



# Tests, certification and qualification of electronic products

Emitech, a French company unique in the world

You may don't know it, but when you use your personal computer, make a coffee, listen to music, travel by car, train, boat or aircraft or when you are at your workplace, you have probably used an electrical or electronic equipment tested by Emitech.

For each type of equipment, test requirements are specified to take into account a possible modification of performance as a consequence of the products environments.

Emitech services accompany our customers to satisfy these environmental requirements and indirectly all users of this equipment in their daily life.

## From toys to aircraft's subparts, all electrical products need our services

The Emitech specificity is to support all the manufacturers, suppliers, importers or resellers of electrical equipments :

- **Certification** - Mandatory requirements before and/or during the marketing of products - general public, medical, industrial, telecom, ... like CE Marking for the European Market
- **Qualification** - Tests specifications fixed by a buyer to its suppliers such as automotive, military, aeronautical or space qualifications

## We support you at every step of your project

Emitech provides three main services for a global performance :

- **Training courses**
- **Advice & Engineering**
- **Test laboratories in complementary fields**

We intervene at each step of your project from the initial research of the applicable test requirements for your product, to the global test campaigns with intermediary services like design assistance

## 11 Centres in France for worldwide services

The headquarter of the Emitech Group and its main laboratories are located near Paris. The different Emitech centres are located in the six main economic areas in France.

Every day, we support our customers from everywhere in the world for their products used all around the world.

CBTL  
CB Scheme

FC  
Listed

NOTIFIED BODIES  
N° 0536, 0573,  
0725, 0726,  
1120 & 1899  
EMC - 2004/108/EC  
LVD - 2006/95/EC  
RATTE - 1999/5/EC

cofrac TESTING  
EN 17025  
ACCREDITED  
N° 1-0107, 1-0744,  
1-0826, 1-0827,  
1-1925, 1-2069,  
1-2070, 1-2188  
AND 1-2206  
ESSAIS  
LIST OF SITES AND SCOPE AVAILABLE  
ON WWW.COFRAC.FR

**EMITECH**  
Our services support you in your daily life

# Our Activities

**Certification**, self-agreement, declaration of conformity, ...

Tell us what is your product and where you want to market it and we will tell you what type of requirement is to satisfy, what conformity assessment processes are to use and how our recognitions will optimize your costs and delays.

For more specific export markets and your access to marks of certification, Emitech works with its partner: Intertek.

**Qualification** is a demonstration that a product fulfill all the functions for which it was conceived.

Our specificity is to put all together the necessary know-how and test capacities to qualify onboard equipments with safety function.

**European market - CE marking**, Notified body for:

- ▶ EMC Directive - 2004/108/EC
- ▶ LV Directive - 2006/95/EC
- ▶ R&TTE Directive - 1999/5/EC

**North American market**

- ▶ EMC/Radio: FCC Listed & Industry Canada recognition
- ▶ Electrical risks: ETL mark

**Worldwide markets**

- ▶ CB Scheme: Certification Body testing laboratory
- ▶ Marks of certification: Intertek
- ▶ MRA - Mutual Recognition Agreements: Conformity Assessment Body

**Unique EMC tests equipment**,

- ▶ HIRF, emission
- ▶ Aeronautical lightning

**Complementary fields**

- ▶ Climatic & Mechanical
- ▶ Reliability

## COMPLEMENTARY TEST LABORATORIES



A RECOGNIZED KNOW-HOW



GLOBAL SERVICES



AN ADDITION OF COMPETENCES  
UNIQUE IN THE WORLD TO SUPPORT YOU

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Emitech Group is formed of Emitech and its subsidiaries Eurocem (\*\*\*) and Adetests (\*)

[www.emitech.fr](http://www.emitech.fr)

# Our Services

We help you to secure the costs and lead times linked to the environmental tests requirements.

