Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

UKAS TESTING **31737** **Accredited to ISO/IEC 17025:2017**	**Element Materials Technology Warwick Ltd** **Issue No:** 003 **Issue date:** 17 August 2026	
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Testing performed at the above address only		

Flexible Scope

The laboratory is accredited for the use of a Flexible Scope for testing activities in the areas of Environmental Testing and Mechanical Tests detailed within Element In-House procedure “COP-144 Testing Flexible Scope Management Procedure for Element Warwick”.

The flexible scope allows for:
Modification of existing test methods
Inclusion of technically equivalent standard methods
Inclusion of revised standard methods

This may include tests on the same or similar product types against standards, or customer-specified methods that are not specifically listed in this Schedule for Environmental Testing and Mechanical Tests providing that:
(1) The method or standard does not introduce new principles of measurement.
(2) The method or standard does not require measurements to be made outside the parametric boundaries defined in this Schedule.

Information about flexible scopes of accreditation is available in UKAS document GEN 4.

NOTE: Where EN Standards have exact equivalents in IEC, or BS EN Standards, these are also included in the accreditation.

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: AEROSPACE STRUCTURES, MATERIALS AND EQUIPMENT AGRICULTURAL EQUIPMENT COMPUTERS AND PERIPHERALS CONSTRUCTION PLANT, EQUIPMENT, PRODUCTS AND MATERIALS CRYOGENIC EQUIPMENT DOMESTIC APPLIANCES ELECTRICAL/ELECTRONIC COMPONENTS, CONNECTORS AND PRODUCTS ELECTRO-MECHANICAL DEVICES FIREARMS FIRE FIGHTING AND DETECTION EQUIPMENT HYDRAULIC EQUIPMENT AND FITTINGS MARINE EQUIPMENT MECHANICAL PRODUCTS AND PLANT MINING EQUIPMENT AND COMPONENTS MISSILE AND COMPONENTS MOTOR VEHICLE ACCESSORIES AND COMPONENTS OFFICE EQUIPMENT PACKAGES AND PACKAGING MATERIAL PLASTICS AND PRODUCTS	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** CLIMATIC High temp – low humidity - constant and cyclic Max temp: +170°C Max chamber size: 1.2 m x 1.2 m x 1.2 m Max temp: +70°C Max chamber size: 4.0 m x 2.5 m x 2.5 m	DEF STAN 00-35 Pt 3, Iss3:1999 Tests CL1 and CL2 DEF STAN 00-35 Pt 3, Iss4:2006 Tests CL1 and CL2 DEF STAN 00-035 Pt 3, Iss5:2017 Test CL2 ETSI EN 300 019-2-1:2000 ETSI EN 300 019-2-1 v2.3.1 2017-11 ETSI EN 300 019-2-2:1999 ETSI EN 300 019-2-2:2013 ETSI EN 300 019-2-3:2003 ETSI EN 300 019-2-3:2015 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E: 2004 RTCA DO 160F: 2007 RTCA DO 160G: 2010 RTCA DO 160G: CN1: 2014 BS EN 50155:10.2.4:2007 BS EN 50155:13.4.5:2017 BS EN 60839-11-1:2013 BS EN 60068-2-2:2007 BS EN 60945:2002 BS 3G100: Part 2:Subsect 3.2: 1970(1983)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd)	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd)	
PRESSURE VESSELS RADAR EQUIPMENT RADIO AND TV EQUIPMENT SAFETY APPLIANCES AND EQUIPMENT SATELLITES AND SUB-ASSEMBLIES SECURITY DEVICES AND ALARMS STRUCTURES AND COMPONENTS TELECOMMUNICATION EQUIPMENT THERMAL IMAGING WEAPONS AND SUB-ASSEMBLIES	CLIMATIC High temp – low humidity (cont'd) - constant and cyclic Max temp: +170°C Max chamber size: 1.2 m x 1.2 m x 1.2 m Max temp: +70°C Max chamber size: 4.0 m x 2.5 m x 2.5 m High temp – low humidity **- constant humidity** Max temp: +450 °C Max chamber size: 0.54 m x 0.47 m x 0.54 m Low temperature **- constant and cyclic** Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 1.2 m Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	MIL-STD 810B:1967 Method 501 MIL-STD 810C:1975 Method 501.1 MIL-STD 810D:1983 Method 501.2 MIL-STD 810E:1983 Method 501.3 MIL-STD 810F:1989 Method 501.4 MIL-STD 810G:2008 Method 501.5 MIL-STD 810G:CN1:2014 Method 501.6 MIL-STD 810H:2019 Method 501.7 MIL-STD 810H:CN1:2022 Method 501.7 DEF STAN 08-123: Iss 2: 2012 Data Sheet 7 DEF STAN 00-35 Pt 3, Iss3:1999 Tests CL4 and CL5 DEF STAN 00-35 Pt 3, Iss4:2006 Tests CL4 and CL5 DEF STAN 00-035 Pt 3, Iss5:2017 Tests CL5 BS EN 60068-2-1:2007 Tests Aa, Ab, Ad ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2:2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Low temperature (cont'd) **- constant and cyclic** Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 1.2 m Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	BS 3G100: Part 2: Subsect 3.2: 1970(1983) RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E: 2004 RTCA DO 160F: 2007 RTCA DO 160G: 2010 RTCA DO 160G: CN1: 2014 BS EN 50155:12.2.3 and 12.2.14:2007 BS EN 50155:13.4.4 and 13.4.6.:2017 MIL-STD 810B:1967 Method 502 MIL-STD 810C:1975 Method 502.1 MIL-STD 810D:1983 Method 502.2 MIL-STD 810E:1989 Method 502.3 MIL-STD 810F:2003 Method 502.4 MIL-STD 810G:2008 Method 502.5 MIL-STD 810G:CN1 2014 Method 502.6 MIL-STD 810H:2019 Method 502.7 MIL-STD 810H:CN1:2022 Method 502.7 BS EN 60839-11-1:2013 DEF STAN 08-123 Issue 2:2012 Data Sheet 8

