



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

CHEM-PLATE INDUSTRIES, INC.¹
 1990 East Devon Avenue
 Elk Grove Village, IL 60007
 Linette Neal Phone: 847 472 4793

MECHANICAL

Valid To: October 31, 2017

Certificate Number: 0940.01

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

| <u>Test</u> | <u>Test Method(s)</u> |
|---|---|
| Rockwell Hardness (A, BW, C, 15N, 30N) | ASTM E18, F606/F606M; GM 6010M (Section 3.1) (<i>superseded</i>) ² ; GM 6170M (Section 3.1) (<i>superseded</i>) ² ; GM 6171M (Section 3.1) (<i>superseded</i>) ² ; ISO 898-1 (Section 9.9); ISO 2702 (Section 4.1.3) |
| Microhardness (Knoop 500 gf) | ASTM E384; GM 6010M (Section 3.2) (<i>superseded</i>) ² ; GM 6170M (Section 3.2) (<i>superseded</i>) ² ; GM 6171M (Section 3.2) (<i>superseded</i>) ² ; SAE J419; ISO 898-1 (Section 9.11); ISO 2702 (Section 4.1.1) |
| Neutral Salt Spray | ASTM B117; SAE/USCAR-1 |
| Measurement of Coating Thickness Eddy Current / Magnetic X-Ray | ASTM B499, B568, E376 |
| Coating Weight | QP-DZ-01 (NOF Metal Coatings) |
| Adhesion | ISO 2819 |

| <u>Test</u> | <u>Test Method(s)</u> |
|---|--|
| Hydrogen Embrittlement (Threaded Parts) | GM 6010M (Section 4.7) (<i>superseded</i>) ² , GM 6170M (Section 3.9) (<i>superseded</i>) ² , GM 6171M (Section 3.9) (<i>superseded</i>) ² ; USCAR-7 |
| Torsional Strength | GM 6010M (Section 3.5) (<i>superseded</i>) ² , GM 6170M (Section 3.6) (<i>superseded</i>) ² , GM 6171M (Section 3.6) (<i>superseded</i>) ² ; ISO 898-1 (Section 9.13); ISO 2702 (Section 4.2.2) |
| Case Depth (Traverse and Visual) | GM 6010M (Section 3.3) (<i>superseded</i>) ² , GM 6170M (Section 3.3) (<i>superseded</i>) ² , GM 6171M (Section 3.6) (<i>superseded</i>) ² ; SAE J423; ISO 2702 (Section 4.1.2) |
| Decarburization | ASTM F2328, F2328M; SAE J121 (<i>superseded</i>) ² , SAE J121M (<i>superseded</i>) ² , SAE J419; ISO 898-1 (Section 9.10) |
| Ductility | GM 6010M (Section 3.7) (<i>superseded</i>) ² , GM 6170M (Section 3.8) (<i>superseded</i>) ² , GM 6171M (Section 3.8) (<i>superseded</i>) ² |

¹ This accreditation covers testing performed at the main laboratory listed above, and the satellite laboratories listed on the following pages.

