



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

METALLURGICAL ENGINEERING SERVICES, INC.

845 E. Arapaho Rd  
 Richardson, TX 75081  
 Daniel Stolk Phone: 972 480 0033  
[danstolk@metengr.com](mailto:danstolk@metengr.com)

MECHANICAL

Valid To: September 30, 2018

Certificate Number: 3065.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metals, polymers, fasteners, aerospace components, and coatings:

**Test**

**Test Method(s)**

**I. Mechanical Tests**

Metallography/Microscopy

Metallographic Preparation  
 Grain Size  
 Graphite in Cast Iron  
 Plating Coating Thickness  
 Case Depth  
 Macroetching  
 SEM

ASTM E3  
 ASTM E112, E1382  
 ASTM A247  
 ASTM B487, B748  
 SAE J423  
 ASTM E340, E381  
 ASTM B748, E766

Hardness/Microhardness

Rockwell (HRBW, HRC, HR15N, HR30N, HR15TW, HR30TW)  
 Brinell – 3000kg  
 Microhardness (Knoop – 500g)

ASTM E18  
 ASTM E10  
 ASTM E384

Uniaxial

Tensile  
 Compression Testing of Metallic Materials at Room Temperature

ASTM A370, B557, D412, D638, E8  
 ASTM E9

Corrosion

Salt Spray

ASTM B117

Failure Analysis (using the methods listed above and below)

ASM Handbook, Vol. 11

**Test**

**Test Method(s)**

**II. Chemical Tests**

WDS (B, C, N, O, F, Na, Mg, Al, Si, P, S, Cl, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Rb, Sr, Y, Zr, Nb, Mo, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Ba, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Pb, Bi, Th, U)

ASTM E1621; Equipment Manual

OES

Aluminum Alloys (Si, Fe, Cu, Mn, Mg, Cr, Zn, Ti, Zr, Ni, B, Be, Bi, Ca, Ga, Li, Na, P, Pb, Sb, Sn, Sr, V, Al)

ASTM E1251

Steel Alloys (C, Si, Mn, P, S, Cr, Ni, Mo, Al, Co, Ti, Nb, V, W, Pb, B, Sn, Zn, As, Bi, Ca, Ce, Zr, La, Fe)

ASTM E415, E1086

EDS

ASTM E1508

FTIR

ASTM E1252

Combustion Analysis of Carbon

ASTM E1019





## *Accredited Laboratory*

A2LA has accredited

# **METALLURGICAL ENGINEERING SERVICES, INC.**

*Richardson, TX*

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 2<sup>nd</sup> day of February 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 3065.01  
Valid to September 30, 2018

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