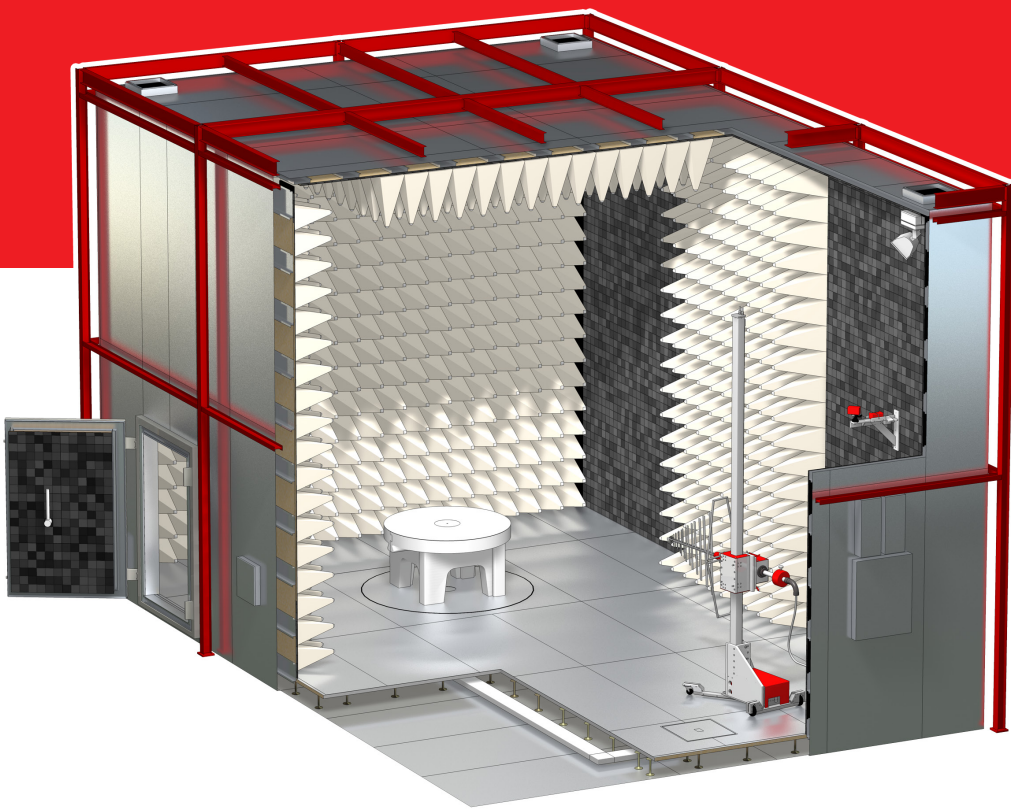# Accessories for Anechoic Chambers

- Antenna Stands
- Antenna Masts
- Turntables
- Optical Transmitters
- Testing Tables
- Shielded Camera Systems
- and others

Frankonia Turnkey Solutions

Anechoic chamber accessories for EMI/EMS tests acc. to IEC/EN/ISO/MIL and CISPR standards

FRANKONIA

Frankonia Group

The FRANKONIA GROUP was founded in 1987 as a solution provider for EMC laboratories to meet the increasing demand for highly specialized testing environments for the electronic and automotive industry. With more than 25 years of experience to date, FRANKONIA maintains its leading position in EMC solutions worldwide. Without limitations in capabilities and resources, FRANKONIA develops future-oriented concepts for EMC laboratories, which guarantees an optimal use of resources as well as the best possible customized solutions.

- FRANKONIA demonstrates a global presence in cooperation, with a well-structured network of productions, representations and service units.
- FRANKONIA strives to be the preferred partner for customized and state-of-the-art solutions.
- FRANKONIA provides fundamental knowledge to operate as a complete solution provider.
- FRANKONIA implements innovative technologies to enhance the efficiency and improve the outcomes and quality along with customers' needs.
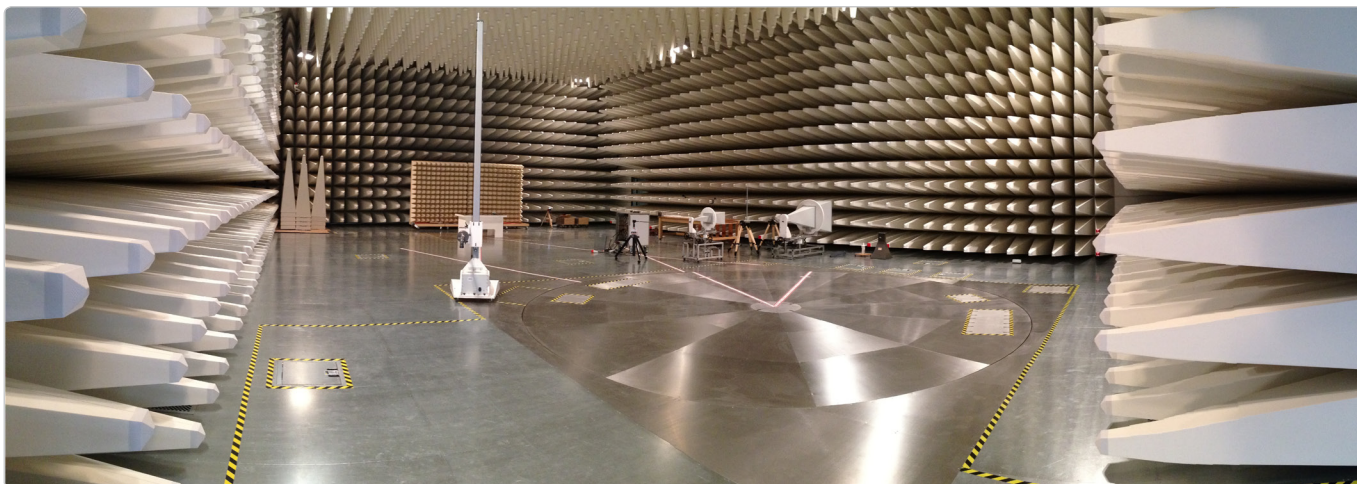
We are proud of our highly specialized team that is putting our customers' demands into practice. It is our philosophy to improve the products, to realize new ideas, and to complete our product range within our broad scope of business. The fact that FRANKONIA is able to offer complete solutions from the first sketch to the final handover makes FRANKONIA a unique and trustworthy partner worldwide.

