



1gdynamics

# UKAS Accredited Product Test Centre



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# 1G Dynamics UKAS 17025 Accredited Test Centre offers a comprehensive range of Test Services including Vibration and Climatic Testing.



6508

The 1g Dynamics Product Test Centre offers a comprehensive range of testing services to industry. Our services include a range of combined temperature and vibration test systems operating in the vertical and horizontal axis, temperature and humidity chambers, heat test ovens, salt spray corrosion cabinets, drop shock, sine, random, sine-on-random, random on random, multi-sweep sine and shock waveform analysis.

We have many years' experience of conducting independent, confidential tests on aerospace, automotive, rail and motor-sport applications to national and international standards, including IEC, BS EN, Def Stan, Mil Std, ISTA, STANAG and RTCA for environmental testing.

Testing is carried out by a team of experts using state-of-the-art technologies in our new Hertfordshire based Product Test Centre. The Test Centre offers consultancy and advice services, including custom jig and fixture design, qualification approvals, FEA analysis and final approval tests.

## Accredited Test Centre – UKAS Testing Lab No 6508

Whether you are in the product development phase of your project, looking for a lab for development work or you require compliance testing to national / international environmental test standards, a United Kingdom Accreditation Service (UKAS) accredited test lab will provide key benefits.

1g Dynamics is a UKAS accredited Test Laboratory, which includes the assessment of both the Quality Management System and the Technical Competence of the laboratory, in accordance with ISO 17025:2017.

## Equipment tailored to your testing requirements

Our aim is to make R&D more affordable. We will continuously evolve the list of equipment available as customers' testing requirements change and utilise all emerging technologies. Currently our UKAS accredited equipment includes:

### Combined Temperature & Vibration Temperature and Humidity Tests

1700 litre capacity, 1300 mm x 1300 mm x 1000mm high  
Range: -70 deg C ~ 180 deg C  
Rate: up to 5 deg C/.min  
10% to 95% RH

### Temperature and Vibration Tests – V894/440 Combo

Resonance dwell, sinusoidal, random noise and shock.  
Vibration both vertical and horizontal  
Sine force, peak 53.3 kN (12000 lbf)  
Random force, rms 55.6 kN (12500 lbf)  
Displacement, continuous 38 mm 1.5 in  
Frequency range, dc to 2300 Hz  
Max payload, 700 kg (15400 lb)  
Slip table size, HBT1100 x 1100 mm

### Temperature and Vibration Tests – V864/640 Combo

Resonance dwell, sinusoidal, random noise and shock.  
Vibration both vertical and horizontal  
Sine force, peak 28 kN (6300 lbf)  
Random force, rms 28 kN (6300 lbf)  
Displacement, continuous 25.4 mm 1.0 in  
Frequency range, dc to 1700 Hz  
Max payload, 680 kg (1500 lb)  
Slip table size, LPT1220 x 1220 mm

### Vibration – 1G D40LS-4000

Resonance dwell, sinusoidal, random noise and shock.  
Vibration vertical axis  
Sine force, peak 40 kN (8800 lbf)  
Random force, rms, 40 kN (8800 lbf)

Displacement, continuous, 100 mm (4 in)  
Frequency range, dc to 2500 Hz  
Max payload, 500 kg (1100 lb)  
Slip table size, 750 x 750 mm

### Vibration – IMV i230

Resonance dwell, sinusoidal, random noise and shock.  
Vibration both vertical and horizontal  
Sine force, peak 16 kN (3600 lbf)  
Random force, rms 16 kN (3600 lbf)  
Displacement, continuous 51 mm 2.0 in  
Frequency range, dc to 5000 Hz  
Max payload, 300 kg (660 lb)  
Slip table size, TBM 630 x 630 mm

## Environmental Test Chambers

**Oven** - Ageing, static temperature testing  
Heat Tests, 25 deg C ~ 300 deg C  
216 litre capacity, 600 mm x 600 mm x 600 mm

### Environmental Chamber – Temperature and Humidity Tests

40 litre capacity, 330 mm x 290 mm x 395 mm  
Range: -20 ~ 180 deg C  
Rate: up to 3 deg C/.min  
Humidity 30% to 95% RH

### Environmental Chamber

250 litre capacity, 600 mm x 845 mm x 500 mm  
Range: -70 ~ 180 deg C  
Rate: up to 3 deg C/.min  
Humidity 20% to 95% RH