**Training courses** - Understand, anticipate and solve

**Advice & Engineering** - From file analysis to technical / normative researches by design assistance

**Test laboratories in complementary fields** - The management of your test campaigns is optimized:

- ▶ ElectroMagnetic Compatibility - EMC
- ▶ Radio
- ▶ Electrical Safety
- ▶ Climatic and Mechanical
- ▶ Reliability
- ▶ Acoustic

# Focus about our representative test capacities

**ElectroMagnetic Compatibility / Radio**

- ▶ 37 shielding rooms - possibility of vehicle test
- ▶ 3 steering mode chambers F- 1G-TEM cell
- ▶ EMF & DAS measurements
- ▶ 3 open area test sites
- ▶ Emission DC - 40 GHz
- ▶ Immunity 10 kHz - 40 GHz: up to 1500 V/m CW, 6 kV/m pulsed and steering mode
- ▶ Specific electrical tests equipment:
  - Rack 30 kVA on AC and DC mains from 50 to 800 Hz
  - Amplifiers, transformers, inductor and generator for aeronautical lightning tests

**Climatic & Mechanical**

- ▶ 16 vibration shakers
- ▶ 52 climatic chambers

**Reliability**

- ▶ 1 HALT & HASS chamber

**Acoustics**

- ▶ 1 hemi-anechoic chamber - test of vehicle
- ▶ 3 reverberating rooms
- ▶ 1 psycho-acoustic room
- ▶ 1 alpha room

**5 000 peoples** have already followed one of our sessions

**Technical staff secondment** for missions of short or long duration

**More than 13 000 days of test per year**

**Testing EN 17025 accredited**, list of sites and scope available on [www.cofrac.fr](http://www.cofrac.fr)

- ▶ Guarantee of a third part laboratory (impartiality, autonomously, integrity)
- ▶ Traceability and metrology
- ▶ Technical validity
- ▶ Confidentiality

**European regulation / worldwide markets**

**EMC standards**

- EN 55022 / EN 55011 / FCC PART 15 / RSS 310 GEN
- EN 61000-4-(2, 3, 4, 5, 6, 8, 11, 16 and 17)
- EN 61000-3-2 / EN 61000-3-3 / EN 61000-6-(1 to 4)
- EN 55013 / EN 55014-(1&2) / EN 55024
- EN 61326 / EN 50130-4 / EN 60601-1-2
- EN 55155 / EN 50121-3-2 / EN 50121-4 / EN 60945
- EN 301 489-xx / EN 300 339 / EN 300 385

**Radio standards**

- EN 300 220 / EN 300 330 / EN 300 440 / EN 300 086
- EN 300 296 / EN 300 113 / EN 300 390 / EN 300 328
- EN 300 442 / FCC PART 15 / RSS 210,310

**Electrical safety standards**

- EN / UL 60950 - EN 60065 - EN 61010, 61558
- EN 60335-1, 60335-2-xx - EN 60598-1, 60598-2-x
- EN 60601-1, 61347-1, 60745-1

**Qualifications**

- EUROCOPTER, DASSAULT, AIRBUS, BOEING, BOMBARDIER, PSA, RENAULT, NISSAN, ...

**EMC Standards**

- RTCA DO 160, MIL STD 461/462, MIL STD 704, MIL STD 202, 810, 883, CISPR 12 and 25, ISO 7637, ISO DTR 10605, GAM EG 13, DEF-STAN, STANAG

**Climatic and Mechanical standards**

- EN 60068-2-xx, ETS 300 019-2-xx, RTCA DO 160, GAM EG 13, MIL STD 810, NF X 41002, ...

**Date of creation** 1989

**Legal status** Public limited company

**Share Capital** 1 560 000 €

**Subsidiaries** Eurocem and Adetests

**Location** 11 centres in France

**17 500 m<sup>2</sup>** principally for our test labs

**Turnover** 16,3 M € for 2010

**Employees** 200 - 80% technicians & engineers

# About us

Because we consider us as a service business, we build our relationship with our customers around three keywords : **advice- reactivity- flexibility**

**Our services support you in your daily life** to secure the delay and costs linked to the certification/qualification of your equipments.

SUBURB OF PARIS

NEAR BRITANNY

SOUTH-WEST

SOUTH

RHONE-ALPES

EAST



EMITECH - SERVICE MKC

