Accreditation

*Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:*

***Consultoría y Pruebas de Materiales, S.A de C.V.***  
*Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
San Nicolás de los Garza, Nuevo León, México. C.P. 66479*

*(Hereinafter called the Organization) and hereby declares that Organization is accredited  
in accordance with the recognized International Standard:*

**ISO/IEC 17025:2017**

This accreditation demonstrates technical competence for a defined scope and the  
operation of a laboratory quality management system  
(as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

***Chemical, Mechanical and Non-Destructive Testing***  
*(As detailed in the supplement)*

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen  
President

Perry Johnson Laboratory  
Accreditation, Inc. (PJLA)  
755 W. Big Beaver, Suite 1325  
Troy, Michigan 48084

Initial Accreditation Date:

November 07, 2010

Issue Date:

November 23, 2021

Expiration Date:

February 28, 2024

Accreditation No.:

67973

Certificate No.:

L21-730

*The validity of this certificate is maintained through ongoing assessments based on a  
continuous accreditation cycle. The validity of this certificate should be  
confirmed through the PJLA website: [www.pjilabs.com](http://www.pjilabs.com)*



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Joel Treviño Phone: 811-520-2292

*Accreditation is granted to the facility to perform the following testing:*

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical <sup>F</sup>	Metals Ferrous and Non-Ferrous (Iron Base, Copper Base, Aluminum Base)	Chemical Analysis Optical Emission Spectrometry	ASTM E-415 ASTM E-1086 ASTM E-1999 ASTM E-1251	Iron Base (% of Weight) C 0.003 % to 5 % Si 0.002 % to 7 % Mn 0.002 % to 25 % P 0.002 % to 0.8 % S 0.002 % to 0.45 % Cr 0.002 % to 40 % Ni 0.003 % to 55 % Mo 0.003 % to 11 % Al 0.002 % to 6 % Cu 0.001 % to 10 % Co 0.002 % to 13 % Ti 0.001 % to 2.3 % Nb 0.001 % to 3.5 % V 0.001 % to 11 % W 0.005 % to 25 % N 0.05 % to 1.2 % Pb 0.003 % to 0.35 % Mg 0.000 5 % to 0.125 % B 0.000 5 % to 0.11 % Sn 0.002 % to 0.35 % Zn 0.001 % to 0.04 % Sb 0.005 % to 0.28 % Se 0.001 % to 0.4 % As 0.002 % to 0.15 % Bi 0.001 % to 0.15 % Ca 0.000 5 % to 0.01 % Ce 0.002 % to 0.8 % Zr 0.002 % to 0.5 % La 0.001 % to 0.05 % Aluminum Base (% of Weight) Si 0.005 % to 25 % Fe 0.001 % to 3 % Cu 0.001 % to 11 % Mn 0.002 % to 2.2 % Mg 0.002 % to 14 % Cr 0.001 % to 0.5 % Ni 0.005 % to 4 % Zn 0.01 % to 12 % Ti 0.001 % to 0.45 % P 0.001 % to 0.01 % Li 0.000 1 % to 0.035 % Sr 0.000 2 % to 0.15 %



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical <sup>F</sup>	Metals Ferrous and Non-Ferrous (Iron Base, Copper Base, Aluminum Base)	Chemical Analysis Optical Emission Spectrometry	ASTM E- 415 ASTM E-1086 ASTM E-1999 ASTM E-1251	Aluminum Base (% of Weight) Ga 0.001 % to 0.15 % Na 0.000 2 % to 0.02 % Co 0.003 % to 0.5 % Cr 0.001 % to 0.7 % Cd 0.001 % to 0.4 % Ag 0.001 % to 1.2 % Ca 0.000 1 % to 0.02 % V 0.005 % to 0.2 % Sn 0.005 % to 1 % Be 0.000 1 % to 0.02 % Pb 0.000 2 % to 1.8 % B 0.0005 % to 0.025 % Ba 0.000 2 % to 0.02 % Bi 0.01 % to 0.7 % Hg 0.005 % to 0.2 % In 0.005 % to 0.2 % La 0.001 % to 0.04 % Mo 0.002 % to 0.02 % Ln 0.001 % to 0.02 % Zr 0.001 % to 0.25 %  Copper Base (% of Weight) Ag 0.002 % to 1.7 % Al 0.001 % to 13 % As 0.001 % to 0.5 % B 0.002 % to 0.1 % Be 0.000 2 % to 2.5 % Bi 0.003 % to 7 % Cd 0.003 % to 1.3 % Co 0.005 % to 3.6 % Cr 0.001 % to 3.5 % Fe 0.005 % to 7.5 % Mg 0.000 5 % to 0.25 % Mn 0.002 % to 15 % Nb 0.002 % to 1 % Ni 0.002 % to 42 % P 0.001 % to 1 % Pb 0.002 % to 25 % S 0.001 % to 0.2 %