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Thermal Shock a) Automatic transference Max temp: +170 °C Min temp: -70 °C Max chamber size: 0.6 m x 0.6 m x 0.4 m b) Manual transference Max temp: +170 °C Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 0.9 m	BS EN 60068-2-14:2000 Tests Na, Nb BS EN 60068-2-14:2009 Tests Na, Nb DEF STAN 00-35 Pt 3, Iss3:1999 CL14 DEF STAN 00-35 Pt 3, Iss4:2006 CL14 DEF STAN 00-035 Pt 3, Iss5:2017 CL14 MIL-STD 810B:1967 Method 503 MIL-STD 810C:1975 Method 503.1 MIL-STD 810D:1983 Method 503.2 MIL-STD 810E:1989 Method 503.3 MIL-STD 810F:2003 Method 503.4 MIL-STD 810G:2008 Method 503.5 MIL-STD 810G:CN1 2019 Method 503.6 MIL-STD 810H:2019 Method 503.7 MIL-STD 810H:CN1:2022 Method 503.7

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Temperature Change/Variation Max temp: +200 °C Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 0.9 m High temp - high humidity **- constant and cyclic** Max temp: +70 °C Humidity range: 10 to 98% rh Max chamber size: 4.0 m x 2.5 m x 2.5 m Max temp: +80 °C Humidity range: 30 to 98% rh Max chamber size: 0.91 m x 0.91 m x 0.91 m	 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:5.3:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 DEF STAN 00-35 Pt 3, Iss3:1999 Test CL7 DEF STAN 00-35 Pt3, Iss4:2006 Test CL7 DEF STAN 00-035 Pt 3,Iss5:2017 Test CL6 DEF STAN 08-123 Issue 2:2012 Data Sheet 7 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G:CN1:2014

