

FRANKONIA

Frankonia E-Drive Testing Chamber
- Fixed Load Machine -

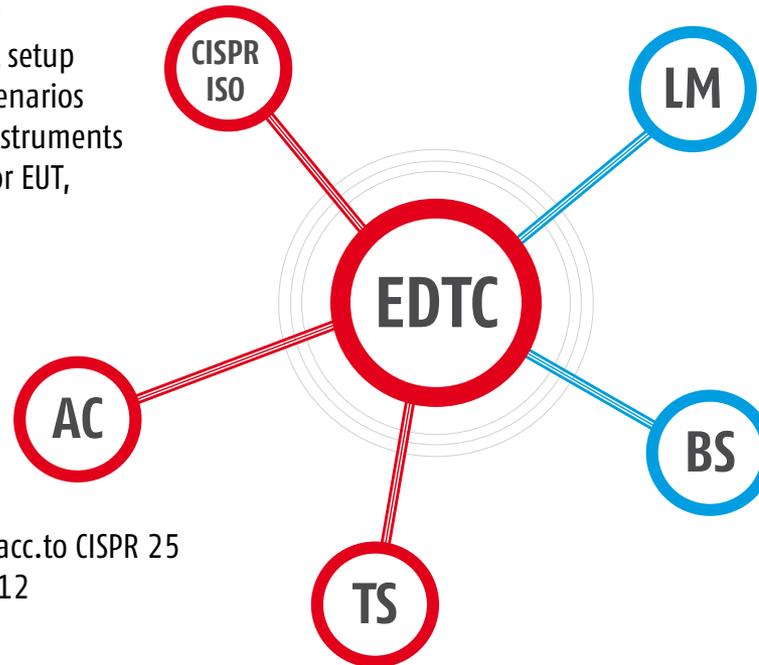
Requirements

Standards CISPR & ISO

- CISPR and ISO conform test setup
- Respect of different test scenarios
- Interference suppressed instruments
- Secure test environment for EUT, chamber and staff
- Future-proof functionality

Anechoic Chamber

- dedicated for component tests acc.to CISPR 25
- or for vehicle tests acc.to CISPR 12
- or both in a single solution



Load Machine (Dynamometer)