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical <sup>F</sup>	Metals Ferrous and Non-Ferrous (Iron Base, Copper Base, Aluminum Base)	Chemical Analysis Optical Emission Spectrometry	ASTM E-415 ASTM E-1086 ASTM E-1999 ASTM E-1251	Copper Base (% of Weight) Sb 0.005 % to 0.75 % Se 0.001 % to 1 % Si 0.003 % to 1 % Sn 0.002 % to 20 % Te 0.005 % to 1 % Ti 0.001 % to 0.07 % Zn 0.005 % to 50 % Zr 0.002 % to 0.06 %
	Nickel Alloys	Chemical Analysis Optical Emission Spectrometry	ASTM E3047	Ni Base (% of Weight) C 0.000 5 % to 0.5 % Si 0.005 % to 8 % Mn 0.001 % to 3.5 % P 0.005 % to 0.08 % S 0.003 % to 0.15 % Cr 0.002 % to 35 % Fe 0.005 % to 55 % Mo 0.002 % to 40 % Al 0.005 % to 8.5 % Cu 0.001 % to 35 % Co 0.002 % to 25 % Ti 0.005 % to 7 % Nb 0.005 % to 8.5 % V 0.005 % to 1.2 % W 0.015 % to 13.5% Pb 0.005 % to 0.08 % Mg 0.000 5 % to 0.15 % B 0.001 % to 3.6 % Sn 0.005 % to 0.8 % Zr 0.001 % to 0.35 % Ta 0.01 % to 8 % Hf 0.005 % to 2 %
	Zinc Alloys	Chemical Analysis Optical Emission Spectrometry	ISO 3815-1 ASTM E-54	Zinc (% of Weight) Al 0.001 % to 40 % Bi 0.001 % to 0.15 % Cd 0.0005 % to 0.8 % Cr 0.003 % to 0.15 % Cu 0.001 % to 8 % Fe 0.003% to 0.7 % Mg 0.000 1 % to 0.25 %



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Chemical <sup>F</sup>	Zinc Alloys	Chemical Analysis Optical Emission Spectrometry	ISO 3815-1 ASTM E-54	Zinc Mn 0.001 % to 2.5 % Ni 0.003 % to 0.1 % Pb 0.001 % to 2.5 % Sb 0.015 % to 13 % Si 0.001 % to 0.1 % Sn 0.001 % to 3 % Ti 0.000 5 % to 0.02 %
	Metals Ferrous and Non-Ferrous Organic Materials and Automotive Components	Salt Spray (Fog)	ASTM B-117 JIS Z 2371	Visual Inspection (Comparison)
	Metals Ferrous	Determination of Carbon-Sulfur	ASTM E1019 ASTM E1806	Carbon 0.000 4 % to 4.5 % Sulfur 0.000 4 % to 0.4 %
	Textile Glass Reinforced Plastics	Determination of Glass Fiber Content	ISO 1172 ASTM D5630	0.1 g to 200 g
Mechanical <sup>F</sup>	Metal Surfaces	Roughness (Ra) Sheet Metal Surfaces	ASTM D 7127 SAE J911	1 µin to 120 µin
	Metal Automotive Components	Tensile Metal Surface (Reduction of Area)	ASTM A370, E8 JIZ Z2241	10 % to 100 %
		Tensile r-Value	ASTM E517	1 to 3
		Tensile n-Value	ASTM E646	0.08 to 0.3
		Weight (mass) of Coating on Iron and Steel Articles with Zinc or Zinc Alloy Coating, Coating Weigth	ASTM A90/ A90M	24 g/m <sup>2</sup> to 1 100 g/m <sup>2</sup>
	Metal	Charpy Impact Test CVN	ASTM A370 ASTM E-23 API 1104 AWS ASME Secc. VIII (UG-84)	0.25 ft-lb to 300 ft-lb (0.338 J to 406.74 J)