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) High temp - high humidity **- constant and cyclic** (cont'd) Max temp: +70 °C Humidity range: 10 to 98% rh Max chamber size: 4.0 m x 2.5 m x 2.5 m Max temp: +80 °C Humidity range: 30 to 98% rh Max chamber size: 0.91 m x 0.91 m x 0.91 m	MIL-STD 810B:1967 Method 507 MIL-STD 810C:1975 Method 507.1 MIL STD 810D:1983 Method 507.3 MIL STD 810D:1983 Method 507.3 MIL-STD 810E:1989 Method 507.3 MIL-STD 810F:2003 Method 507.4 MIL-STD 810G:2008 Method 507.5 MIL-STD 810G;CN1:2014 Method 507.6 MIL-STD 810H:2019 Method 507.6 MIL-STD 810H:CN1:2022 Method 507.6 BS EN 50155:10.2.5:2007 BS EN 5015513.4.7:2017 BS EN 60068-2-30:2005 BS EN 60068-2-78:2002 BS EN 60068-2-78:2013 BS EN 60945:2002 IEC 60068-2-30:1980 BS 3G100: Part 2:Subsect 3.7: 1972(1983) ETSI EN 300 19-2-1:2000 ETSI EN 300 19-2-1v2.3.1(2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 19-2-2:2013

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) High temp - high humidity **- constant and cyclic** (cont'd) Max temp: +70 °C Humidity range: 10 to 98% rh Max chamber size: 4.0 m x 2.5 m x 2.5 m Max temp: +80 °C Humidity range: 30 to 98% rh Max chamber size: 0.91 m x 0.91 m x 0.91 m High/low temp - low/high pressure (atmospheric) - high humidity (combined and sequential) Temperature range: -70 °C to +150 °C Humidity range: 30 to 98 %rh Pressure range: 35 mbar to 1090 mbar Chamber size: 1.01 m x 1.01 m x 1.02 m	 ETSI EN 300 19-2-3:2003 ETSI EN 300 19-2-3:2015 DEF STAN 08-123 Issue 2:2012 Data Sheet 9 BS EN 60068-2-13:1999 BS EN 60068-2-40:2000 BS EN 60068-2-41:2000 BS EN 60068-2-61:1994 DEF STAN 00-35 Pt 3, Iss 3:1999 Tests CL11, CL12 and CL21 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests CL11, CL12, and CL21 DEF STAN 00-035 Pt 3, Iss 5:2017 test CL11 MIL-STD 202F:105C:1980 MIL-STD 810B:1967 Method 500 MIL-STD 810C:1975 Method 500.1 MIL-STD 810D:1983 Method 500.2 Method 520 MIL-STD 810E:1989 Method 500.3 Method 520.1

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) High/low temp - low/high pressure (atmospheric) - high humidity (combined and sequential) (cont'd) Temperature range: -70 °C to +150 °C Humidity range: 30 to 98 %rh Pressure range: 35 mbar to 1090 mbar Chamber size: 1.01 m x 1.01 m x 1.02 m	MIL-STD 810F:2003 Method 500.4 Method 520.2 MIL-STD 810G:2008 Method 500.5 Method 520.3 MIL-STD 810G w/Change 1:2014 Method 500.6 Method 520.4 MIL-STD 810H:2019 Method 500.6 MIL-STD 810H:CN1:2022 Method 500.6 MIL-STD 810H:2019Method 520.5 MIL-STD 810H:CN1 2022 Method 520.5 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RCTA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014
	Dust and Sand – Driving Temperature Range: +20 to +71 °C Chamber size: 1.5 m x 1.5 m x 2.5 m Maximum Test Area: 200 mm diameter Maximum Velocity: 25 m/s with 200 mm dia Duct 40 m/s with 140 mm dia Duct Dust Concentration: 0.1 g/m3 to 20 g/m3	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:12.0:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 MIL-STD 810B:1967 Method 510 MIL-STD 810C:1975 Method 510.1 MIL STD 810D:1983 Method 510.2 MIL-STD 810E:1989 Method 510.3 MIL-STD 810F:2003 Method 510.4 MIL-STD 810G:2008 Method 510.5

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Dust and Sand – Driving (cont'd) Temperature Range: +20 to +71 °C Chamber size: 1.5 m x 1.5 m x 2.5 m Maximum Test Area: 200 mm diameter Maximum Velocity: 25 m/s with 200 mm dia Duct 40 m/s with 140 mm dia Duct Dust Concentration: 0.1 g/m3 to 20 g/m3	MIL-STD 810G:CN1:2014 Method 510.6 MIL-STD 810H:2019 Method 510.7 Procedures I and II MIL-STD 810H:CN1:2022 Method 510.7 Procedures I and II DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL25 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL25 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL25

