



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

SEMBLEX CORPORATION  
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MECHANICAL

Valid To: June 30, 2019

Certificate Number: 0794.01

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

<b><u>Test</u></b>	<b><u>Test Methods</u></b>
Axial & Wedge Tensile ( $\leq 60$ klbs)	ASTM F606/F606M; DIN 7513 (Section 5.2.3); EN20-898-1 (Section 8.5); SAE J429, J1216
Hardness (Rockwell) (A, B, C, 15N, & 30N)	ASTM E18; CHRYSLER MS-4515 (Section 2.41.2); FORD WD/950 (Section 3.1), WD/951 (Section 4.1), WD/953 (Section 2.2/2.3); GM 6010M (Sections 4.1, 4.2, and 4.3), 6109M and 6177M (Section 3.2), 6170M (Section 4.1); SAE J417, J429 (Sections 5.1 and 5.2), J1216 (Sections 3.1 and 3.2)
Microhardness (Knoop 500g)	ASTM E384 (Knoop); DIN 50-133, DIN 50-150; GM 6109M, 6177M (Section 3.1), 6170M (Sections 4.2 and 4.3); SAE J423
Sample Preparation	ASTM E3
Case Depth	CHRYSLER MS415 (Sections 2.4.1.1 and 2.4.2.2); DIN 50 190-1; GM 6010M (Sections 4.2 and 4.3), 6171M (Appendix A); SAE J78
Decarburization	FORD WD/952 (Section 4.1); ISO 898-5 (Sections 6.2.2, 6.2.2.1, and 6.2.2.2); GM 6104M; SAE J121, J419
Surface Discontinuities	PA WI 073; ASTM F788, F788M; Chrysler PF-5188; DX 520007; Ford WA990; GM 6102M; ISO 6157-1/3; SAE J123, J1061
Plating Thickness	ASTM B568

**Test****Test Methods**

Salt Spray	ASTM B117; ISO-9227; GMW 3286; USCAR-1
Drive Testing ( $\leq 200$ N-m)	ANSI/ASME B18.6.4 and 2.91.1; CHRYSLER MS415 (Section 2.6); DIN 7513 (Section 5.2.1), DIN EN ISO 2702 (Section 6.2.1); FORD WD/952 (Section 4.3), WD/953 (Section 3.2); GM 6010M (Section 3.6), 6170M (Section 4.6), 6171M (Section 4.6)
Stress Durability (Hydrogen Embrittlement)	SAE J81 (Section 4.9)
Torsional Strength ( $\leq 200$ N-m)	ANSI B18.6.4 and 2.9.1.2; DIN 7513 (Section 5.2.2), DIN EN ISO 2702 (Section 6.2.2); FORD WD/950 (Section 4.2), WD/951 (Section 4.4), WD/953 (Section 2.6); GM 6010M (Sections 3.5 and 4.4), 6170M (Section 4.5), 6171M (Sections 3.5, 3.6, 4.4 and 4.5); SAE J81 (Section 3, Table 5A); WI ENG 007 <sup>1</sup>
Ductility	FORD WD/951 (Sections 3.3 and 4.5); GM 6170M (Section 3.8), 6171M (Sections 3.8 and 4.6); SAE J81 (Sections 3.3.7 and 4.8)
Product Evaluation	WI ENG 015 <sup>1</sup>
Torque Test (Unsupported, Proof, Drive/Failure, Drive, Breakaway) ( $\leq 200$ N-m)	WI ENG 022 <sup>1</sup> , 026 <sup>1</sup> , 016 <sup>1</sup> , 025 <sup>1</sup> , 012 <sup>1</sup>
Pull Out/Push Out Testing ( $\leq 2000$ lbs)	WI ENG 020 <sup>1</sup> , 021, 024 <sup>1</sup>
Clamp Load Testing ( $\leq 100$ kN)	WI ENG 023 <sup>1</sup>



<sup>3</sup> Calibration and Measurement Capability Uncertainty (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. CMC's 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.

<sup>4</sup> This test is not equivalent to that of a calibration.

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## *Accredited Laboratory*

A2LA has accredited

### **SEMBLEX CORPORATION**

*Elmhurst, 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 15<sup>th</sup> day of September 2017.

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President & CEO  
For the Accreditation Council  
Certificate Number 0794.01  
Valid to June 30, 2019  
Revised April 9, 2019

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