SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

VIPAC ENGINEERS & SCIENTISTS LTD.
279 Normanby Road
Port Melbourne, Victoria, Australia 3207
Raj Pavalavel Email: rajp@vipac.com.au Phone: +61 3 9647 9874

MECHANICAL

Valid to: December 31, 2024 Certificate Number: 5677.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to the laboratory to perform the following mechanical tests:

Test Technology(s):	**Test Method(s):**
Environmental - Climatic	AS/IEC/EN 60068-2-1 Cold Test; AS/IEC/EN 60068-2-2 Dry Heat; AS/IEC/EN 60068-2-30 Damp Heat, Cyclic; AS/IEC/EN 60068-2-78 Damp Heat, Steady; AS/IEC/EN 60068-2-14 Change of Temperature (except Nc); AS/IEC/EN 60068-2-13 Low Air Pressure/Altitude; AS/IEC/EN 60068-2-11 Test Ka: Salt Mist; AS/IEC/EN 60068-2-52 Test Kb: Salt Mist, cyclic; IEC/EN 50155: clause 13.4.4 Low Temperature, clause 13.4.5 Dry Heat, clause 13.4.7 Cyclic Damp Heat, clause 13.4.13 Equipment Stress Screening, clause 13.4.6 Low Temperature Storage; BS EN50125-3: clause 4.3 Temperature; MIL-STD-810 E, F: Method 501.4 High Temperature (*no solar radiation*), Method 502.4 Low Temperature, Method 507.4 Humidity (*no solar radiation*); MIL-STD-810 G: Method 501.5 High Temperature (*no solar radiation*), Method 502.5 Low Temperature, Method 507.5 Humidity (*no solar radiation*); MIL-STD-810 H: Method 501.7 High Temperature (no solar radiation), Method 502.7 Low Temperature, Method 507.6 Humidity (no solar radiation);

5202 Presidents Court, Suite 220 | Frederick, MD 21703-8515 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

Test Technology(s):	**Test Method(s):**
Environmental – Climatic (Continued)	DEF STAN 00-035: Test CL1 Constant High Temperature – Low Humidity, Test CL2 High Temperature – Low Humidity, Test CL4 Constant Low Temperature Test, Test CL5 Low Temperature Test, Test CL6 High Temperature – High Humidity Test Test CN2 Corrosive Atmosphere; ISTA 2A Test blocks 1, 2; ISTA 2B Test blocks 1, 2; ISTA 3A Test blocks 1, 2; ISTA 3B Test blocks 1, 2; ASTM D4169, ASTM D6653 (Low Pressure)
Environmental – Mechanical* ***Vibration*** ***Frequency range: 1 to 2000Hz*** ***Max Force: 60kN*** ***Max Displacement: 100mm pk-pk*** ***Shock:*** ***Max Acceleration:*** ***600g at 2ms pulse duration*** ***Max load weight: 700kg*** ***Drop:*** ***Max 1.5m height, 80kg***	IEC/EN/AS 60068-2-6 Vibration; IEC/EN/AS 60068-2-27 Shock; IEC/EN/AS 60068-2-29 Bump; IEC/EN/AS 60068-2-32 Free Fall (procedure 1); IEC/EN/AS 60068-2-64 Vibration; IEC/EN/AS 60068-2-31 Drop and Topple; MIL-STD-810E, F: Method 514.5 Vibration, Method 516.5 Shock (except VII and VIII); MIL-STD-810G: Method 514.6 Vibration, Method 516.6 Shock (except VII and VIII); MIL-STD-810H: Method 514.8 Vibration, Method 516.8 Shock (except VII and VIII); MIL-STD-167-1A, Type I ISTA 2A Test blocks 4, 5, 6 Vibration and Shock, ISTA 2B Test blocks 3, 4, 5, 6, 7 Vibration and Shock, ISTA 3A Test blocks 3, 4, 5, 6, 7, 8, 9 Vibration and Shock; DEF-STAN-0035, Part 3: Chapter 2-01, Test M1– General Purpose Vibration, Chapter 2-03, Test M3 – Classical and Sine Waveform Shock; Chapter 2-04, Test M4 – Drop, Topple and Roll Test, Except section 4.5; Chapter 2-05, Test M5 – Impact; Chapter 2-12, Test M12 – Bump; BS EN 50125-3: clause 4.13.1 Vibration, clause 4.13.2 Shock; Except on Rail;

Test Technology(s):	**Test Method(s):**
Environmental – Mechanical* (Cont.)	IEC/EN 50155: clause 4.1.3, 13.4.11 Vibration and Shock; IEC 61373: Railway application – Rolling stock Equipment – Shock and Vibration Tests;
Vibration ***Frequency range: 1 to 2000Hz*** ***Max Force: 60kN*** ***Max Displacement: 100mm pk-pk***	ASTM D4169; ASTM D5276 (Handling/Drop); ASTM D4728 (Stacked & Vehicle Vibration); ASTM D999 (Loose Load Vibration); ASTM D6344 (Concentrated Impact)
Shock: ***Max Acceleration:*** ***600g at 2ms pulse duration*** ***Max load weight: 700kg***	
Drop: ***Max 1.5m height, 80kg***	

*Including customer supplied and industry specifications directly related to the test technologies and parameters listed above.

Accredited Laboratory

A2LA has accredited

VIPAC ENGINEERS & SCIENTISTS LTD.

Port Melbourne, Victoria, Australia

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 16th day of November 2022.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5677.01
Valid to December 31, 2024
Revised May 22, 2024

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