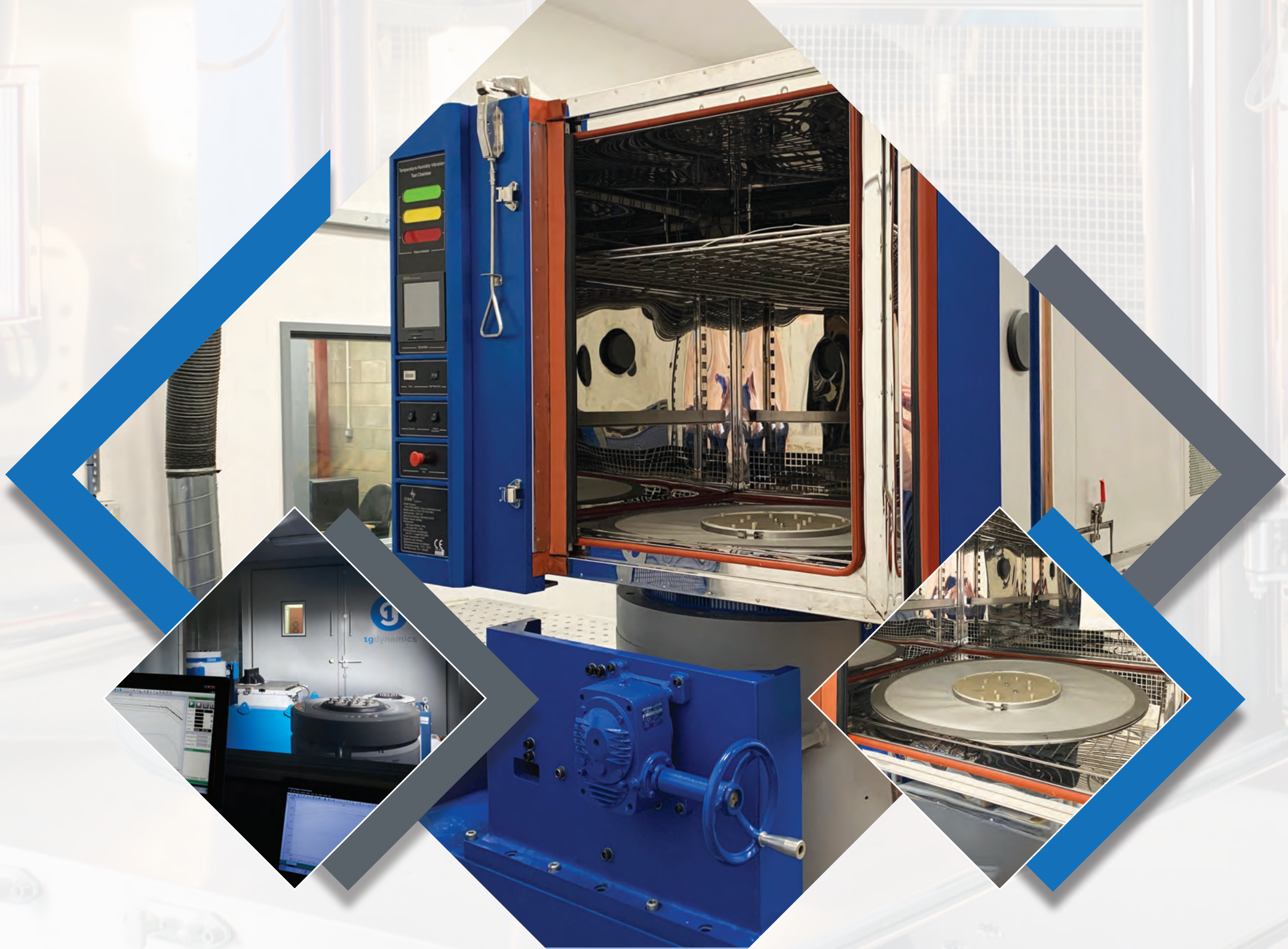
### Salt Spray Cabinet - accelerate the effects of corrosion

108 litre capacity  
Salt spray Settlement: 1 ... 2ml/80 (cm²h)  
Range: +10 ~ 55 deg C

### Calibration of Accelerometers

Comply to UKAS standards ISO/IEC 17025:2017 - UKAS No 4110.







# Environmental Testing and Consultancy

Environmental testing is carried out in order to ensure and verify the robustness and reliability of manufactured products and to simulate conditions they will experience during transportation, storage and operation. Industries such as Aerospace, Automotive, Electronics, Telecommunications, Marine and many others have been carrying out environmental test programmes for years to ensure the robustness, reliability and on-going safety of manufactured goods.



**1gdynamics**

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Specifications are correct at the time of publication. In keeping with our commitment to continuous product improvement, the information herewith is subject to change. 1g Dynamics reserves the right to amend specifications without prior notice.



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