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Drip Proof Drip Tray area: 0.77 m x 0.77 m	ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v2.3.1(2017-11) BS 3G100: Part 2: Subsect 3.11: 1973(1983) Grade B RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:10.3.1:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL28 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL28 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL28 BS EN 60068-2-18:2001 BS EN 60068-2-18:2017 IEC 60068-2-18:2000 IEC 60068-2-18:2017 MIL-STD 810B:1967 Method 506 MIL-STD 810C:1975 Method 506.1 MIL STD 810D:1983 Method 506.2 MIL-STD 810E:1989 Method 506.3 MIL-STD 810F:2003 Method 506.4 MIL-STD 810G:2008 Method 506.5 Procedure III MIL-STD 810G CN 1:2014 Method 506.6 Procedure III MIL-STD 810H:2019 Method 506.6 Procedure III MIL-STD 810H:CN1:2022 Method 506.6 Procedure III

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd)	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd)	
As listed on Pages 1 and 2	CLIMATIC (cont'd)	
	Spray Proof	
	Max Item size: 3.0 m x 3.0 m x 3.0 m	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014
	Driving Rain	
	Max item size: 3.0 m x 3.0 m x 3.0 m (single pass)	BS EN 60068-2-17:1995 BS 3G100: Part 2: Subsect 3.11:1973(1983) Grade B DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL27 DEF STAN 00-35 Pt 3, Iss4: 2006 Test CL27 DEF STAN 00-035 Pt 3, Iss5:2017 Test CL27 DEF STAN 08-123 Issue 2:2012 Data Sheet 18
	Icing/Freezing Rain	
	Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	MIL STD 810D: 1983 Method 521.0 MIL-STD 810E:1989 Method 521.1 MIL-STD 810F:2003 Method 521.2 MIL-STD 810G:2008 Method 521.3 MIL-STD 810G CN1:2014 Method 521.3 MIL-STD 810H:2019 Method 521.3 MIL-STD 810H:CN1:2022 Method 521.3

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd)	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd)	
As listed on Pages 1 and 2	CLIMATIC (cont'd)	
	Icing/Freezing Rain (cont'd)	
	Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:24.0:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL10 DEF STAN 00-35 Pt 3, Iss4:2006 Test CL10 DEF STAN 00-035 Pt 3, Iss5:2017 Test CL10 DEF STAN 08-123 Issue 2:2012 Data Sheet 15
	Corrosion Salt Max chamber size: 1.9 m x 1.2 m x 0.9 m	BS EN 60068-2-11:1999:Ka BS EN 60068-2-52:1996:Kb BS EN 60068-2-52:2018:Kb BS 3G100: Part 2: Subsection 3.8:1977(1983) BS EN 50155:12.2.10:2007 BS EN 50155:13.4.10:2017 BS EN ISO 9227:2006: NSS BS EN ISO 9227:2017: NSS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) CLIMATIC (cont'd) Corrosion Salt (cont'd) Max chamber size: 1.9 m x 1.2 m x 0.9 m	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:14.0:2007 RTCA DO 160G:2010 RTCA DO 160G:CN1:2014 MIL-STD 810B:1967 Method 509 MIL-STD 810C:1975 Method 509.1 MIL STD 810D:1983 Method 509.2 MIL-STD 810E:1989 Method 509.3 MIL-STD 810F:2003 Method 509.4 MIL-STD 810G:2008 Method 509.5 MIL-STD 810G CN1:2014 Method 509.6 MIL-STD 810H:2019 Method 509.7 DEF STAN 00-35 Pt 3, Iss 3:1999 Tests CN2 and CN5 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests CN2 and CN5 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests CN2 and CN5 DEF STAN 08-123 Issue 2:2012 Data Sheet 21

