



Environmental Test Laboratory

Alphatech Ltd
Green House
Homefield Road Industrial Estate
Haverhill
Suffolk
CB9 8QP

Environmental Test Laboratory Capabilities



Certificate number GB 03/58524

Environmental Test Laboratory - Capabilities

Introduction:

This document describes the capabilities of Alphatech's Environmental Test Laboratory.

Alphatech was established in 1997 and has an excellent reputation for the sales, service and repair of both new and used environmental test equipment.

During April of 2002, Alphatech moved into purpose built premises that included an area assigned for an Environmental Test Laboratory.

This was a long-term growth plan for Alphatech, one of the objectives being to provide a 'Best in Class' Environmental Test Laboratory to meet and support our Customer's ongoing test requirements.

In February of 2003, Alphatech was assessed and certified as meeting the requirements of ISO 9001:2000. In July of 2004, Alphatech was granted UKAS Test Laboratory Accreditation to ISO/IEC 17025.

A further extension to our Scope of Accreditation was granted by UKAS in April of 2006 to add Salt Spray, additional Mechanical Shock Test facilities and a 'Walk In' Climatic Chamber to our capabilities.

In October of 2007, as the result of our planned capability improvements and continuous improvement philosophy, Alphatech moved into larger premises and we have further extended our Scope of Accreditation to meet the increasing requirements of our customers.

Copies of our ISO 9001:2008 and ISO/IEC 17025: 2005 accreditation certificates are attached for your information.

Included in this document are details of the capabilities of our Environmental Test Laboratory.

Full details of our UKAS Schedule of Accreditation can be found at the UKAS website:

<http://www.ukas.org/testing/schedules/Actual/2645Testing%20Single.pdf>

Contact Information:

For further information, please contact:

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Environmental Test Laboratory - Capabilities

UKAS Accredited Climatic Tests		
Test Description:	Maximum Severity:	Equipment:
Low Temperature	-70°C	Temperature Chamber
	-60°C	Walk In Climatic Room
High Temperature	+180°C	Temperature Chamber
	+80°C	Walk In Climatic Room
Change of Temperature (Gradual)	-70°C to +180°C Ramp Rate = 20°C/min	Temperature Chamber
	-60°C to +80°C Ramp Rate = 1°C/min	Walk In Climatic Room
Change of Temperature (Thermal Shock)	Transition Time < 10 seconds -70°C to +200°C	Thermal Shock Chamber
Damp Heat (Steady State & Cyclic)	+20°C to +85°C 50%RH to 95%RH	Climatic Chamber
	+20°C to +60°C 50%RH to 95%RH	Walk In Climatic Room
Altitude	70,000 feet	Altitude Chamber
Salt Spray	Neutral Salt Spray	Salt Spray Chamber

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UKAS Accredited Dynamic Tests		
Test Description:	Maximum Severity:	Equipment:
Vibration (Sinusoidal)	Peak Thrust = 26.7kN Frequency Range = 5Hz to 2000Hz Displacement = ±25.5mm	Vertical Axis Shaker Standard Laboratory Conditions
	Peak Thrust = 8.9kN Frequency Range = 5Hz to 2000Hz Displacement = ±25.5mm Temperature = -40°C to +100°C Ramp Rate = 10°C/min	Vertical Axis Shaker with Combined Temperature Chamber
Vibration (Random)	RMS Thrust = 22.24kN Frequency Range = 5Hz to 2000Hz Displacement = ±25.5mm	Vertical Axis Shaker Standard Laboratory Conditions
	RMS Thrust = 8.9kN Frequency Range = 5Hz to 2000Hz Displacement = ±25.5mm Temperature = -40°C to +100°C Ramp Rate = 10°C/min	Vertical Axis Shaker with Combined Temperature Chamber
Mechanical Shock	Half Sine, Sawtooth, Trapezoidal Acceleration = 80gn pk * Pulse Width = 100ms **	Vertical Axis Shaker Standard Laboratory Conditions
	Half Sine, Sawtooth, Trapezoidal Acceleration = 50gn pk * Pulse Width = 100ms ** Temperature = -40°C to +100°C	Vertical Axis Shaker with Combined Temperature Chamber
	Half Sine Acceleration = 200gn pk * Pulse Width = 16ms **	MTS Shock System Standard Laboratory Conditions
Bump	Half Sine Acceleration = 75gn pk * Pulse Width = 50ms **	Vertical Axis Shaker Standard Laboratory Conditions
	Half Sine Acceleration = 50gn pk * Pulse Width = 50ms ** Temperature = -40°C to +100°C	Vertical Axis Shaker with Combined Temperature Chamber
Free Fall	Mass = 45Kg Height = 1m	Drop Tester
Drop & Topple	Mass = 45Kg	n/a