Frankonia's authenticity
FRANKONIA stands for latest technologies, highest quality, innovative concepts and materials, and reliable solutions. Due to its easy and efficient usability along with its time-saving configuration, Frankonia's Anechoic Chambers set new standards for innovative and complete EMC testing solutions and offer a real added value to our customers.

Frankonia solutions
FRANKONIA as a turnkey solution provider and manufacturer offers a complete range of test equipment, instruments, software and accessories. Additionally, our broad range of doors, gates, turntables, monitoring equipment, and positioning devices can be easily integrated to meet our customers' needs.

Frankonia Accessories for Anechoic Chambers

To complete our product range for EMC testing chambers, Frankonia offers a variety of innovative positioning devices and accessories required in modern testing facilities.

More details about chambers are available in the separate brochure 'Anechoic Chambers'.

Furthermore, the turnkey capabilities of Frankonia also encompass testing equipment for emissions and immunity tests. This includes a broad range of antennas, pre-amplifiers, broadband RF power amplifiers, software, GTEM cells, striplines, open/closed TEM cells, and receivers. With our own range and that of our partners, Frankonia can serve all demands in EMC test equipment.

ANTENNA STAND – FSM 1.6/ FSM 2.0

The Frankonia antenna stand FSM 1.6 or FSM 2.0 is perfectly adapted for tests where no height scan is required. As the name already indicates, it is available in two different sizes, whereby the height of the stand can be adjusted from 0.9/ 1.2 m to 1.6 /2.0 m. In order to avoid any unwanted reflections, the mast rod is made of fiberglass.

The foot of the antenna stand is a collapsible tripod. It ensures a secure standing and is easily adaptable to uneven ground. For the perpendicular adjustment of the mast, a spirit level is mounted on the tripod. All the adjustments can be done by a single person within a few seconds.

Antennas can be mounted directly on the 3/8″ thread or by using adapters for double-stacked antennas.

In case electrical polarization of the antenna is desired, Frankonia's polarization unit FPD-01 is the solution.

Features
· Low-price solution for tests without height scan
· Quick to adjust
· Adaptable and secure when standing
· 3/8″ antenna or adapter mount

Antenna Stand – FSM 1.6/ FSM 2.0		
Technical specification		
Version	FSM 1.6	FSM 2.0
Height range	0.9 m to 1.6 m	1.2 m to 2.0 m
Weight	6 kg	7 kg
Material	Fiberglass	

