MILITARY Qualification

The Emitech Group is a major actor of the qualifications in the military sector. Known and recognized for their know-how, our laboratories are equipped with means and skills to lead complete qualifications. Our test capacities, allow us to control your deadline and schedule imperatives.

Expertise - Reactivity - Availability

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EMITECH: laboratories with complementary activities

Emitech offers you a comprehensive service concerning your qualification needs in different fields such as: EMC, Electrical Tests, Lightning, Climatic, Reliability, Fire and Acoustics. Our methods & technology are in accordance with the most demanding standards & specifications.

A support at every step of your projects

Emitech can help you to manage a key point of your qualification: the identification of costs & deadlines. Our services in Engineering intervene in all the steps of your project: from the training courses of your team to the specific missions such as file analyses, technical or normative researches, design assistance right up to the assistance with manufacturing.

Exceptional Tests Equipment & Closeness Services

Our aeronautical test equipments are spread throughout our centers in France, permitting Emitech to offer the highest level of service on the market. The whole equipment concerning the more specific demands (lightning, high intensity radiated field, tests benching 800 Hz, EMC Rooms, windmilling, shakers 105kN, chamber 93m³, and hydraulic means with various fluids) remains unique in Europe.
Electromagnetic Compatibility

- Electric field from 10 kHz to 40 GHz
  - up to 3000 V/m CW
  - up to 10 000 V/m pulsed
- 5 Steering mode chambers with testing methods: DO160 and MIL STD 461
- Magnetic field from 10 Hz to 150 kHz
- B.C.I. up to 1 Ampere from 10 kHz to 1 GHz
- AM, FM, pulsed and combined modulations

Emission

- Measurements from DC to 40 GHz
- Clamp current probes: 10 Hz - 1 GHz (1kA)
- Magnetic loop antennas (20 Hz - 30 Mhz)
- Electric field antennas (10 kHz - 40 GHz)
- Temporal Analysis (DC - 500 Mhz)

Electrical tests

- Transient surges according to RTCA DO160 F/G, ABD 0100.1.8, ABD 0100.1.1C (A350), AMD 24C
- Voltage subtransients and specific waveforms by direct injection or by coupling
- Power supply interruptions

Combined test chambers

Number: 6
Temperature: -70 up to +150 °C
Rapid variation temperature: 20 °C/min
Relative humidity: 20 to 100 % Hr
Software monitoring, remote alarms
Useful dimensions (mm): 1200x1200x1200

Hydraulic

- Pressure: 50 MPA
- Frequency: 0 to 300 Hz
- Force: 20 MPA

Piezoelectric shakers

Number: 2
Frequency: 2 kHz to 50 kHz
Force: 50 kN
Max acceleration: 100 g

Specific test

- Contamination by fluid
- Solar radiation
- Cooling
- Wind-milling
- Icing
- Wind and rain, sand and dust
- Static mecanical tests up to 15000N
- Fire testing

Specific measurements

- Voltage
- Current
- Rotation speed
- Micro cut
- Thermal camera
- Laser vibrometry
- Strain gauges
- ...