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (a) Ambient Temperature **(electromagnetic)** Freq range: 3 to 3000 Hz Max peak thrust: 160 kN Max payload (vertical): 2000 kg Max payload (horizontal): 7000 kg Max displacement: 40mm pk-pk (b) High/Low Temperature (Prefabricated Enclosure) Max temp: +150 °C Min temp: -70 °C	DEF STAN 08-123 Issue 2:2012 Data Sheet 25 (externally generated) MIL-STD 810B:1967 Method 514 Method 519 MIL-STD 810C:1975 Method 514.2 Method 519.2 MIL STD 810D:1983 Method 514.3 Method 519.3 MIL-STD 810E:1989 Method 514.4 Method 519.4 MIL-STD 810F:2003 Method 514.5 Method 519.5 MIL-STD 810G:2008 Method 514.6 Method 519.6 MIL-STD 810G CN1:2014 Method 514.7 Method 519.7 MIL-STD 810H:2019 Method 514.8 Method 519.8 MIL-STD 810H:CN1:2022 Method 514.8 Method 519.8

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Vibration Sine, random, broadband random, swept sine, fixed sine dwell, notching, force notching, sine-on-random, random-on-random, sine-on-random-on-random, and gunfire - with slip table facility	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M1 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M1 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M1 BS EN 60068-2-6:2008:Fc BS EN 60945:2002 IEC 60068-2-64:2008 BS 3G100: Part 2: Subsection 3.1:1969(1983) RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014 IEC 61373:1999 IEC 61373:2010 BS EN 50155-1:2007 BS EN 50155:13.4.11:2017 BS EN 60255-21-1:1996 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 MIL-STD167-1A 2005

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Shock Classical shock with half sine, initial and terminal peak sawtooth, trapezoidal, and rectangular pulse shape Shock response spectrum synthesis (SRS) **- Vertical** half sine, sawtooth Max item mass: 2000 kg **- Ambient temperature** Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent) **- with temperature (prefabricated enclosure)** Severity: 3 g to 1500 g Duration: 0.2 ms to 70 ms (severity dependent) Max temp: +150 °C Min temp: -70 °C	DEF STAN 00-35 Pt 3, Iss 3:1999 Tests M3, M6 and M7 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests M3, M6 and M7 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M3 and M6 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014 BS EN 60068-2-27:1993:Ea BS EN 60068-2-27:2009 EN 60068-2-81:2003 MIL-STD 810B:1967 Method 516 MIL-STD 810C:1975 Method 516.2 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003 Method 516.5MIL-STD 810G:2008 Method 516.6 MIL-STD 810G:CN1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8 MIL-STD 810H:CN1:2022 Method 516.8 IEC 61373:1999 IEC 61373:2010

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Shock (cont'd) Classical shock with half sine, initial and terminal peak sawtooth, trapezoidal, and rectangular pulse shape Shock response spectrum synthesis (SRS) **- Vertical** half sine, sawtooth Max item mass: 2000 kg **- Ambient temperature** Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent) **- with temperature (prefabricated enclosure)** Severity: 3 g to 1500 g Duration: 0.2 ms to 70 ms (severity dependent) Max temp: +150 °C Min temp: -70 °C	 BS EN 50155:12.2.11:2007 BS EN 50155:13.4.11:2017 BS EN 60255-21-2:1996 BS EN 60255-21-1:1996 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 DEF STAN 08-123 Issue 2:2012 Data Sheet 28

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Shock (cont'd) **- Horizontal** half sine, sawtooth Max item mass: 7000 kg	DEF STAN 00-35 Pt 3, Iss 3:1999 Tests M3, M6 and M7 DEF STAN 00-35 Pt 4, Iss 4:2006 Tests M3, M6 and M7 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M3 and M6 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014
	- ambient temperature Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent)	BS EN 60068-2-27:1993:Ea BS EN 60068-2-27:2009 MIL-STD 810B:1967 Method 516 MIL-STD 810C:1975 Method 516.2 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003Method 516.5 MIL-STD 810G:2008 Method 516.6 MIL-STD 810G CN 1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8 MIL-STD 810H:CN1:2022 Method 516.8

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Shock (cont'd) **- with temperature (prefabricated enclosure)** Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent) Max temp: +150 °C Min temp: -70 °C **- SRS** Limited by: 210g acceleration 50mm displacement	IEC 61373:1999 IEC 61373:2010 BS EN 50155:12.2.11:2007 BS EN 50155:13.4.11:2017 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 DEF STAN 08-123 Issue 2:2012 Data Sheet 28 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003 Method 516.5 MIL STD 810G:2008 Method 516.6 MIL-STD 810G CN1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8 MIL-STD 810H:CN1:2022 Method 516.8