The polarization unit FPD-01 is designed for the polarization of antennas, and is a perfect complement to the antenna stand FSM 1.6 or FSM 2.0. The polarization unit FPD-01 is adapted for antennas up to a weight of 5 kg, and has a slewing range from 0° to 90°. The FPD-01 polarization unit has an antenna tube of ⌀ 22 mm, which is equipped with a clamp ring for easy and safe installation of antennas. On the side a 3/8″ thread is provided for the installation of a stand. The control is effected by the controller FC06 which is equipped with an additional 24 V output. The control signal is fed through the shielded wall via an EMC filter that is mounted on the carrying unit.
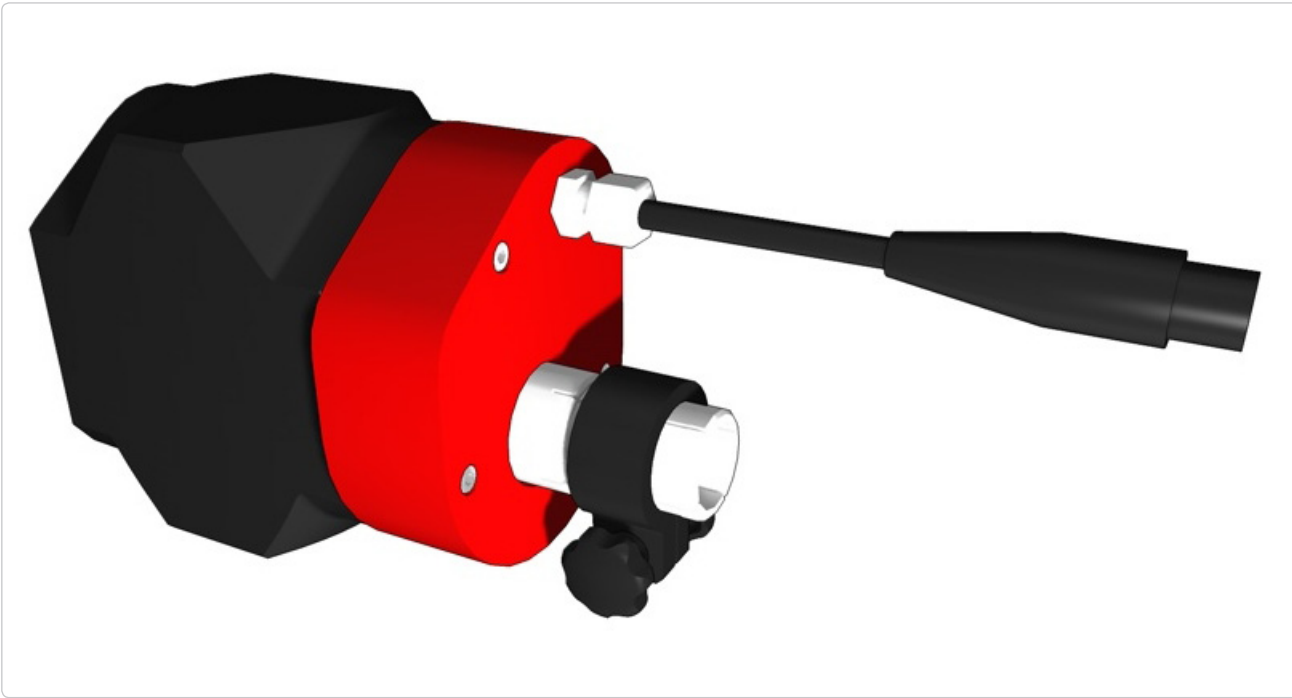

Features
- Electric polarization from 0° to 90°
- Polarization time of about 5 sec
- Polarization accuracy of 0.2°
- For antennas up to 5 kg
- Antenna tube of ⌀ 22 mm ± 0.1

Polarization Unit – FPD-01	
Technical specification	
Version	FPD-01
Dimension (L x W x H)	200 mm x 110 mm x 90 mm
Weight	2.5 kg

ANTENNA MAST – FAM2-4/ FAM2-6

Frankonia's innovative range of positioning devices is entirely compatible with the EMC chamber environment. Our fully automatic antenna mast FAM with electric height scan and electric polarization is available in two sizes:

- FAM2-4 for height scans up to 4 m, and
- FAM2-6 for height scans up to 6 m
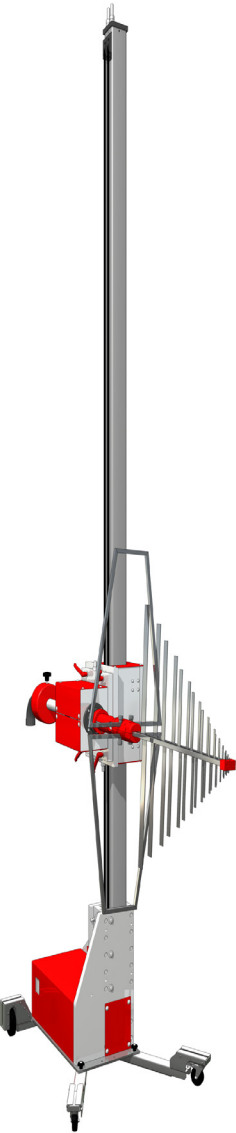
The antenna mast is designed for antennas up to max. 12 kg. For the convenience of the user, the mast comes on wheels, and furthermore it can be folded down for easy handling and transportation.

The control of the antenna is performed by duplex optical fibers, and the automatic operation is performed via GPIB IEEE 488.2. For the control of the antenna mast, the Frankonia controller FC06 is perfectly adapted.

Features
- Accuracy of the height scan ± 5 mm
- Electric polarization from 0°– 90°, vernier adjustment of the polarization angle possible
- Polarization time of about 6 sec
- Polarization accuracy 0.2°
- Manual antenna alignment ± 2°
- Easy positioning of antenna tubes trough a clamp ring
- Conforms to DIN EN 55022/CISPR 22/Class B

| Antenna Mast – FAM2-4/ FAM2-6		
Technical specification		
Version	FAM2-4	FAM2-6
Electric height scan	0.9 m to 4.0 m	0.9 m to 6.0 m
Total height	4.5 m	6.5 m
Dimension (L x W x H)	1.2 m x 0.9 m x 4.5 m	1.2 m x 0.9 m x 6.5 m
Weight	85 kg	92 kg

