



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017¹

IMR METALLURGICAL SERVICES
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CHEMICAL

Valid to: April 30, 2022

Certificate Number: 1140.04

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 test on the following materials and products: adhesives, aerospace and automotive products, aluminum alloys, brass and bronze, cables, carbon steel, cast iron, ceramics, coatings, copper alloys, elastomers, fasteners, labels, low alloy steel, nickel, paints, plastics, powder metals, power and hand tools, rubber, stainless steel, superalloys, titanium alloys, zinc alloys, thermal spray, oil and oil products:

| <u>Test:</u> | <u>Test Method(s):</u> |
|---|------------------------------|
| Cleanliness Testing | ASTM F2459; CLP-049, CLP-074 |
| Coating Weight | ASTM A90/A90M |
| Corrosion of Surgical Instruments | ASTM F1089 |
| Combustion Analysis (LECO - C & S) | ASTM E1019, E1941 |
| Density | ASTM B311 |
| SEM/EDS | ASTM E1508 |
| Spectroscopy | |
| FTIR | ASTM E1252 |
| Optical Emission (OES) | |
| Iron Base: (Al, As, B, C, Ca, Ce, Cr, Co, Cu, La, Mn, Mo, N, Nb (Cb), Ni, O, P, Pb, S, Sb, Si, Sn, Ta, Ti, V) | ASTM A751, E415, E1009 |
| Stainless Steel: (Al, B, C, Ce, Co, Cr, Cu, Mn, Mo, N, Nb (Cb), Ni, O, P, Pb, S, Si, Sn, Ti, V, W) | ASTM E1086 |
| Aluminum Base: (Ag, B, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Li, Mn, Mg, Na, Ni, P, Pb, Si, Sn, Sr, Ti, V, Zn, Zr) | ASTM E1251 |
| Cobalt Base: (Al, B, C, Cr, Cu, Fe, Mn, Mo, N, Nb, Ni, P, S, Si, Ta, Ti, V, W) | CLP-008 |

| Test: | Test Method(s): |
|--|----------------------------|
| <i>Optical Emission (OES) cont'd</i> | |
| Copper Base: (Al, Ag, As, Bi, Cr, Co, Fe, Mg, Mn, Ni, O, P, Pb, S, Sb, Si, Sn, Zn) | CLP-008 |
| Nickel Base: (Al, As, B, C, Co, Cr, Cu, Fe, Mg, Mn, Mo, N, Nb, Ni, P, Pb, S, Si, Sn, Ta, Ti, V, W, Zr) | CLP-008 |
| Titanium Base: (Al, C, Cr, Cu, Fe, H, Mn, Mo, N, Nb, Ni, O, Pd, Si, Sn, V, Y, Zr) | CLP-008 |
| | |
| Wet Chemistry | |
| pH | ASTM D1293 (Method B), E70 |
| | |
| Ion Chromatography | ASTM D4327 |
| | |
| XRD | ISO 13779-3; CLP-056 |
| | |
| X-Ray Fluorescence (XRF) | |
| Positive Material Identification (PMI) ² (Al, Ag, As, Au, Bi, Co, Cr, Cu, Fe, Ga, Hf, Mg, Mn, Mo, Nb (Cb), Ni, P, Pb, Pd, Pt, Re, S, Sc, Si, Sb, Sn, Ta, Ti, V, W, Zn, Zr) | ASTM E1916 |

¹This laboratory also meets the requirements of ISO/IEC 17025:2005.

²This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these tests or calibrations.



Accredited Laboratory

A2LA has accredited

IMR METALLURGICAL SERVICES

Louisville, KY

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 3rd day of August 2020.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1140.04
Valid to April 30, 2022

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