



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

LUVAK, INC.  
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Boylston, MA 01505  
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CHEMICAL

Valid To: September 30, 2021

Certificate Number: 3183.01

In recognition of the successful completion of the A2LA evaluation process (including compliance to R223 – Specific Requirements – GE Aviation S-400 Accreditation Program), accreditation is granted to this laboratory to perform the following tests on Al, Co, Cu, Fe, Mg, Ni, Ti and alloys, transition metals, refractory metals, solder and braze materials and various non-metallic materials:

**Test**

**Test Methods**

Chromatography

Ion Chromatography  
(Br, Cl, F, NO<sub>2</sub>, NO<sub>3</sub>, PO<sub>4</sub>, SO<sub>4</sub>)

ASTM D808, D4327

Combustion

LECO Combustion Analysis  
(C, H, N, O, S)

ASTM E1019, E1941, E1409, E1447

Spectroscopy

Atomic Absorption

Flame

(Ag, Be, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Zn)

ASTM E663 (Withdrawn 1997)<sup>1</sup>

Graphite Furnace

(As, Bi, Cd, Pb, Sb, Se, Sn, Te, Tl)

ASTM E1184

Direct Current Plasma Emission Spectroscopy (DCP)

(Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pd, Pr, Pt, Re, Rh, Rb, Ru, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, W, U, V, Y, Yb, Zn, Zr)

ASTM E1097, E2371

Inductively Coupled Plasma Optical Emission Spectrometry

(Al, B, Cu, Fe, Mn, Mo, Si, Sn, V, Y, Zn, Zr)

ASTM E2371

Miscellaneous

Vacuum Hot Extraction (H)

ASTM E146 (Withdrawn 1989)<sup>1</sup>

<sup>1</sup>This laboratory's scope contains a withdrawn or superseded method. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.



## Accredited Laboratory

A2LA has accredited

**LUVAK INC.**

*Boylston, MA*

for technical competence in the field of

**Chemical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of R223 – Specific Requirements: GE Aviation S400 Accreditation Program. 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 April 2017*).



Presented this 11<sup>th</sup> day of October 2019.

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

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 3183.01  
Valid to September 30, 2021

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