

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:20

#### ELEMENT MATERIALS TECHNOLOGY CHICAGO 194 Internationale Boulevard Glendale Heights, IL 60139 Jeff Romain Phone: 630 221 0385 x76237 E-mail: : jeff.romain@element.com

#### MECHANICAL

Valid to: June30, 2026

Certificate Number 0104.02

In recognition of the successful completion of the A2LA evaluation evaluation is granted to this laboratory to perform failure analysis and the following tests on the following productings; castings;

tool and die, consumer and construction industries.

<u>Test</u>

Test Method(s)

<u>Metals</u>

Page 1of 3

(A2LA Cert. No. 0104.0206/10/2024

#### <u>Test</u>

Metals(continued)

**Fillet Fracture Test** 

Hardenability

#### Hardness

Rockwell (A, B, C, E, F15N, 30N, 45N, 15T, 30T, 45T) Brinell (500 and 3000)gf Microhardness-Knoop and Vickers (25 to 1000) gf Macrohardness-Vickers (5 and 10)gf

Heat Treat (Raw Material)

Impact Testing(Charpy and Izod) (-320 to 450)°F

Metallographic Evaluation Alpha Case Case Depth Delta Ferrite Determination Depth of Decarburization Discontinuities (Surface)

> Grain Size Inclusions in Steel Macroetch

Microetch Microstructure Evaluation Plating Thickness Preparation Volume Fraction by Point Count

**Passivation Testing** 

Peel

Powder Characterization Apparent Density (Carney) Apparent Density (Hall) Apparent Density (Scott) Carney Flow Rate Flow Rate (Hall) Metal Powder Sampling Particle Size Distribution by Sieve Tap Density Volume of Apparent Density Test Method(s)

AWS B2.1/B2.1M, D1.1/D1.1M, D1.3/D1.3M, D14.1/14.1M;ASME (SectionIX); MIL-STD 15951998

ASTM A255

ASTM A370, A623, B294, E18, F606/606M; NASM 13126 ASTM A370, E10 ASTM E384; NASM 13126

ASTM E92

AMS 2750

ASTM A370, E23; BS ENSO 1481; BS EN 100451 :2001<sup>1</sup>

ASTM F136; SOP 021-S007 ASTM F2328 SAE J423 AMS 2315 ASTM E1077, F2328 SAE J1212013', J419 ASTM F788, F812|SO 6157; SAE J122, J1232012', J1061 ASTM E112, E930, E1181 ASTM E45 (Method A&D), E1245; SAE J422 ASTM A561, A604/A604M E381, E340; ASME (SectionIX) ASTM E407 ASTM A247, A892, E1268; ASM Metals HBK, Vol. 9 ASTM B487 ASTM E3 ASTM E562, A800/A800M

ASTM A380/A380M, A967/A967M, F1089

ASME (SectionIX)

ASTM B417 ASTM B212 ASTM B329 ASTM B964 ASTM B213 ASTM B215 ASTM B214 ASTM B527 ASTM B873



(A2LA Cert. No. 0104.0206/10/2024

Test	Test Method(s)
Metals(continued)	
SEM/EDS	ASTM B748,E1508
Shear- Single	ASTM F606/F606M
Shear-Double	ASTM B769;NASM 131213
Stress Rupture	ASTM E139, E292
Surface Roughnes	



(A2LA Cert. No. 0104.0206/10/2024





# **Accredited Laboratory**

A2LA has accredited

## **ELEMENT MATERIALS TECHNOLOGY CHICAGO**

Glendale Heights, IL

for technical competence in the field of

### Mechanical 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 accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to



Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 0104.02 Valid to June 30, 2026