Frankonia's mobile turntable FTM is available in two sizes, FTM 0.6-0.3 and FTM 0.8-0.3. Both versions are designed to carry loads of up to 300 kg and to be used in anechoic chambers. Two handles are provided for easy transportation of this small turntable. The interface is GPIB IEEE488.2, and the control is performed via duplex optical fibers.
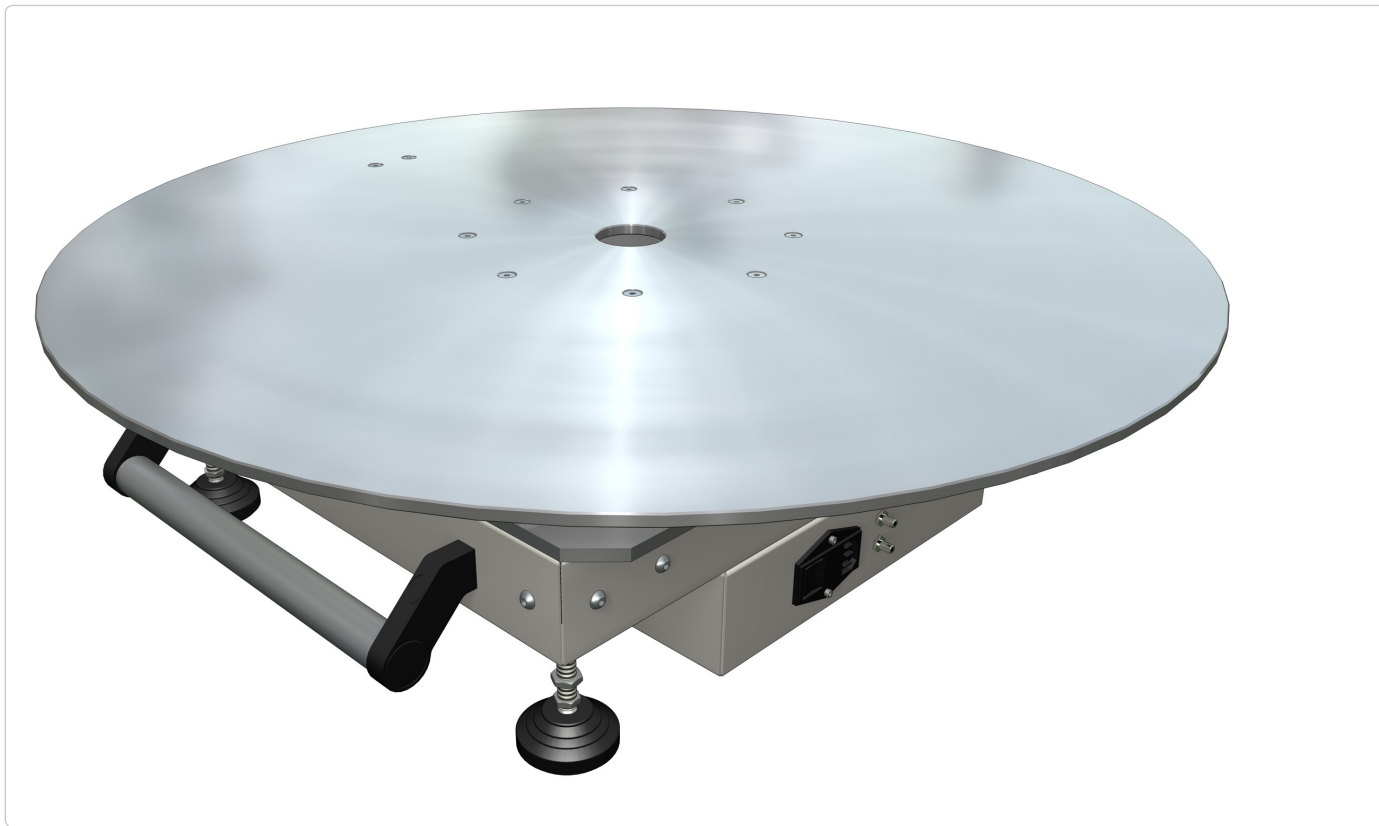
Features
- Rotational speed 0.5 rpm to 3 rpm, adjustable in 30 steps
- Slewing range from +200° to -200°
- Accuracy of 0.1°
- Resolution of 0.1°
- Shielded drive unit

| Mobile Turntable – FTM 0.6-0.3/ FTM 0.8-0.3		
Technical specification		
Version	FTM 0.6-0.3	FTM 0.8-0.3
Diamater	ø 0.6 m	ø 0.8 m
Maximum load	0.3 tons	0.3 tons
Height	205 mm	205 mm
Surface cover plate	8.0 mm aluminium	

TURNTABLES – FTM SERIES

Frankonia's wide range of turntables is fully compliant with the EMC chamber environment. The turntables are available in different sizes and can be equipped with various options. The turntables are integrated flush in the raised floor and are surrounded by a conductivity grounding ring to ensure contact with the ground plane of the chamber. In accordance with the height of the raised floor of the chamber, different installation heights are available.