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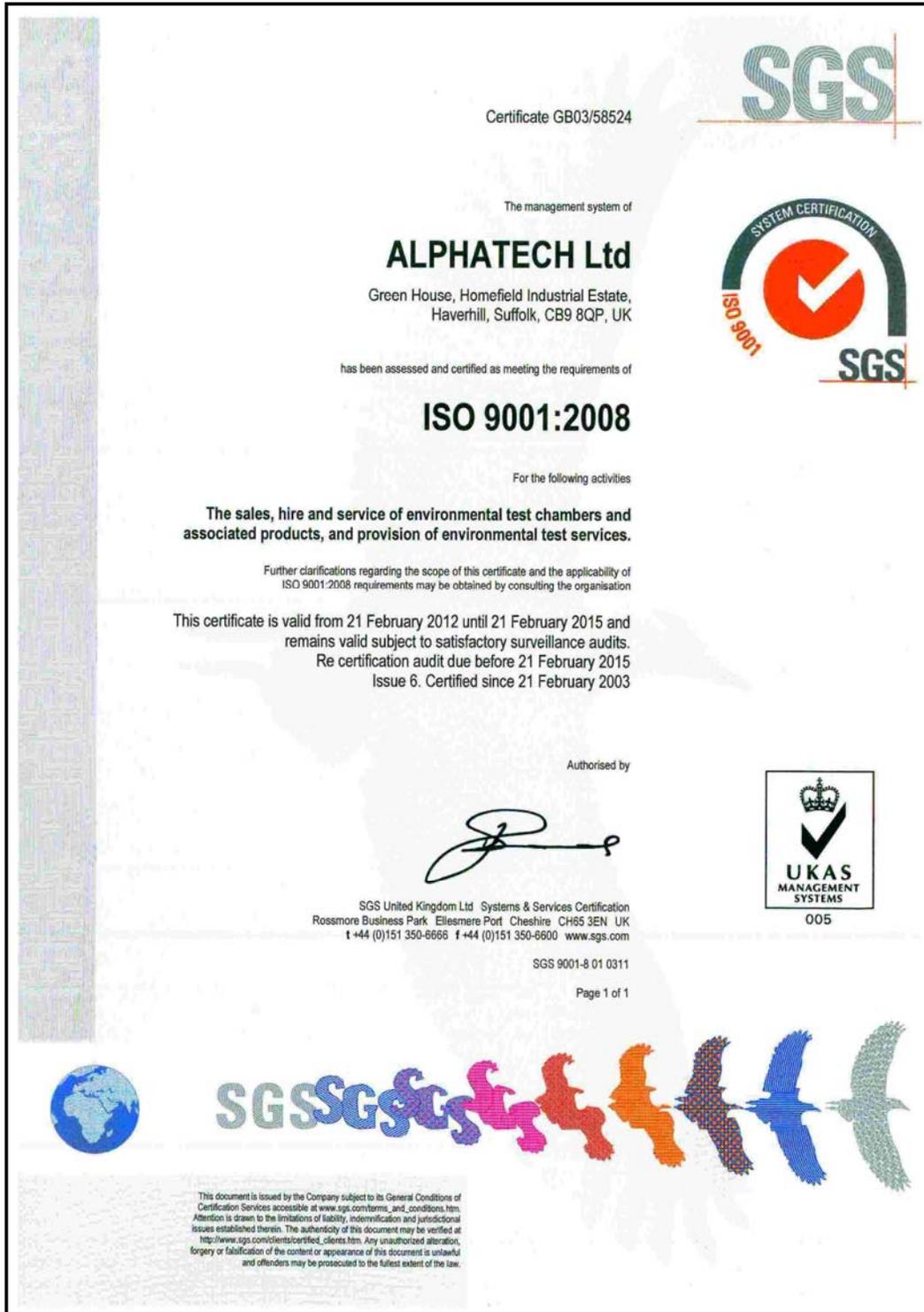
UKAS Accredited Ingress Protection Tests	
Test Description:	Equipment:
IP1X	Test Probe
IP2X	Test Probe
IP3X	Test Probe
IP4X	Test Probe
IP5X	Dust Chamber
IP6X	Dust Chamber with Vacuum System
IPX1	Dripping Water Chamber
IPX2	Dripping Water Chamber
IPX3	Spray Rose
IPX4	Spray Rose
IPX5	Spray Nozzle
IPX6	Spray Nozzle
IPX7	Immersion Tank
IPX8	Submersion Tank
IPX9	Spray Chamber

UKAS Accredited HALT & HASS		
Test Description:	Maximum Severity:	Equipment:
HALT & HASS	Frequency Range = 10Hz to 5000Hz Temperature = -90°C to +200°C Ramp Rate = 60°C/min	QualMark HALT Chamber 6DOF Vibration

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Non-UKAS Accredited Tests	
Test Description:	Equipment:
Dewing	Climatic Chamber
Chemical Resistance	Temperature Chamber
Impact (UL1703)	Temperature Chamber 535g, Ø2" Steel Sphere
Impact (ST/SG/AC.10/11)	Impact Fixture
External Short Circuit (ST/SG/AC.10/11)	Short Circuit System
Overcharge (ST/SG/AC.10/11)	Various PSUs
Automotive Transients	Waveform Generators & Power Amplifiers

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United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE



**TESTING LABORATORY
No. 2645**

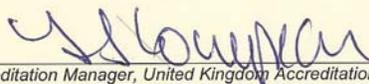
Alphatech Limited

is accredited in accordance with the recognised International Standard ISO/IEC 17025:2005
General Requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope as detailed in and at the locations
specified in the schedule to this certificate, and the operation of a laboratory quality management system (refer
joint ISO-ILAC-IAF Communiqué dated January 2009).

The schedule to this certificate is an essential accreditation document and from time to time may be revised and
reissued by the United Kingdom Accreditation Service. The most recent issue of the schedule of accreditation,
which bears the same accreditation number as this certificate, is available from the UKAS website
www.ukas.com.

This accreditation is subject to continuing conformity
with United Kingdom Accreditation Service requirements. The absence of a schedule on the UKAS website
indicates that the accreditation is no longer in force.



Accreditation Manager, United Kingdom Accreditation Service

Initial Accreditation date
1 July 2004

This certificate issued on
9 July 2012

UKAS is appointed as the sole national accreditation body for the UK by The Accreditation Regulations 2009 (SI No 3155/2009) and
operates under a Memorandum of Understanding (MoU) with the Department for Business, Innovation and Skills (BIS).