



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

WESTMORELAND MECHANICAL TESTING & RESEARCH LTD.

19 Wildmere Rd.

Banbury, United Kingdom OX16 3JU

Samuel Harburn Phone: +44 (0) 1295 261211

www.wmtr.co.uk

MECHANICAL

Valid To: June 30, 2023

Certificate Number: 0621.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metals, alloys, metal products, plastics and reinforced plastic composites:

Test:

Test Method(s):

Metals

Tensile

ASTM E345, E8/E8M, A370, B557, B557M, E21; BS EN ISO 6892-1, BS EN ISO 6892-2; BS EN 2002-1, BS EN 2002-2

Youngs Modulus, Tangent Modulus and Chord Modulus

ASTM E111

Compression

ASTM E9

Bend Testing

WMTR/QTP/EM007¹

Pin - Type Bearing

ASTM E238

Double Shear

ASTM B769

Slotted Shear

ASTM B831

Hardness

Brinell Hardness
(10/3000 HBW)

ASTM E10

Rockwell Hardness
(HRB & HRC)

ASTM E18

Vickers Hardness
(HV5, HV10, HV30)

ASTM E92

Micro-Hardness
(HV 0.2, 0.3, 0.5, 1 & HK 0.5, 1)

ASTM E384

(A2LA Cert. No. 0621.03) 06/01/2021

Page 1 of 3

Test:

Test Method(s):

Metals continued

Impact

Charpy V - Notch

ASTM E23, A370

Izod

BS 131-1

Fracture Toughness

Fracture Toughness (KIC)

ASTM E399

Fatigue Testing

Constant Amplitude Fatigue

BS EN 6072

High Cycle & Low Cycle Fatigue Under Force Control

ASTM E466; BS 3518-3

High Cycle Fatigue

BS EN 3987

Low Cycle Fatigue Under Force Control

prEN 3874:Edition P1, April 1998

Low Cycle Fatigue Under Strain Control

BS 7270; ASTM E606/E606M

Fatigue Crack Growth

ASTM E647

Rotating Bend

BS ISO 1143

Creep Testing

Creep

ASTM E139; BS EN 2002-005; ISO 204

Stress Rupture

ASTM E139, E292; ISO 204

Metallurgical Tests

Depth of Decarburization

(Micro Hardness and Optical Techniques)

ASTM E1077

Average Grain Size

Automatic & Semi-Automatic Methods

ASTM E1382, E112

Largest Grain

ASTM E930

Hydrogen Embrittlement

ASTM F519

Inclusion Content

ASTM E45 (Method D)

Microstructure of Graphite in Iron Castings

ASTM A247

Alpha Case in Titanium

Microscopic and Bend

WMTR/QTP/MOG024¹

Test:

Test Method(s):

Metallurgical Tests continued

Intergranular Attack and Intergranular Oxidation (IGA/IGO)

WMTR/QTP/MOG007¹

Plastics

Compressive Properties

ASTM D695

Compressive Residual Strength Properties

ASTM D7137/D7137M

In-plane Shear

ASTM D3518/D3518M

Tensile

ASTM D3039/D3039M

Flexural

ASTM D790

Tension Fatigue

ASTM D3479/D3479M

Chemical Tests on Metals

Elemental Analysis

WMTR/QTP/OES002 using OES¹

Aluminum and Aluminum alloys
(Be, Bi, Ca, Cd, Cr, Cu, Fe, Ga, Li, Mg, Mn, Na, Ni, P, Pb, Sb, Si, Sn, Sr, Ti, V, Zn, Zr)

Carbon Steels, low alloy steels, stainless steels
(Al, As, B, C, Ca, Co, Cr, Cu, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Si, Ti, V, W, Zr)

Combustion/Fusion (LECO)

H₂, N₂ and O₂

ASTM E1019, E1409, E1447, E1569

Corrosion Tests

Intergranular Corrosion

ASTM G110; BS EN ISO 7866 Annex A

Alternate Immersion Stress Corrosion
(Including Preparation of Samples)

ASTM G44, G47, G38, G49

Salt Spray (Fog)

ASTM B117

¹In-house test method



Accredited Laboratory

A2LA has accredited

WESTMORELAND MECHANICAL TESTING & RESEARCH LTD.

Banbury, United Kingdom

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 joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 1st day of June 2021.

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

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0621.03
Valid to June 30, 2023

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