For the control of the turntables series FTM, the Frankonia controller FC06 is perfectly adapted. The interface is GPIB IEEE488.2, and the control is performed via duplex optical fibers.
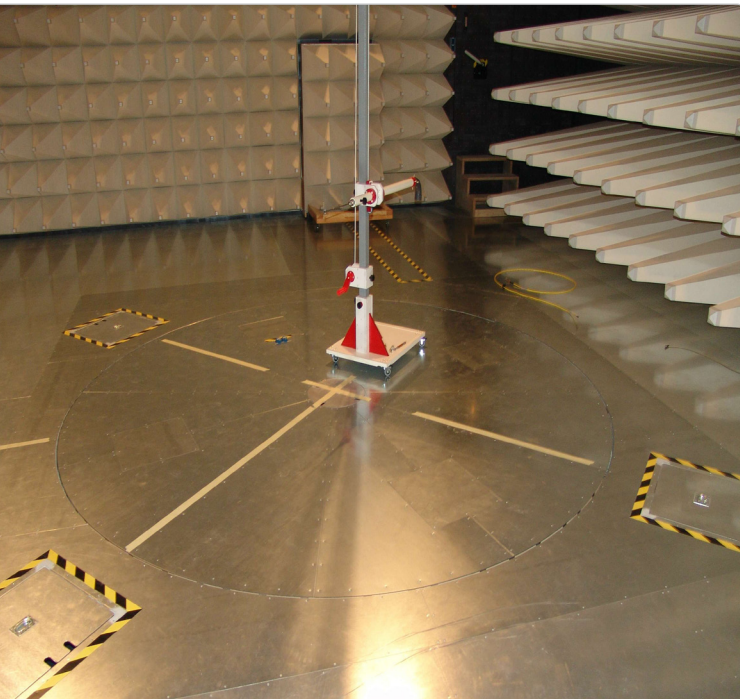
Features
- Revolution speed up to 14 m/min, adjustable in 30 steps
- Slewing range from +200º to −200º
- Accuracy of 0.1º/0.2º
- Resolution of 0.1º
- Shielded drive unit
- Variable installation height for integration into raised floor or pit
- Equipped for MIL−STD 461 F

Options
- Central connection panel (CP) (300 mm), equipped with sockets and set of connectors
- Integrated exhaust system
- Heavyweight turntables
- Customization, e.g., to carry special equipment under the floor
- Integrated energy chain for electric or data line

List of standardized turntables

Our broad product range starts from FTM 1.2–0.5 (x–y) and is adjustable according to customers' specifications.

      x: diameter of the turntable in m
      y: load capacity of the turntable in tons

Turntables – FTM Series

Technical specification

Version*	FTM 1.2–0.5	FTM 1.5–1	FTM 2–2	FTM 2–3
Diamater	⌀ 1.2 m	⌀ 1.5 m	⌀ 2.0 m	⌀ 2.0 m
Size of square form	2.400 mm x 1.800 mm	2.400 mm x 2.400 mm	3.000 mm x 3.000 mm	3.000 mm x 3.000 mm
Maximum load	0.5 tons	1.0 tons	2.0 tons	3.0 tons
Revolution speed	2.0 rpm	2.0 rpm	2.0 rpm	2.0 rpm
Installation height**	150 mm	150 mm	150 mm/ 300 mm	225 mm
Surface cover plate	Ground plane 2.0 mm made of stainless steel with highly conductivity surrounding contact			

Turntables – FTM Series

Technical specification

| Version*	FTM 3–2	FTM 3–3	FTM 4–5	FTM 4–10
Diamater	⌀ 3.0 m	⌀ 3.0 m	⌀ 4.0 m	⌀ 4.0 m
Size of square form	3.600 mm x 3.600 mm	3.600 mm x 3.600 mm	4.800 mm x 4.800 mm	4.800 mm x 4.8000 mm
Maximum load	2.0 tons	3.0 tons	5.0 tons	10.0 tons
Spot load on a square of 200 mm x 200 mm	0.7 tons	1.0 tons	1.7 tons	3.3 tons
Revolution speed	1.5 rpm	1.0 rpm	1.0 rpm	0.8 rpm
Installation height**	225 mm	320 mm	320 mm/ 600 mm	600 mm
Surface cover plate	Ground plane 2.0 mm made of stainless steel with highly conductivity surrounding contact			

*Beyond the turntables sizes shown, a wide range of sizes and load capacities can be realized according to customer needs.
**Customized solutions available.

Frankonia's controller FC06 provides easy control of positioning devices. Using a new processor technology the data rate has been increased. A modular construction allows an individual configuration of the controller and for the driving of up to six automation devices that are recognized automatically. The controller is equipped with a GPIB IEEE 488.2 and a RJ45 interface.

The software interface has been reworked and adapted to the latest system software. In order to facilitate the operation of the controller, the FC06 can be connected to a wireless router. Where the chamber access is open, the software is operable with a mobile terminal.
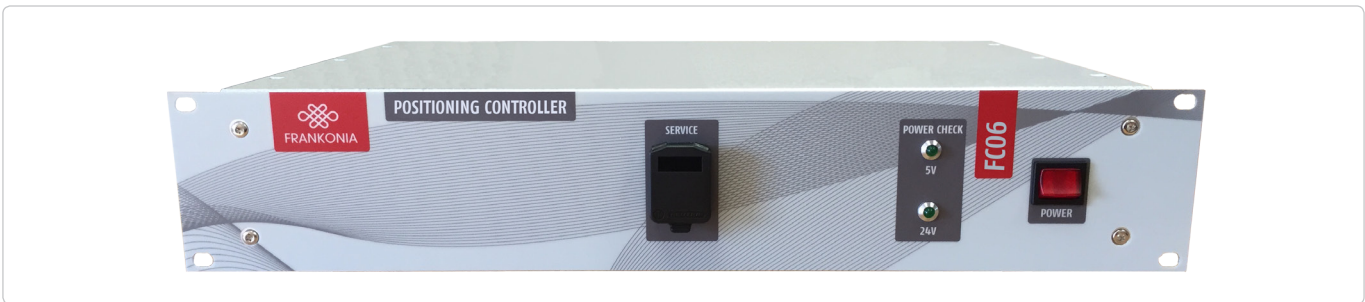
Features
- Able to control up to six devices
- 19″ rack mounting possibility
- Easy and user-friendly software design
- Software updates via USB

