



# THIENE LAB

DEKRA Testing and Certification

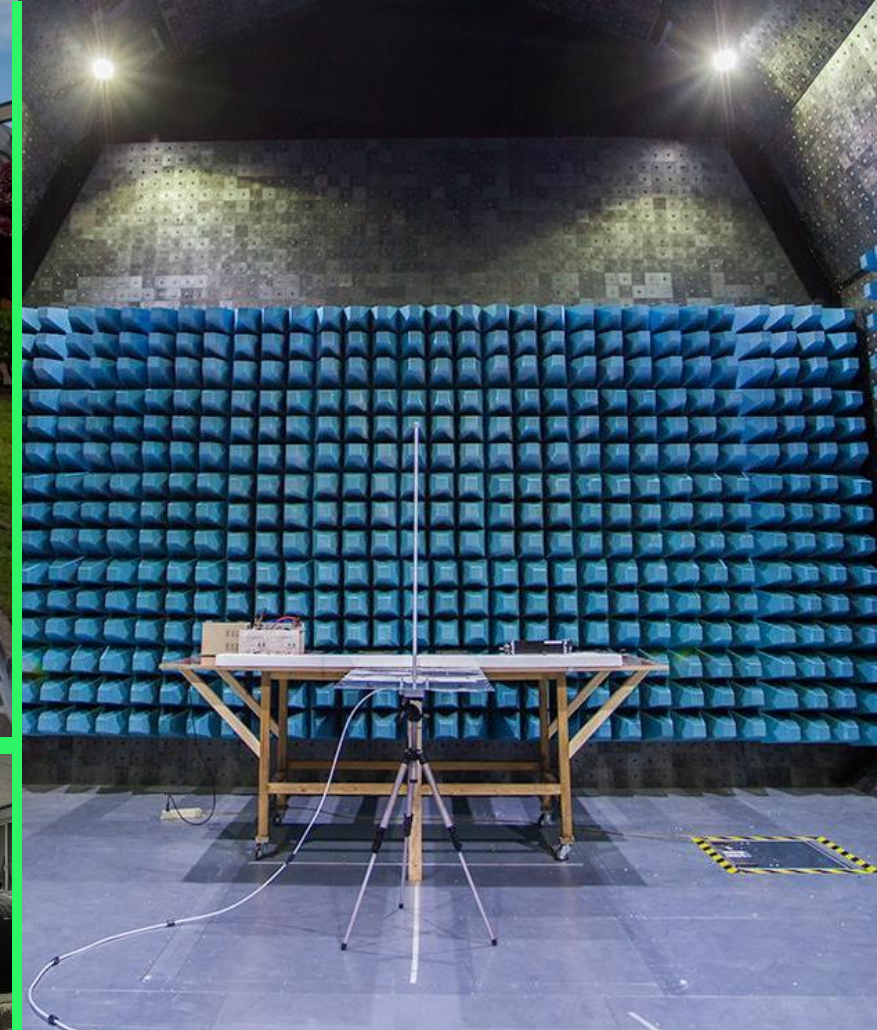
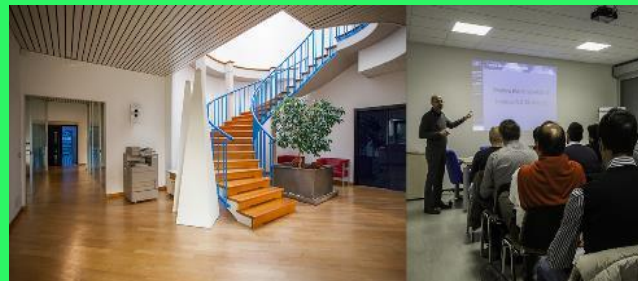
REAL  
SAFETY

## Our Lab

Test laboratory located in Thiene (Vincenza) joined DEKRA group in May 2021.

The lab was founded in 1995 providing testing and verifications to almost every type of electric, and electronic products, including electro-mechanical systems and components.