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Bump **- ambient temperature** Max item mass: 2000 kg **- with temperature (prefabricated enclosure)** Max item mass: 2000 kg Max temp: +150 °C Min temp: -70 °C Drop and Topple **- with temperature (prefabricated enclosure)** Max item mass: 2000 kg Max temp: +150 °C Min temp: -70 °C	 DEF STAN 00-35 Pt 3, Iss 3:1999 Test M12 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M12 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M12 ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 DEF STAN 00-35 Pt 3, Iss 3:1999 Test M4 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M4 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M4 BS EN 60068-2-31:2008:Ec ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Free Fall Impact Test **- with temperature (prefabricated enclosure)** Max drop ht: 4.5 m Max item mass: 8000 kg Max temp: + 150 °C Min temp: -70 °C	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M5 DEF STAN 00-35 Pt 3, Iss 4:2006: Test M5 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M5 BS EN 60068-2-31:2008 ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) As listed on Pages 1 and 2	**ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) DYNAMIC (cont'd) Acceleration **- steady state** Max acceleration: 70 g Max radius: 1.22 m Max item mass: 22 kg (at max gn) Max item size: length 0.5 m width 0.3 m height 0.3 m	BS EN 60068-2-7:1993: Ga BS 3G100: Part 2: Subsection3.6:1972(1983) DEF STAN 00-35 Pt 3, Iss 3:1999 Test M13 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M13 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M13 MIL-STD 810B:1967 Method 513 MIL-STD 810C:1975 Method 513.2 MIL STD 810D:1983 Method 513.3 MIL-STD 810E:1989 Method 513.4 MIL-STD 810F:2003 Method 513.5 MIL-STD 810G:2008 Method 513.6 MIL-STD 810G CN1:2014 Method 513.7 MIL-STD 810H:2019 Method 513.8 MIL-STD 810H:CN1:2022 Method 513.8 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ENCLOSURES FOR ELECTRICAL EQUIPMENT	**2 INGRESS PROTECTION TESTS** IP1X Protected against solid objects greater than 50 mm diameter IP2X Protected against solid objects greater than 12.5 mm diameter IP3X Protected against solid objects greater than 2.5 mm diameter IP4X Protected against solid objects greater than 1.0 mm diameter IP5X Dust protected IP6X Dust tight IPX1 Protected against dripping water IPX2 Protected against dripping water when tilted up to 15° IPX3 Protected against spraying water IPX4 Protection against splashing water IPX5 Protected against water jets IPX6 Protected against powerful water jets IPX7 Protected against the effects of immersion IPX8 Protected against submersion	BS EN 60529:1992 +A2:2013 EN 60529:1991 IEC 60529:1989 BS EN 60598-1:2008, Clause 9.2