| Controller – FC06	
Technical specification	
Version	FC06
Dimension (L x W x H)	482.6 mm x 284.5 mm x 88.9 mm 19″ rack case, 2 RU
Weight	2 kg

Software
Frankonia's software for the FC06 runs on any Microsoft Windows® operating system. The software offers two main functions to control and command:
- Combination of up to 6 positioning devices
- Control of devices via optical signal
- Real-time position of each device
- WebVisu software control for tablet, computers or any other mobile devices
- Full programmable functionality due to customer specific test scenario
- Preset a specific test procedure with loop function
- User-friendly interface

The software uses either a USB or GPIB interface to exchange control commands and to receive real-time position information.
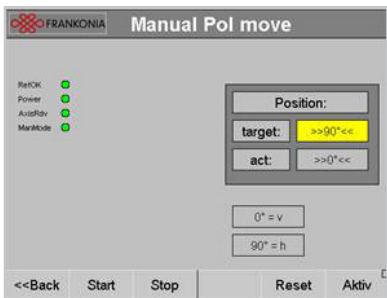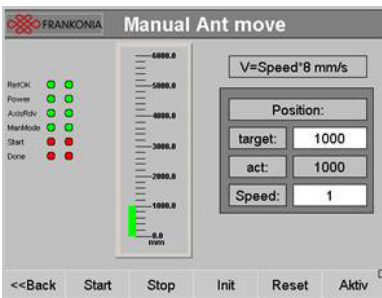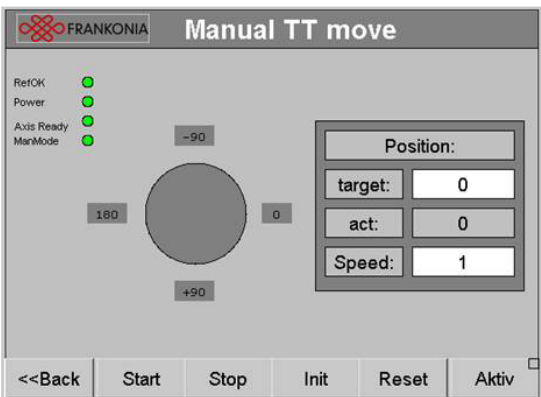
Frankonia's FAS 3.1 is a shielded audio system which is fully compatible with the EMC environment. It offers the possibility to communicate between shielded rooms or anechoic chambers or to survey EUTs during EMI or EMS tests, and assures high-quality communication. The FAS 3.1 is a full duplex system. Due to high-quality components, it guarantees a frequency response close to hi-fi quality, with a signal rate > 89 dB and a distortion rate of 0.007 %. Complete digital processing provides very high sensitivity and very clear audio signals. The system consists of two parts, the passive components inside the chamber and the other part outside the chamber. CISPR25 requirements are respected.
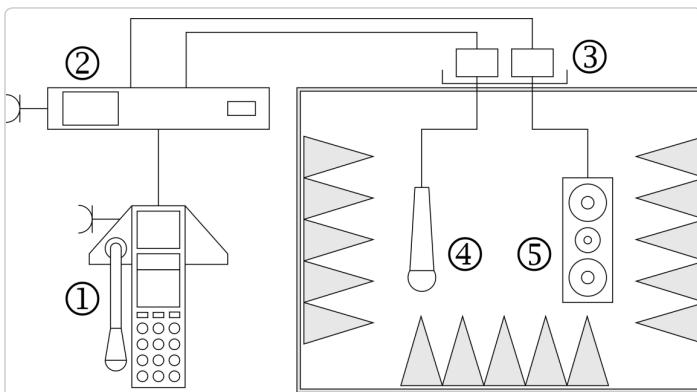

Features

- Full duplex system
- Compliance with the requirements of CISPR 25
- High-quality communication system
- Easy and user-friendly integration

| Shielded Audio System – FAS 3.1	
Technical specification	
Version	FAS 3.1
Dimension (L x W x H)	19" rack, 2 RU

1) Intercom station
2) Controller
3) Shielded audio signal filter
4) Microphone
5) Speaker