Currently, this facility has **30 employees** in staff and our main facilities are hosted in a **2.500 sqm area**, including offices and laboratories, a large training/workshops room, additional meeting/customers rooms.



In our state-of-the-art facilities we provide our testing capacities and capabilities to allow customers ensure compliance of their products with regulations and internal requirements.

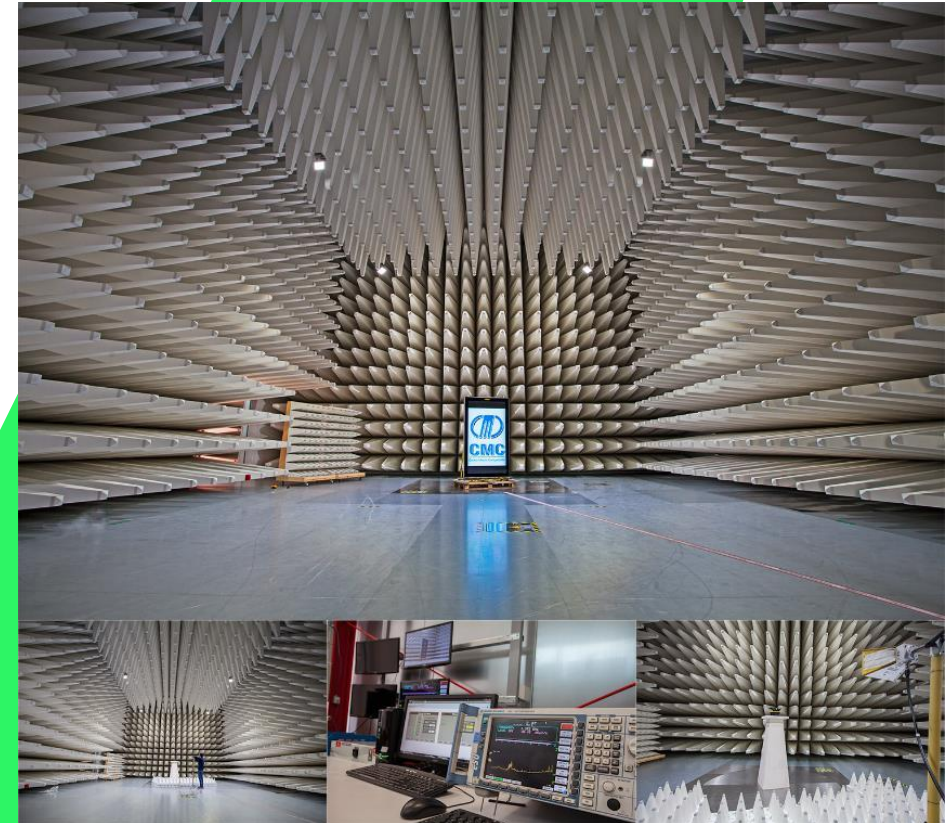
**TESTS and VERIFICATIONS:** The laboratory is accredited by ACCREDIA, FCC (US) and ISED (Canada) with a wide scope covering a large number of International Standards. In addition, we are also have extended capabilities to cover customers own specifications/requirements.

**COMPETENCE:** Technical staff/engineers are highly experienced; competence is constantly improved and upgraded.

**INNOVATION:** Permanent orientation towards innovation and ready to provide proper support to customers to cope with market challenges.

**TRAINING:** Ability to provide training/update courses on current standards, regulations and legislations.

**CERTIFICATION and International Services:** Combined with our DEKRA group services, full testing and certification services including DEKRA mark, NRTL, chemical testing, cybersecurity, Medical Device Services, etc. can be provided





## ILAC – MRA

CMC is an independent laboratory, part of the international circuit ILAC – MRA.

## ACCREDIA

CMC is accredited by ACCREDIA (accreditation No. 0168). ACCREDIA is the only National Body appointed by the Italian State to perform accreditations activities.