- fixed version up to 350 kW
- mobile version up to 120 kW

Battery System

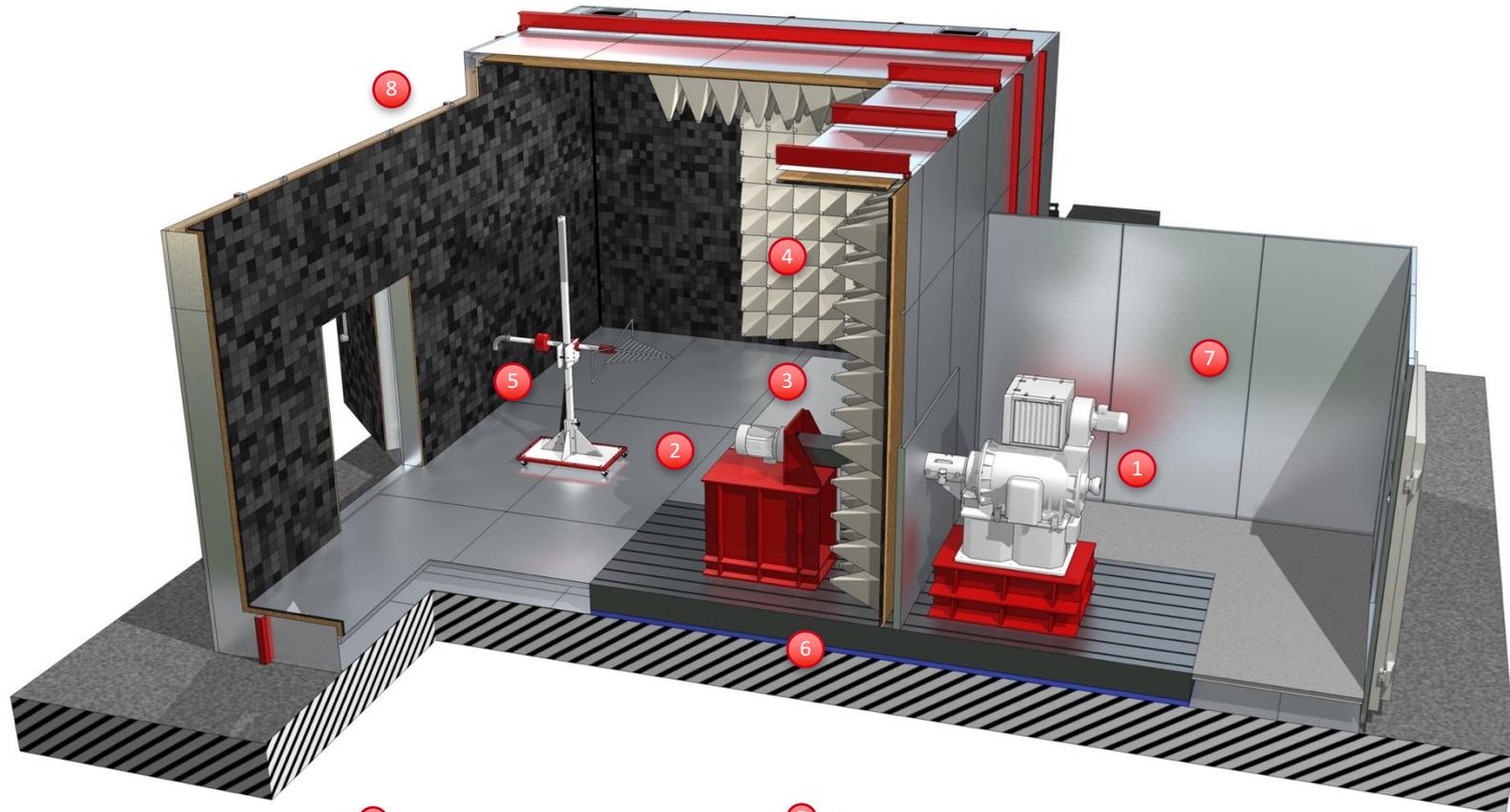
- Battery simulation
 - Battery test
 - Charging emulation
 - for components and vehicle tests
- Available power range:
- 300 A or 600 A
 - 100 kW up to 600 kW

Test System

- Defined according to CISPR and ISO standards
- dedicated for component tests
 - dedicated for vehicle tests

