



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Alternate Systems LLC

17440 Dallas Parkway, Suite 210, Dallas, TX 75287

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Testing of Coating Thickness, Composition, Alloy Conductivity, and Ferrite Content with X-ray Fluorescence, Eddy Current, and Magnetic Induction; X-ray Radiation Safety Surveys, 21 CFR Parts 210 and 211 Validation including Environmentally Controlled Spaces and Systems, Sound Surveys, Dosimetry and Spectrum Analysis, Electrical Qualification, Fume Hood Validation, Temperature Mapping, and Temperature Uniformity Surveys
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Initial Accreditation Date:

December 4, 2017

Issue Date:

January 23, 2022

Expiration Date:

April 30, 2024

Accreditation No.:

73642

Certificate No.:

L22-72

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjllabs.com



Certificate of Accreditation: Supplement

Alternate Systems LLC

17440 Dallas Parkway, Suite 210, Dallas, TX 75287
 Contact Name: Peter W. Wright Phone: 972-964-3124

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Acoustic ^{FO}	Sound Surveys, Dosimetry, Spectrum	Sound Intensity, Spectrum	OSHA Section 3 Chapter 5	20 dB A to 130 dB A D.L. = 0.1dB A
Dimensional Inspection ^{FO}	Pin Gages	Diameters	Laser Micrometry	0.007 8 in to 1.575 in
Environmental ^{FO}	X-Ray Leakage	X-Ray Radiation Safety Surveys	AltSys Procedure	0 mR/hr to 50 mR/hr
Non-Destructive ^{FO}	Coating Thickness Standards, Units	Coating Thickness and Alloy Analysis	ASTM B568 X-Ray Florescence	0 to 0.95 Normalized Counts
	Non-magnetic Coatings on Magnetic Substrates, Non-Conductive Coatings on Conductive Substrates, Conductive Coatings on Nonconductive Substrates	Eddy Current and Magnetic Induction	ASTM B244 / ASTM E376	0 in to 0.045 in
	Nonferrous Alloys, Ferrous Alloys and Weld Metal	Alloy Conductivity and Ferrite Content	ASTM A799/A799M, ASTM E1004, Magnetic Induction	0.1 % IACS to 104 % IACS 0.1 % Fe to 100 % Fe
	XRF Chemical Composition	Weight %	Fischerscope X-Ray System, P6010	0.1-100 Wt. %
Thermodynamics ^{FO}	Thermocouples, RTDs, Data Loggers, IR Thermometers	Temperature	ASTM E1137	-80 °C to 800 °C
Visual Inspection ^O	Equipment and Facilities Validation	21 CFR Parts 201 and 211 Validation	Math to Customer Requirements	Qualitative Visual Evaluation
Electrical Inspection		Electrical Safety requirements, Customer Requirements	OSHA Subpart S Standard 1910.303, Customer Requirements	Electrical Supply Voltage, Grounding Resistance
Fume Hood Validation ^O		Electrical Safety, Fume Extraction Capability and Uniformity	29 CFR Part 1910.1450, ANSI/ASHRAE 110-1995, ANSI AIHA Z9.5, Customer Requirements	Electrical Safety, Air Flow Velocity and Uniformity

1. The presence of a superscript O means that the laboratory performs testing of the indicated parameter onsite at customer locations. Example: Outside Micrometer^O would mean that the laboratory performs this testing onsite at the customer's location.
2. The presence of a superscript FO means that the laboratory performs testing of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer^{FO} would mean that the laboratory performs this testing at its fixed location and onsite at customer locations.