## FCC

CMC is recognized to perform FCC tests part 15 e 18, with reference to Mutual Recognition Agreement (MRA) between the United States and the European Union.

## INDUSTRY CANADA (IC)

CMC is a recognized laboratory by Industry Canada.

- + FCA (FIAT/CHRYSLER) RECOGNIZED LABORATORY
- + QUALIFIED BY RINA (ITALIAN MARINE REGISTRY)
- + FLAMME VERTE ACCREDITED LABORATORY



## EMC AND RADIO

Electromagnetic compatibility tests:  
- conducted and radiated emissions  
- conducted and radiated immunity  
- radio certification



## LVD

Insulation analysis, construction checks, temperature mapping, IP rating.



## ENVIRONMENTAL AND VIBRATIONS

Temperature cycles, shocks, environmental conditions and vibration tests, including in a controlled environment.



## CPR

Setting up and checking the conformity of pellet and wood-burning stoves and heating fireplaces.

## Other Testing & Certifications services available via DEKRA network:

Wireless Testing

Cybersecurity testing

Product Inspections

Explosion Safety

International Type Approval services

Medium/High Voltage testing

Product Certification

Connectivity Testing

Machinery testing and Certification

Medical testing and Certification

# Covered Product Categories



**HOUSEHOLD  
APPLIANCES**



**MEDICAL  
DEVICES**



**INFORMATION TECHNOLOGY  
AND AUDIO/VIDEO EQUIPMENT**



**AUTOMOTIVE AND  
E-MOBILITY**



**LABORATORY  
EQUIPMENT**



**SPACE HEATING  
APPLIANCES**



**LIGHTING EQUIPMENT**



**RAILWAY**

## Covered Products

- Domestic Appliances (HOUS)
- Lighting equipment and similar devices/components (LITE)
- Information Technology, Telecommunication, Audio/Video equipment (ITE / ITAV)
- Industrial, Scientific and Medical devices (ISM)
- Measurement Instruments (INST)
- Space heating appliances
- Electric Tools and similar equipment (TOOLS)
- Welding stations
- Automotive Components

## Accreditations



ACCREDIA Accredited Laboratory, Certificate No. 0168, according to UNI CEI EN ISO/IEC 17025, ILAC recognized (International Laboratory Accreditation Cooperation)



Electrical Safety (LVD, Directive 2014/35/UE)

Medical Equipment (MDR, Medical Device Regulation (UE) 2017/745)

Machinery (MD, Directive 2006/42 CE)

Energy related Products and Energy Label Directives (Directives 2009/125/CE e 2010/30/UE)

## Covered Products

- Household Appliances (HOUS)
- Lighting equipment and similar devices/components (LITE)
- Information Technology, Telecommunication, Audio/Video equipment (ITE / ITAV)
- Industrial, Scientific and Medical devices (ISM)
- Measurement Instruments (INST)
- Telecommunication equipment
- Radio receivers and televisions
- Railway and marine components
- Space heating appliances
- Electric tools
- Fire protection systems, anti-intrusion systems
- Control systems
- 2 e 3 wheeled vehicles
- Automotive electric and electronics subassemblies and components
- EV medium sized vehicles

## Laboratory facilities

1 Semi-anechoic Chamber for Full Compliance tests up to 40 GHz, with EUT-antenna distance 10 m

1 Semi-anechoic Chambers for Full Compliance tests up to 40 GHz, with EUT-antenna distance 3 m

1 Fully Anechoic Chamber for tests from 27 MHz to 6 GHz, with level up to 200V/m at 1m distance, 3 m

1 Shielded room



FIAT CHRYSLER AUTOMOBILES



## Recognized Laboratory

Electromagnetic Compatibility (EMCD, Directive 2014/30/UE)

Electromagnetic Compatibility for vehicles and components (Reg. ECE R10)



## Covered Products

- Radio and Telecommunication equipment
- Connected Appliances/Devices
- Information Technology Equipment (ITAV, ITE)
- Industrial, Scientific and Medical devices (ISM)