EDTC

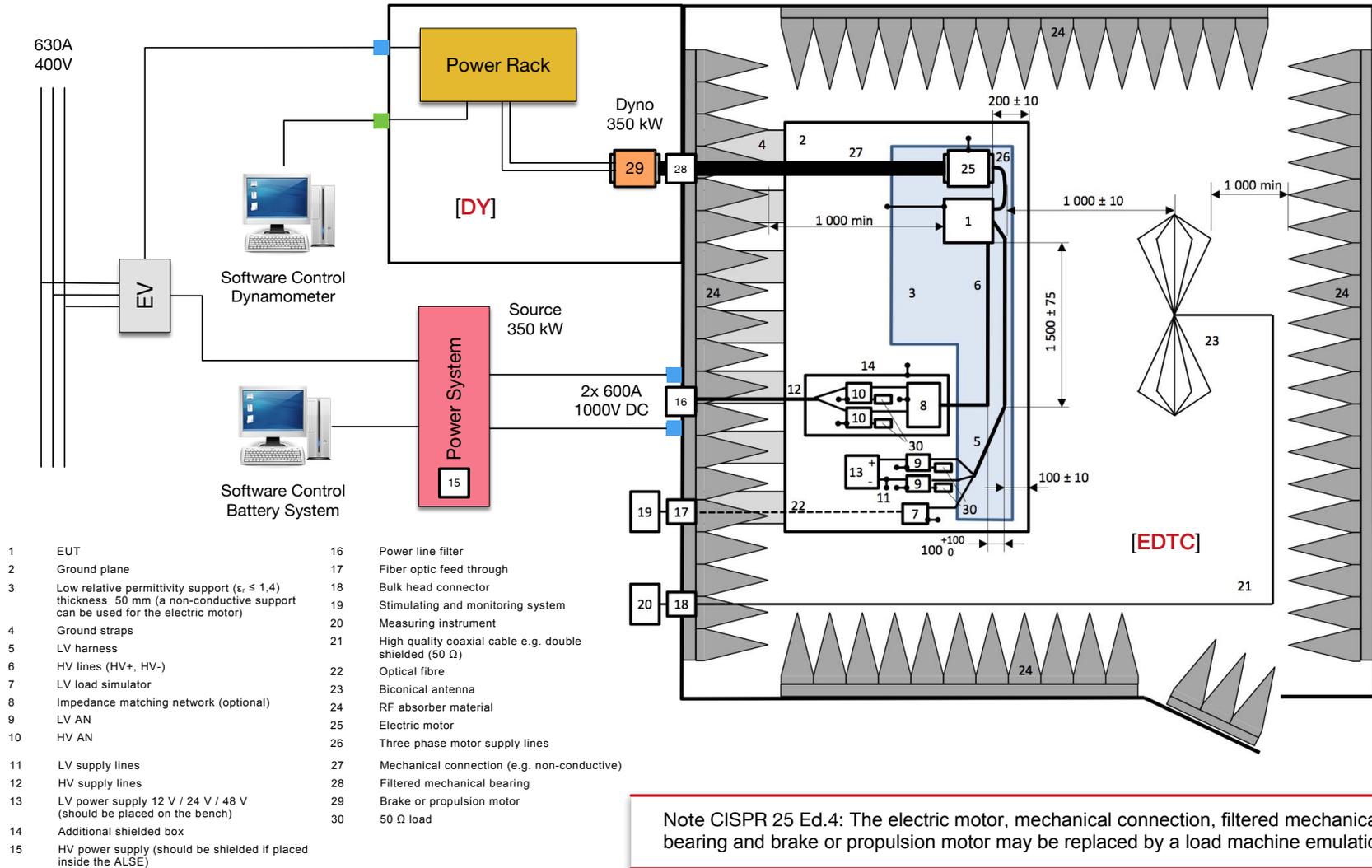
Load Machine | Fixed Version



- | | |
|----------------------------|---------------------------|
| ① Load Machine (Dyno) | ⑤ Frankonia Antenna Mast |
| ② Drive Unit Bench | ⑥ Vibration-free Basement |
| ③ CISPR 25 Test Table | ⑦ Shielded Room for Dyno |
| ④ Frankosorb® A2 Absorbers | ⑧ Anechoic Chamber (EDTC) |