² This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

CHEM-PLATE INDUSTRIES, INC.
1800 Touhy Avenue
Elk Grove Village, IL 60007

| <u>Test</u> | <u>Test Method(s)</u> |
|--|---|
| Rockwell Hardness (A, BW, C, 15N, 30N) | ASTM E18, F606/F606M; GM 6010M (Section 3.1) (<i>superseded</i>) ² ; GM 6170M (Section 3.1) (<i>superseded</i>) ² ; GM 6171M (Section 3.1) (<i>superseded</i>) ² ; ISO 898-1 (Section 9.9); ISO 2702 (Section 4.1.3) |
| Microhardness (Knoop 500 gf, Vickers 300 gf) | ASTM E384; GM 6010M (Section 3.2) (<i>superseded</i>) ² ; GM 6170M (Section 3.2) (<i>superseded</i>) ² ; GM 6171M (Section 3.2) (<i>superseded</i>) ² ; SAE J419; ISO 898-1 (Section 9.11); ISO 2702 (Section 4.1.1) |
| Torsional Strength | GM 6010M (Section 3.5) (<i>superseded</i>) ² ; GM 6170M (Section 3.5) (<i>superseded</i>) ² ; GM 6171M (Section 3.6) (<i>superseded</i>) ² ; ISO 2702 (Section 4.1.3) |
| Case Depth (Traverse and Visual) | GM 6010M (Section 3.3) (<i>superseded</i>) ² ; GM 6170M (Section 3.3) (<i>superseded</i>) ² ; GM 6171M (Section 3.6) (<i>superseded</i>) ² ; SAE J423; ISO 2702 (Section 4.1.2) |
| Decarburization | ASTM F2328, F2328M; SAE J121 (<i>superseded</i>) ² ; SAE J121M (<i>superseded</i>) ² , SAE J419; ISO 898-1(Section 9.10) |
| Wedge Tensile | ASTM F606/F606M; ISO 898-1; SAE J429; GM 6170M (Section 3.5) (<i>superseded</i>) ² ; GM 6171M (Section 3.5) (<i>superseded</i>) ² |
| Axial Tensile | ASTM F606/F606M; ISO 898-1; SAE J429 |
| Ductility | GM 6010M (Section 3.7) (<i>superseded</i>) ² ; GM 6170M (Section 3.8) (<i>superseded</i>) ² ; GM 6171M (Section 3.8) (<i>superseded</i>) ² |

CHEM-PLATE INDUSTRIES, INC.
1250 Morse Avenue
Elk Grove Village, IL 60007

| <u>Test</u> | <u>Test Method(s)</u> |
|---|---|
| Rockwell Hardness (A, BW, C, 15N) | ASTM E18, F606/F606M; GM 6010M (Section 3.1) (<i>superseded</i>) ² ; GM 6170M (Section 3.1) (<i>superseded</i>) ² ; GM 6171M (Section 3.1) (<i>superseded</i>) ² ; ISO 898-1 (Section 9.11); ISO 2702 (Section 4.1.3) |
| Microhardness (Vickers 300 gf) | ASTM E384; GM 6010M (Section 3.2) (<i>superseded</i>) ² ; GM 6170M (Section 3.2) (<i>superseded</i>) ² ; GM 6171M (Section 3.2) (<i>superseded</i>) ² ; SAE J419; ISO 898-1 (Section 9.11); ISO 2702 (Section 4.1.1) |
| Neutral Salt Spray | ASTM B117; SAE/USCAR-1 |
| Measurement of Coating Thickness Eddy Current / Magnetic X-Ray | ASTM B499, B568, E376 |
| Torsional Strength | GM 6010M (Section 3.5) (<i>superseded</i>) ² ; GM 6170M (Section 3.6) (<i>superseded</i>) ² ; GM 6171M (Section 3.6) (<i>superseded</i>) ² |
| Case Depth (Traverse and Visual) | GM 6010M (Section 3.3) (<i>superseded</i>) ² ; GM 6170M (Section 3.3) (<i>superseded</i>) ² ; GM 6171M (Section 3.6) (<i>superseded</i>) ² ; SAE J423; ISO 2702 (Section 4.1.2) |
| Decarburization | ASTM F2328, F2328M; SAE J121 (<i>superseded</i>) ² ; SAE J121M (<i>superseded</i>) ² , SAE J419; ISO 898-1 (Section 9.10) |
| Ductility | GM 6010M (Section 3.7) (<i>superseded</i>) ² ; GM 6170M (Section 3.8) (<i>superseded</i>) ² ; GM 6171M (Section 3.8) (<i>superseded</i>) ² |
| Torque-Tension | ISO 16047; JDM F15X; GMW3044 |
| Adhesion | ISO 2819 |



Accredited Laboratory

A2LA has accredited

CHEM-PLATE INDUSTRIES INC.

Elk Grove Village, IL

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 20th day of January 2016.

A handwritten signature in blue ink, appearing to read "J. C. Bunt".

Senior Director of Quality and Communications
For the Accreditation Council
Certificate Number 940.01
Valid to October 31, 2017

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