## Activities

- Testing according to ETSI standards
- Support for Technical File preparation
- FCC certification for parts 15 and 18
- IC Industry Canada certification

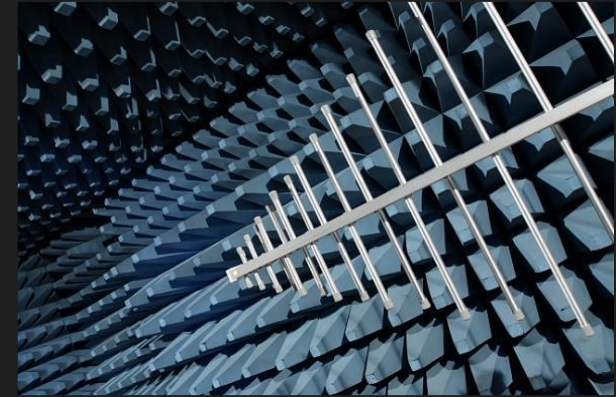
## Laboratory facilities

1 Semi-anechoic Chamber for Full Compliance tests up to 18 GHz, with EUT-antenna distance 10 m

1 Semi-anechoic Chambers for Full Compliance tests up to 18 GHz, with EUT-antenna distance 3 m

1 Fully Anechoic Chamber for tests from 27 MHz to 6 GHz, with level up to 200V/m at 1m distance, 3 m

1 Shielded room



Radio Equipment Directive  
(RED, Directive 2014/53 UE)

Federal Communications Commissions Title  
47 part. 15 e 18 (FCC)

Innovation, Science and Economic  
Development Canada (ISED)

## Covered Products

- Household Appliances (HOUS)
- Lighting equipment and similar devices/components (LITE)
- Information Technology equipment (ITE / ITAV)
- Industrial, Scientific and Medical devices (ISM)
- Measurement Instruments (INST)
- Telecommunication equipment
- Radio receivers and televisions
- Railway and marine components
- Combustible products
- Electric tools
- Automotive components

## Laboratory facilities

Climatic chambers (from -70°C to +180°C)

Thermal shock chamber (from -85°C to +220°C)

Combined climatic & vibration test chamber (from -40°C to +180°C)

Salt mist chamber

Mechanical vibrations shaker (with slip table)

Microphone arrays

Spectrum analyzer, 1/3 octave

Noise reference sources

Enclosure IP degree of protection from water penetration (chamber for covered degrees from IPX1 a IPX9K)

Probes for IP degree of protection from solid penetration (from IP1X to IP4X)

Chamber for dust penetration (from IP5X to IP6X)



Climatic tests, Vibrations, IP, acoustics

## Covered Products

- Solid fuel stoves
- Pellets stoves
- Insets appliances and open fires
- Residential cookers fired by solid fuel
- Heating boilers
- Pellet burners

## Activities

- Product documentation analysis
- Measurement and analysis of the performances and the emissions of the tested appliance
- Safety tests
- Pre-tests to achieve a better setup for the product
- Technical consultancy
- “Certificazione Ambientale/Classificazione Stelle” (Italian Decree 7/11/2017, n. 186, “Decreto Bacino Padano”)
- Complete LVD, EMC, radio and acoustics tests

## Laboratory facilities

Test trihedron with precision platform balance

Adjustable flue draught system

Computer-aided data-logging system

Thermo camera

Flue gas analysis system for the measurement of CO, CO<sub>2</sub>, O<sub>2</sub>, NO<sub>x</sub>, THC

Water circuit for appliances with boiler

Instrument for the measurement of the water content in the test fuel

Computer-based real-time analysis system for the instantaneous calculation of efficiency, power and emissions of the appliance, according to the standards



Construction Products  
Regulation (CPR, Regulation  
UE N.305/2011)



# BE A SAFETY AMBASSADOR

Thank You

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SAFETY