Frankonia's shielded camera module FMC–03 is perfectly adapted to the EMC environment and to monitoring EUTs during EMC test. The camera module FMC–03 is available as SD or full HD version, and comes with either a power supply (FPS–03) or a battery pack (FPB–03) for mobile use. On the back of the camera module are all the necessary command buttons to facilitate the set–up of the camera. Full functionality provided with Frankonia software, and more remote controlled possibilities are offered via a optional joystick or via front panel on the camera controller. Further amenities that are available for the FMC–03 are a pan/tilt unit and a small setting–up display. With all these features, it is adapted for transmission of camera pictures over long distances without loss of signal quality. Moreover, a wide range of accessories for control and recording and also monitors are available.
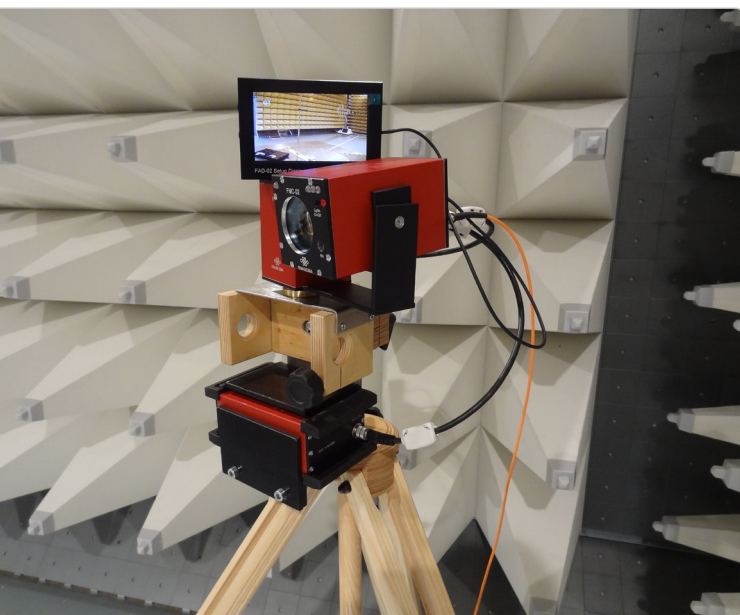
Features
- Integrated microphone
- Wide zoom range
- Integrated DVI and VGA output signal
- Higher luminous sensitivity (SD – 0.6 lux, HD – 0.1 lux)
- LED lights for short-range illumination
- Robust against EMS up to 200 V/m and 18 GHz
- User–friendly integration
- Wall fixation kit
- Absorber fixation kit
- Software control

Options
- High RF shielding >200 V/m; 40 GHz
- HD: 30 x zoom available
- Joystick controller
- Front panel controller

Shielded Camera System – FMC–03/ FMC–03–HD
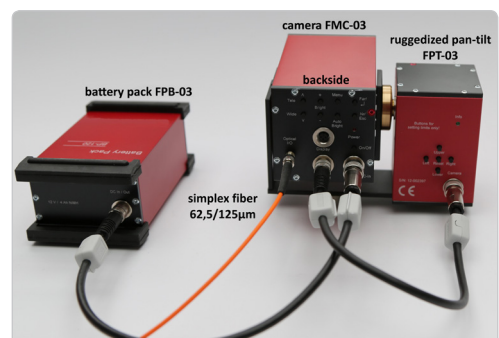
Technical specification

Version	FMC–03	FMC–03–HD
Zoom	40 x optical 12 x digital	20 x optical 12 x digital
View angle	57.8° (wide end) to 1.7° (tele end)	55.4° (wide end) to 2.9° (tele end)
Image format	PAL 4:3	PAL 16:9
Camera resolution	670 TV lines	1920 x 1080 Full HD
Controller output adjustable via software VGA/DVI: CVBS:	Standard settings: 1280 x 1024 p60 720 x 576 i50	Standard settings: 1920 x 1080 p60 720 x 576 i50
Optical transmission	Audio, remote and signal on one fiber (FSMA/simplex – multimode optical fiber 62.5/125 μm)	
Microphone	Integrated mono	
Dimension	135 mm x 70 mm x 80 mm	
Weight	650 g	

Shielded Camera System – FMC-03/ FMC-03-HD	
Accessories	
Power supply FPS-03	Shielded mains adapter, 110 V to 230 V for permanent installation 136 mm x 86 mm x 65 mm, 800 g
Battery pack FBP-03	For external power supply, NiMH battery with 10 cells, 12 V, 4 Ah approx. 10 h Shielded case: 136 mm x 86 mm x 65 mm, 1000 g
Setting-up	4.3" LCD display
Pan/tilt unit FPT-03	For flexibility of camera unit; with buttons for moving and setting end positions
Controller FBC-03	Tabletop camera controller, base unit for one interface Remote control of camera functions via push buttons or software, 100-240 V (50/60 Hz) external power supply
Controller FCC8-03	Camera controller for up to eight interfaces (4x2) RS485 Interface for joystick USB interface for software control Operated via external PC Including multichannel 2 RU Optional: Front panel for direct remote control; Integrated loudspeaker with selection switch
Interface (HD) LWL-VGA/DVI +CVBS	Digital optical channel with standard (or HD) resolution, output connector VGA/DVI + CVBS
Remote control panel FEC-03	For convenient remote control with joystick
Recorder/Web server VC-15540	For simultaneous recording of up to four camera signals, image format PAL 4:3 (for CVBS signals) Subsequent postproduction is not possible 500 GB hard disk Remote control via software
Recorder FACR1-03-HD	19" rack mount with integrated PC Full HD DVI In; External monitor (full HD), keyboard, mouse required Subsequent postproduction via software is possible One channel DVI In 500 GB hard disk, additional audio hard disk 1 TB, DVD-RW
Monitors	19" for SD only, 24" full HD, 42" LCD full HD
Fixations	Wall holders, or tripods

OPTICAL TRANSMITTER

Frankonia's broad range of optical transmitters allow data transfer during emission and immunity tests within shielded rooms or anechoic chambers. The optical transmission ensures safe communication without interfering with the testing environment or disturbing peripherals. Our range of optical transmitters is available for any kind of application.