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT				
Mechanical <sup>F</sup>	Metal	Tension Testing of Metallic Materials	ASTM B557/B557M ISO6892-1 ASME IX API 1104 AWS ASTM E8 ASTM A370	45 lbf to 300 000 lbf (200.17 N to 1 334.46 kN)				
		Microhardness and Macrohardness	ASTM E384 ASTM E92 ISO 6507	1 g·f to 1 000 g·f and 1 000 g·f to 50 000 g·f				
		Guided Bend Test	ASTM A370 API 1104 AWS ASME Secc.IX (QW-160) ASTM-E190 ASTM-E290	45 lbf to 300 000 lbf (200.17 N to 1 334.46 kN)				
		Brinell Hardness	ASTM E110 SAE J417 ASTM E10	Load 62.5 kgf to 3 000 kgf				
		Rockwell Hardness	ASTM E-18	27 HRA to 86 HRA 1 HRB to 100 HRB 20 HRC to 80 HRC 60 HR15T to 93 HR15T 15 HR30T to 84 HR30T 2.6 HR45T to 75 HR45T 57 HRF to 100 HRF 69 HR15N to 94 HR15N 41 HR30N to 85 HR30N 20 HR45N to 76 HR45N				
Mechanical <sup>F</sup>	Polymers	Melt Flow Rate	D1238 ISO 1133 Part 1 and Part 2	0.01 g/10 min to 50 g/10 min				
					Thermoplastics	Izod Notched Impact Strength	ASTM D256 ISO 180	2.75 J / 5.5 J / 11 J / 22 J



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
 San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
 Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Mechanical <sup>F</sup>	Metallic Materials	Determining No Metallic Inclusion	ASTME-45	Visual Inspection (Comparison)
		Determining Average Grain Size	ASTM E112	Visual Inspection (Comparison)
			ASTM E1382	Software (NIST Element) 0 to 14
		Phase Determination	ASTM E1245	Software (NIST Element) 1 % to 100 %
	Metals Ferrous	Resistance to Hydrogen Induced Cracking	NACE TM0284	0.01 % to 100 % of Crack Sensitivity Ratio (CSR), Crack Length Ratio (CLR) and Crack Thickness Ratio (CTR)
		SCC (Stress Corrosion Cracking)	ISO 7539-2 Corrosion of Metals and Alloys - Stress Corrosion Testing	Four-Point Loading
Mechanical <sup>F</sup>	Adhesive Materials	Peel Adhesion Test 90° and 180°	ASTM D6862 ASTM D903	0.88 lbf to 1 000 lbf (3.92 N to 4 448.27 N)
		Loop Tack	ASTM D6195	0.88 lbf to 1 000 lbf (3.92 N to 4 448.27 N)
	Polymers	Tension Testing	ASTM D3950 ASTM D638 ISO 527	0.88 lbf to 300 000 lbf (3.92 N to 1 334.46 kN)
		Hardness Shore A, C and D	ASTM D2240 ISO 868 ISO 7619- Part 1	0 HS to 100 HS
	Metal and Polymers	Appearance/Gloss	ASTM D523 ASTM D2457 ASTM C584 DIN 67530	20°, 60° and 85° (0 GS to 199.9 GS)
Non-Destructive Test <sup>FO</sup>	Metal	Ultrasonic Examination	ASTM E587	Carbon and Alloy Plain and Clad Steel Plates, 3/8 in (10 mm) in Thickness and Over
			ASTM A435	Fully Killed Carbon and Alloy Steel Plates, 1/2 in (12.5 mm) and Over in Thickness



# Certificate of Accreditation: Supplement

## Consultoría y Pruebas de Materiales, S.A de C.V.

Avenida Adolfo López Mateos 1099A-1, Col Margarita Salazar de Rodriguez  
San Nicolás de los Garza, Nuevo León, México. C.P. 66479  
Contact Name: Arturo Joel Treviño Phone: 811-520-2292

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Non-Destructive Test <sup>FO</sup>	Metal	Liquid Penetrant	ASTM E1417 Practice for Liquid Penetrant Testing	Non-Porous Metal and Nonmetal Components
		Magnetic Particle	ASTM E 1444 ASTM E3024 (Magnetic Particle Testing)	Qualitative/Visual
		Micro/Macro Etching	ASTM E340, E407 AWS, ASME Secc. IX	Visual

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> would mean that the laboratory performs this testing at its fixed location.
2. The presence of a superscript FO means that the laboratory performs testing of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer<sup>FO</sup> would mean that the laboratory performs this testing at its fixed location and onsite at customer locations.

