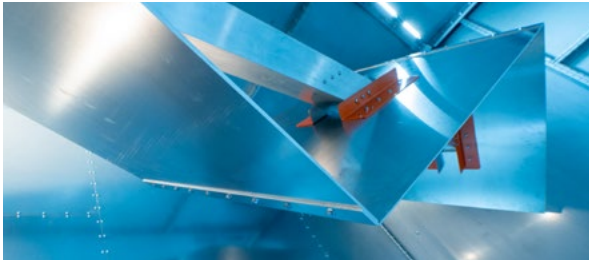




## ELECTROMAGNETIC COMPATIBILITY

### ELECTROMAGNETIC COMPATIBILITY OF DEVICES AND COMPLEX SYSTEMS

Electrical and electronic devices require professional consideration of all EMC-aspects, in particular where safety-critical systems are concerned. Based on more than 30 years of experience we offer services in EMC-compliant device and system design and in conformity assessment according to EU directives.



#### CE compliance testing, radio, railway, medicine, FCC \*

Providing support in EMC-compliant device development from the design process up until the successful acceptance test, PCB-level EMC analysis using an EM scanner.

#### Automotive testing \*

Fully compliant emission tests and immunity tests of automotive components in our Automotive Component Testing Chamber and automotive pulse testing pursuant to ISO standards and engineering specifications at our transient testing station.

#### Special EMC tests, MIL-STD-461, RTCA DO-160, ECSS \*

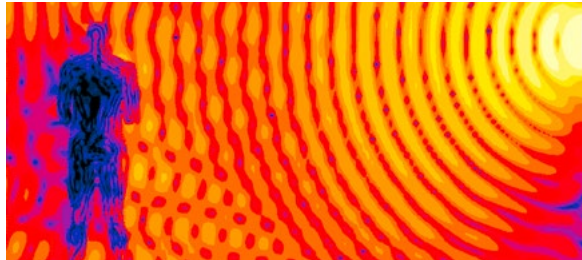
Tests on EMC system compatibility and robustness of electronic devices up to 40 GHz, immunity tests for safety-related systems.

#### EMC testing with high field strengths \*

Reverb chamber according to ISO 11452-11 and IEC 61000-4-21, field strengths up to several hundred V/m possible, frequency range 200 MHz – 18 GHz, tests in accordance with automotive OEM standards, MIL-STD-461, RTCA-DO-160, etc.

### EFFECTS OF ELECTROMAGNETIC FIELDS ON THE HUMAN BODY

In order to prevent adverse health effects caused by electromagnetic fields, certain limit values have been established, the fulfilment of which has to be ensured by the operators and manufacturers of devices and facilities. We guarantee reliable exposure assessment according to the most recent scientific evidence.



#### Investigating the effects of electromagnetic fields

Implementation of scientific projects on the topic of human safety in electromagnetic fields, including interaction between electromagnetic fields and implants.

#### Development of exposure systems

Design, calibration and continuous maintenance of exposure systems for in vivo, in vitro and provocation studies to assure defined and reproducible exposure conditions.

#### Determination of power absorption, currents and field strengths \*

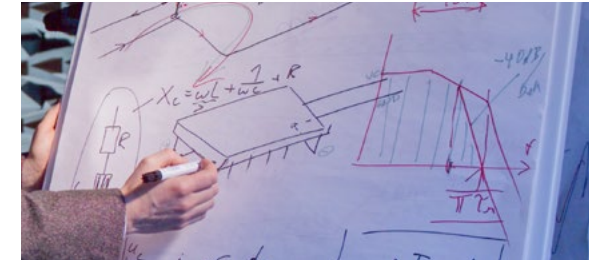
Numerical calculations with human body models to analyse the power absorption and/or electric current densities and electric field strengths induced in the body tissue. Standard-conforming SAR measurements for radio transmitters operated close to the body.

#### Exposure assessment / minimising exposure

Standard-conforming measurements of devices and facilities, preparation of audit reports and expert opinions. Advice on measures to minimise exposure, e.g. in occupational settings in connection with the implementation of EU Directive 2013/35/EU.

### EVENTS AND TRAINING

Through seminars and training courses, experts provide information on the current state of the art of science and technology in the areas of electromagnetic compatibility and human exposure to electromagnetic fields.



#### Seminars at the Seibersdorf Academy

We are happy to pass our experience on to you as lecturers. In our Academy we offer a series of seminars on EMC and on EMF, both of which are module-based so you can also book each module individually.

ONLINE registration is possible at [www.seibersdorf-academy.at](http://www.seibersdorf-academy.at)

#### Tailor-made seminars

We offer individual training tailored specifically to your needs: Seminars can either be held in our seminar rooms or at your premises.

#### Symposium on EMC

Each year, we organise the Austrian EMC symposium in technical cooperation with the Graz University of Technology, the Austrian Electrotechnical Association (OVE) and the Austria Chapter of the IEEE EMC Society. The venue of the symposium alternates between Seibersdorf and the Graz University of Technology.

Website of the EMC symposium: [www.emv-fachtagung.at](http://www.emv-fachtagung.at)

\* The activities marked with an asterisk are carried out as part of our accreditation.