

World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

LUVAK INC.

Boylston, MA

for technical competence in the field of

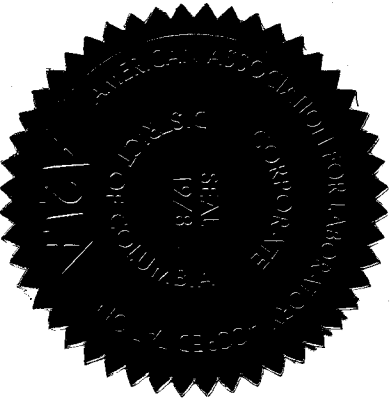
Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 2nd day of November 2011.

A handwritten signature in cursive script, appearing to read 'Peter Almyer', is written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 3183.01
Valid to September 30, 2013



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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Luvak Inc.
722 Main Street
Boylston, MA 01505
Dean Gaskill Phone: 508 869 6401

CHEMICAL

Valid To: September 30, 2013

Certificate Number: 3183.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on Fe, Ni, Co, Cu, Ti, Al and Mg alloys, transition metals, refractory metals, solder and braze materials and various non-metallic materials:

<u>Test</u>	<u>Test Methods</u>
Atomic Absorption Flame ¹ (Ag, Be, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Zn)	ASTM E663
Graphite Furnace (As, Bi, Cd, Pb, Sb, Se, Sn, Te, Tl))	ASTM E1184
LECO Combustion Analysis ¹ (C, O, H, S, N)	ASTM E1019, E1409, E1447
Vacuum Hot Extraction (H)	ASTM E146
Direct Current Plasma Emission Spectroscopy (DCP) ¹ (Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cs, Cr, 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, Sm, Sn, Si, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, W, U, V, Y, Yb, Zn, Zr)	ASTM E1097, E2371
Ion Chromatography (Br, Cl, F, NO ₃ , NO ₂ , PO ₄ , SO ₄)	ASTM D808, D4327
Gravimetric Analysis Si in Steel S in Metals Chlorides (Cl) in Ti Alloys ¹	ASTM E350 (Section 46-52) ASTM C114, E129 (Section 6) ASTM D808, E120-2000 (Section 15-22) (Withdrawn 2003) ²

¹This accreditation also includes an evaluation of the GE S400 requirements for the tests listed above using the GE AC1.1 checklist.

²This 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.