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
AMUNITION EXPLOSIVES and PROPELLANTS FUZES: WEAPONS FIREARMS WEAPONS and SUB-ASSEMBLIES	**ENVIRONMENTAL TESTS (EXPLOSIVE ITEMS)** (UN Class 1 Hazard Divisions 1.3 and 1.4)	
	All tests above (pages 1 to 23) may be carried out	See above (pages 1 to 23)
	Certain tests listed above can/may increase the potential hazard of the explosive item	Where necessary, prefabricated Standard Safety Cells are constructed for containment
	The hazard classifications mentioned above (1.3 and 1.4) must not be violated before, during, or after testing	
	Assurances that the item will remain potentially safe under the test conditions must be furnished by the customer	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
AEROSPACE STRUCTURES, MATERIALS AND EQUIPMENT AGRICULTURAL EQUIPMENT CONSTRUCTION PLANT, EQUIPMENT, PRODUCTS AND MATERIALS CRYOGENIC EQUIPMENT ELECTRICAL/ELECTRONIC COMPONENTS, CONNECTORS AND COMPONENTS ELECTRO-MECHANICAL DEVICES ENCLOSURES MARINE EQUIPMENT MECHANICAL PRODUCTS AND PLANT MINING EQUIPMENT AND COMPONENTS MOTOR VEHICLE ACCESSORIES AND COMPONENTS PACKAGES AND PACKAGING MATERIAL STRUCTURES AND COMPONENTS WELDMENTS	**MECHANICAL TESTS** Structural tests (a) Static (universal testing machines) Max force: 53 kN Max crosshead ht: 0.45 m (b) Static/low frequency (reaction frames) - ambient, high/low temp (prefabricated enclosures) Purpose built reaction frames Maximum specimen size: 4 m x 4 m x 3 m (high) Max single force: 500 kN (hydraulic actuators) Max temp: +70°C Min temp: -70°C Properties measured: - displacement mechanical strain **Fatigue Tests – Mechanical** Sinusoidal, , Synthesised, Square Wave, Sawtooth, Rounded Ramp, Trapozoidal Purpose built reaction frame Maximum specimen size: 4 m x 4 m x 3 m (high) Max force: 53 kN Max freq: 10 Hz (force/stiffness dependent)	Documented In-House Procedures COP-015 & COP-016 DEF STAN 08-123 Issue 2:2012 Data Sheet 36 DEF STAN 00-35 Pt 3, Iss3:1999 Tests M15, M16 and CL22 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests M15, M16 and CL22 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M15, M16 and CL22 NES 1004:1995 Data Sheet 35 DEF STAN 08-123:2000 Data Sheet 35 DEF STAN 08-123 Issue 2:2012 Data Sheet 35 Documented In-House Procedure COP-015 COP-005 Hydraulic mechanical fatigue test procedure

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
As listed on page 26	**MECHANICAL TESTS** (cont'd) **Endurance Tests – Mechanical** Purpose-built rigs utilising pneumatic/hydraulic/electric Actuators Measurement of: force - static and dynamic displacement strain frequency-cycles completed : at failure	Documented In-House Procedure COP-015 and COP-005 Hydraulic mechanical fatigue test method
JET ENGINE COMPONENTS INCLUDING GUIDE VANES; LOW, INTERMEDIATE AND HIGH-PRESSURE COMPRESSOR STAGES FOR COMMERCIAL AND MILITARY AIRCRAFT	High Cycle Fatigue Testing (HCF) Electromagnetic shaker, or air-jet excitation Frequency range: 50Hz to 3kHz	Documented In-house Procedure: COP-086
HOSES, PIPES AND TUBES HYDRAULIC EQUIPMENT AND FITTINGS PRESSURE VESSELS	Pressure Tests (a) Hydraulic fatigue Max pressure : 22 MPa (3200 lb/in^2) Cycle rate 2 to 600 cpm (b) Hydrostatic proof Max pressure: 60 MPa (8700 lb/in^2) c) Air pressure/vacuum Positive gauge pressure limit: 13.79 MPa (2000 lb/in^2) Negative gauge pressure limit: -96 kPa (-14 ib/in^2)	DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL15 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL15 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL11 DEF STAN 08-123 Issue 2:2012 Data Sheet 13 BS EN 60068-2-13:1999 COP-138 Hydraulic pressure fatigue testing COP-140 Pneumatic testing

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
ELECTRICAL/ELECTRONIC COMPONENTS and PRODUCTS	**ELECTRICAL OPERATION AND MEASUREMENT** Voltage: DC: 100 mV to 1000 V AC: 10 mV to 1000 V at 10 Hz AC: 100 mV to 10 V at 50 kHz Frequency: 1 Hz to 100 kHz Current: AC: 1 mA to 1000 A DC: 10 μA to 1000 A Resistance: 1 mΩ to 10 MΩ Insulation Resistance: 100 MΩ to 1 TΩ at 500 V 100 MΩ to 1 GΩ at 1 kV max Break detection (Contacts): 1 μS to 100 mS (max current: 100 mA)	Documented In-House Methods (as agreed with the client) TEP-10
ELECTRO-MECHANICAL and MECHANICAL PRODUCTS	**MECHANICAL OPERATION AND MEASUREMENTS** Torque: 1 lb-in to 500 lb-ft Air Pressure: 0 to 16,000 psi Vacuum:100 mb to 1050 mb Internal Dimensions: 0.1 to 150 mm External Dimensions: 0.1 to 150 mm Weight: 1.00g to 12 kg	Documented In-House Methods (as agreed with the client) TEP-10
END		