



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

VELTEC LABORATORIES  
12255 Universal  
Taylor, MI 48180  
Billy Martin Phone: 734 946 0440

MECHANICAL

Valid To: December 31, 2019

Certificate Number: 0248.01

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

<u>Test</u>	<u>Test Method(s)</u>
Tensile Testing (Flat Metal, Tubular Product and Full Cross Section Round)	ASTM E8/E8M, A370 (Sections 6-14)
UTM-Tensile, Yield, Elongation, Reduction of Area, r and n Values	JIS Z2241; ISO 6892-1
Plastic Strain Ratio (r-Value)	ASTM E517; ISO 10113; JIS Z2254
Work Hardening Exponent (n-Value)	ASTM E646; ISO 10275; JIS Z2253
Bake Hardening Index	ASTM A1008
Rockwell Hardness (HRBW, HRC, HR15TW, HR30TW, HR45TW)	ASTM E18, E140
Coating Weight Aluminum on Steel Zinc on Steel	ASTM A428/A428M ASTM A90/A90M, A917 (Section 8)
Double Olsen Coating Adhesion	Chrysler LP-461H-120
Olsen Cup	ASTM E643
Bend Test Guided V Bend Guided V Bend for Cold Rolled Sheet Semi-guided Bend Arrangement B Free-Bend Types 1 and 2 Bend and Flatten	ASTM E290, A917 (Section 9)

**Test**

**Test Method(s)**

Mod-r Drawability	Tinius Olsen Instruction Booklet #122
Surface Roughness using a Profilometer	SAE J911; ASME B46.1
Sample Preparation	ASTM E3
Light Photomicrography	ASTM E883
Inclusion Content	ASTM E45 (Method A); SAE J422
Micro Etching	ASTM E407
Macro Etching	ASTM E381
Case Depth (Microscopic)	SAE J423
Surface Discontinuities	ASTM F788, F812
Grain Size (Comparison)	ASTM E112
Decarburization	ASTM E1077; SAE J419
Weld Discontinuities	Using the methods listed above in accordance with the ASM Handbook Volume 6
Metallography and Microstructures	Using the methods listed above in accordance with the ASM Handbook Volume 9
Failure Analysis	Using the methods listed above in accordance with the ASM Handbook Volume 11

**Chemical**

Optical Emission Spectroscopy (Chemical Analysis) Carbon and Low-Alloy Steels (Al, B, C, Ca, Cr, Cu, Mn, Mo, Nb, Ni, P, S, Si, Ti, V)	ASTM E415
Stainless Steel (C, Cu, Cr, Mn, Mo, Ni, P, S, Si)	ASTM E1086
Aluminum Alloys (B, Ca, Cr, Cu, Ga, Mg, Mn, Ni, P, Pb, Si, Ti, V, Zn)	ASTM E1251





## *Accredited Laboratory*

A2LA has accredited

### **VELTEC LABORATORIES**

*Taylor, MI*

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 29<sup>th</sup> day of December 2017

A handwritten signature in black ink, appearing to read "L. S. ...", positioned above a horizontal line.

President & CEO  
For the Accreditation Council  
Certificate Number 0248.01  
Valid to December 31, 2019

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