

EMC and reliability

Nemko provides third party testing of electrotechnical products.

We can provide first class testing and certification services thanks to our knowledgeable workforce, our many accreditations and state-of-the-art testing equipment.

Third party testing implies conformity assessments carried out by a body that is independent of both suppliers and customer organizations.

Accreditations according to ISO/IEC 17025 and ISO/IEC 17065 ensure reliable and quality services.

Testing Services

- EMC radiated and conducted emissions
- EMC radiated and conducted immunity
- Electrostatic discharges immunity
- Harmonic and flicker emissions
- Supply voltage variations

- Temperature
- Humidity
- Vibration
- Altitude
- Drop / Shock / Impact
- Corrosion / Salt mist
- Ingress protection (IP)

- Flammability
- High voltage and insulation tests
- Compass safe distance measurements



EMC 10-meter anechoic chamber



Climatic chambers



One (out of three) vibration systems

Environmental testing

A product is manufactured for a certain operating environment. In this environment, the product is subject to various electrical and mechanical exposures, such as high and low temperatures, humidity, vibrations, electromagnetic fields, static electricity and different conducted transients and disturbances. To make sure your design is reliable and robust the design should be qualified by testing according to suitable standards for that environment.

EMC testing

Does your equipment work in harmony with others?

Electromagnetic disturbances are caused by other nearby electrical and mechanical products or by a natural phenomenon such as lightning and solar winds. At the same time, your product also generates many disturbances to this environment.

EMC testing helps you measure the product emission of disturbances, and tests the design's capability to withstand external disturbances.

Our EMC facilities:

- Conducted emissions (2Hz – 108MHz)
- Radiated emissions (30MHz – 40GHz)
- EFT transient's immunity (8kV, 5/100kHz)
- Surge impulse immunity (up to 24kV)
- Conducted RF immunity (10kHz – 400MHz)
- Conducted LF immunity
- ESD discharge immunity (30kV)
- Radiated RF immunity (10kHz – 6GHz)
- Supply dips / variations / failures
- Supply inter-harmonics
- EUT weight: 2 000 kg
- EUT maximum height and width: 2.2m

Lab capacity

Our state-of-the art facilities for Environmental simulations allow us to test and certify equipment for a wide range of products. We support most commercial standards, maritime specifications, subsea and oil industry standards and certain automotive / aviation / space specifications.

Nemko can help you through the entire production phase:

- Pre-compliance testing
- Qualification testing
- Type approvals
- Product certifications
- Factory inspections

Reliability testing

Does your equipment work under all conditions?

Products that are manufactured to withstand environmental conditions must be exposed to specific kinds of strain.

Here is where our rigorous environmental testing capability can help you ensure that your products are in conformity with the expectations and the specifications.

Our Reliability facilities:

- Temperature (-70°C to +180°C) / 15°C pr. min.
- Humidity (8 to 98% RH)
- Vibration and Shock
 - Max rated force: 105 kN
 - Frequency range: up to 3 000Hz
 - Max acceleration: 150 g
 - EUT weight: 1 000 kg
 - Displacement: 3"
- Altitude simulation
- Drop and impact testing
- Corrosion and salt mist testing
- Ingress protection (IP)
 - Ingress of water, IPX1 to IPX8
 - Ingress of solid objects, IP1X to IP 6X



For more information, contact:

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