Frankonia E-Drive Test Chamber

EMC Test on Motor and HV Battery acc. to CISPR 25 Ed.4



EDTC

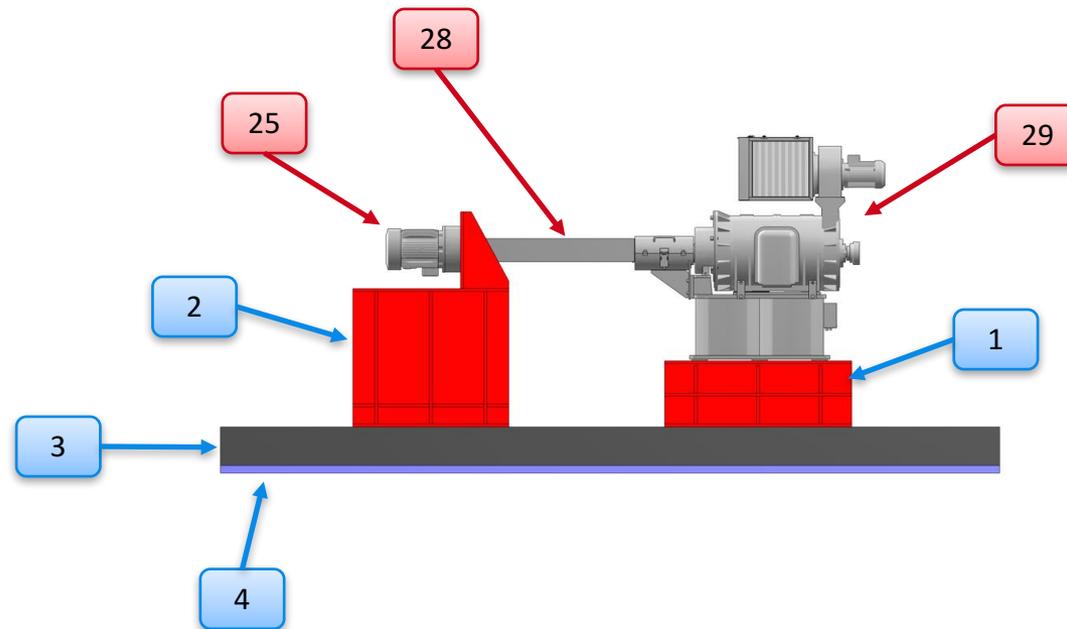
Load Machine | Fixed Version

According to CISPR 25 Ed.4

- 25 Electric Motor (EUT)
- 28 Filtered mechanical bearing
- 29 Brake or propulsion motor (Dyno)

Frankonia EDTC preparation:

- 1 Load machine support
- 2 Electric motor support (customized)
- 3 Vibration-free-Basement
- 4 Buffer/Isolation



EDTC

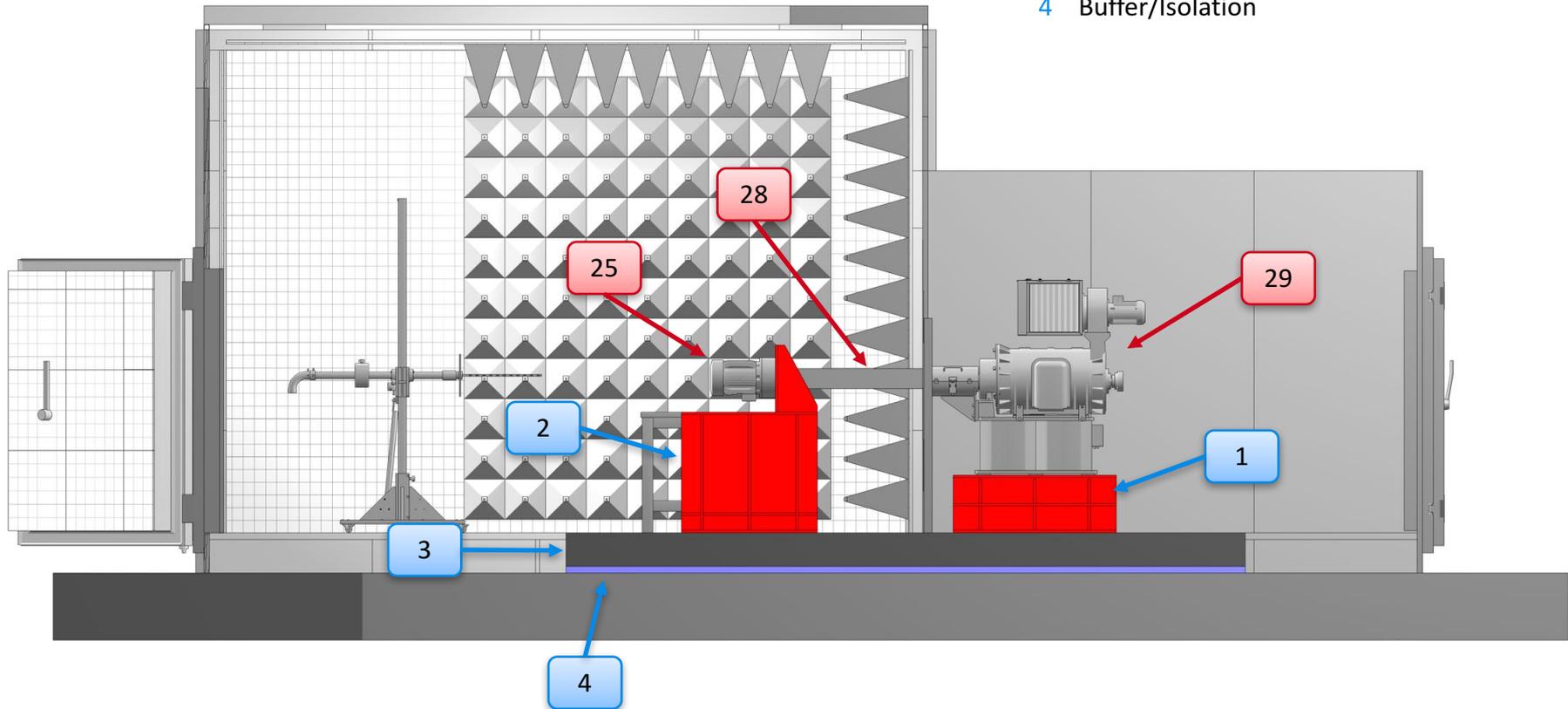
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EDTC

Load Machine | Fixed Version - Features

- Radiated Emission (EMI): Full compliant according to CISPR 25 Ed.4
- Radiated Immunity (EMS): Full compliant according to ISO 11452-2
- Load machine (dynamometer) available as a fixed version from 125 kW up to 350 kW
- Additional battery simulation up to 1.000 V, 600 kW and 600 A available
- Liquid or air cooling load machine
- Solutions for powertrain component or complete vehicle tests (full flexible use)
- Frankosorb® A2 non-combustible absorbers as a must have!
- Shielded-shaft, fully integrated in the Anechoic Chamber
- Highest European safety standards
- Integration kit for existing chambers available
- EMC knowledge-exchange base and worldwide service
- Turnkey solution by Frankonia

Load Machine Systems

Version: *	EDTC-125	EDTC-160	EDTC-250	EDTC-350
Power range:	125 kW (both directions)	160 kW (both directions)	250 kW (both directions)	350 kW (both directions)
Revolution speed:	up to 12.000 RPM	up to 12.000 RPM	up to 12.000 RPM	up to 8.000 RPM

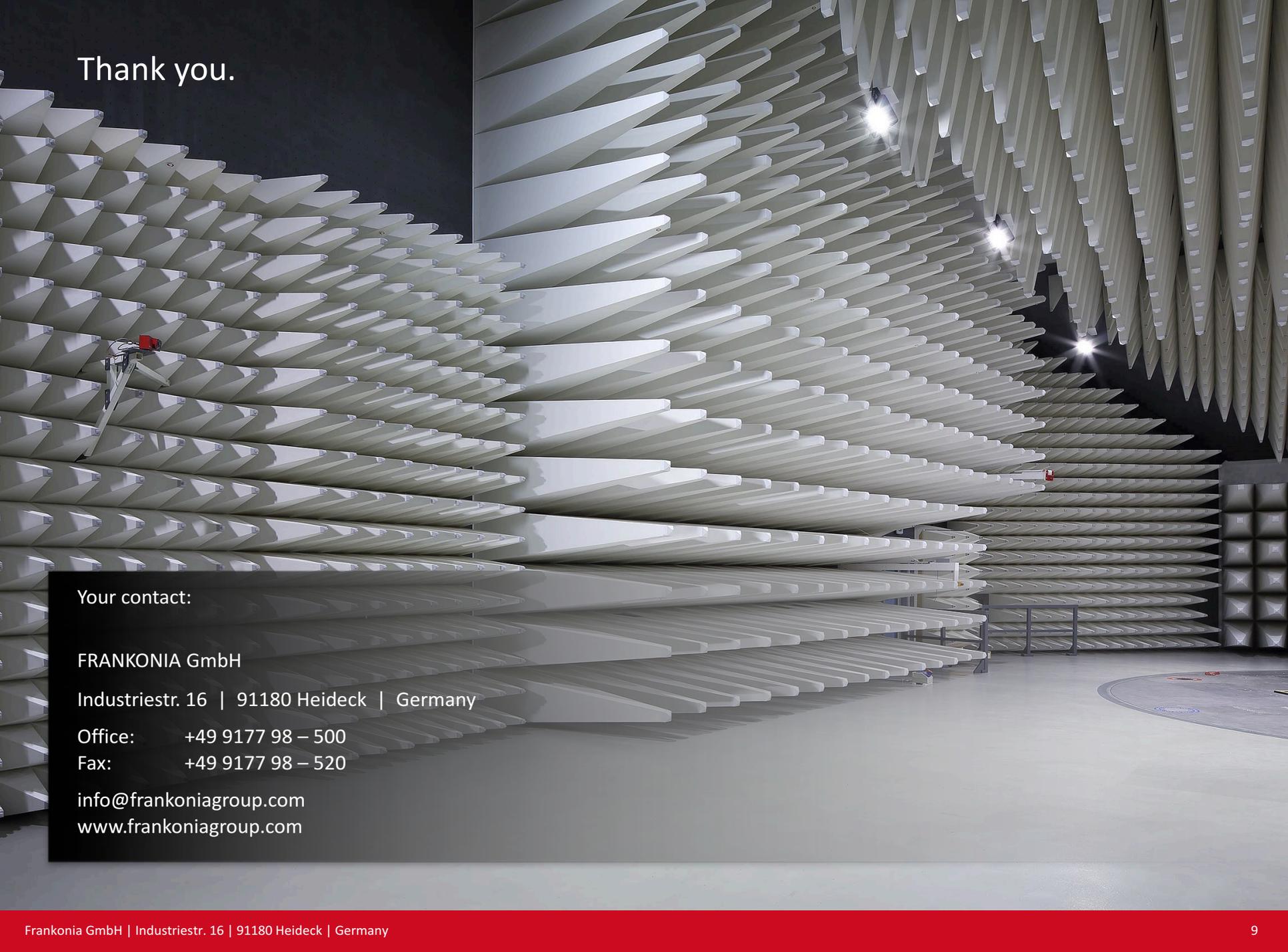
*other configurations available on request

EDTC

Load Machine | Fixed Version - Specifications

EDTC Anechoic Chamber

Dimensions:	Chamber requirements acc. to CISPR 25 Ed. 4 (model ACTC, size: 7,88 x 5,33 x 4,05m) or integrated in CISPR 12 chamber (model AVTC or SAC)
Frequency range:	150 kHz to 18 GHz (40 GHz as option)
Measuring distance:	1,0m (typical)
Basement:	Vibration-free and non-interacting solid basement (floating slab or steel)
Absorber lining:	Frankonia Frankosorb® non-combustible DIN EN 13501-1 class A2 – s1 d0 absorbers acc. to CISPR 25 Ed. 4 chamber requirements
Floor:	Highly conductive floor finishing and protection, integration of load machine fixation
EUT test table:	Test bench requirements acc. to CISPR 25 Ed. 4, incl. electric motor support bench and fixation set with filtered mechanical bearing to the external load machine

A large anechoic chamber with white pyramidal absorbers. A person is visible on a ladder on the left side. The chamber is illuminated by several spotlights, creating a dramatic effect with strong highlights and deep shadows. The floor is a light-colored, polished surface.

Thank you.

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