Features
- Fully compliant for emissions or immunity testing
- Customized transmitters available
- Safe data communication

| Optical Transmitters	
Type	**Description**
LWL-dAV	Digital optical transmission of analogue A/V-signals, single-ended (optional differential switchable)
LWL-F2V-100	Exchanger frequency signal => voltage signal; four frequency ranges selectable up to 100 kHz
LWL-Heat	Temperature monitoring with optical output, -50 °C to +500 °C (optionally -200 °C to 1,200 °C)
LWL-1394	Optical FireWire transmission, up to 400 Mbit/s (optional: up to 800 Mbit/s)
LWL-232-HS	Optical RS232-transmission with handshake, up to 116 kbit/s
LWL-485	Optical RS485-transmission (data +/-), up to 1 Mbit/s
LWL-CAN-HS	Optical one-channel CAN-HS (high-speed) transmission, up to 1 Mbit/s
LWL-CAN-FD	Optical one-channel CAN-FD (flexible data rate) transmission, up to 10 Mbit/s
LWL-CAN-LS	Optical one-channel CAN-LS (low-speed) transmission, up to 25 kbit/s
LWL-CAN-SW	Optical one-channel CAN-SW (single-wire) transmission, up to 33 kbit/s (100 kbit/s)
LWL-CML	Optical transmission of video signals (various chip sets, ask for details)
LWL-Flex-s	Optical transmission of FlexRay signals, up to 10 Mbit/s
LWL-K	Optical transmission of K-line signals, up to 30 kbit/s
LWL-LAN	Optical transmission of Ethernet signals (100 Mbit/s, not downward compatible)
LWL-LAN-Gb	Optical transmission of Ethernet signals (10/100/1000 Mbit/s)
LWL-LIN	Optical transmission of LIN signals, up to 20 kbit/s
LWL-LVDS-1-ds	Optical transmission of single-channel LVDS signals (various chipsets, ask for details)
LWL-PSI5	Optical transmission of PSI5 signals, up to 200 kbit/s, sync, parallel, or serial bus
LWL-SENT	Optical transmission (analog) of asynchronous SENT signals, up to 1 MHz, integrated sensor supply; optional second channel
LWL-SENT-2-d	Optical two-channel transmission (digital) of synchronous SENT signals, up to 1 MHz, integrated sensor supply
LWL-SPI	Optical transmission of SPI signals, up to 1 Mbit/s, integrated sensor supply 3.3 V/5 V
LWL-SPI-hs	Optical transmission (POF fiber) of SPI signals, up to 10 Mbit/s, integrated sensor supply 3.3 V/5 V
LWL-TTL	Optical transmission of TTL-signals, one to 16 channels (optionally bi-directional), up to 100 kHz digital signals, input 0/5 and 0/12V; output 0/5V

Optical Transmitters	
Type	**Description**
LWL-USB2.0	Optical transmission of USB2.0 signals, up to 480 Mbit/s
LWL-U1-12	Optical transmission of one-channel analogue signals min. 10 bit resolution, up to 10 MHz, I/0: +/-15V
LWL-U1-12-30M	Optical transmission of one-channel analogue signals, min. 10 bit resolution, up to 30 MHz, I/0: +/-5V
LWL-U2-12	Optical two-channel transmission of analogue signals, min. 10 bit resolution, up to 10 MHz, I/0: +/-15V
LWL-U2-12-1M	Optical two-channel transmission for analogue signals, min. 10 bit resolution, up to 1 MHz, I/0: +/-15V
LWL-Ux-12-1M	Optical multi-channel transmission (1-8) of analogue signals, min. 10 bit resolution, up to 1 MHz, I/0: +/-15V; x = number of channels
LWL-Ux-12-100k	Optical multi-channel transmission (1-16) of analogue signals, min. 10 bit resolution, up to 100 kHz; I/0: +/-15V; x = number of channels

*Beyond the listed optical transmitters, special customer requirements of any kind can be discussed and developed as long as appropriate requirements are provided.
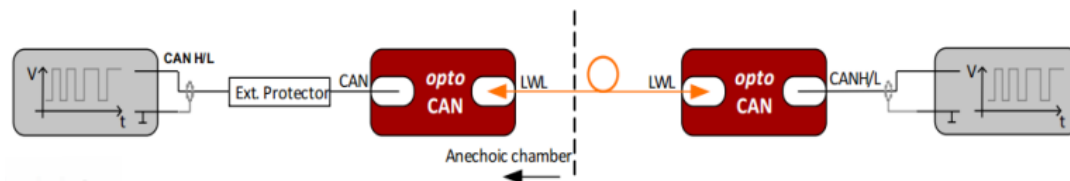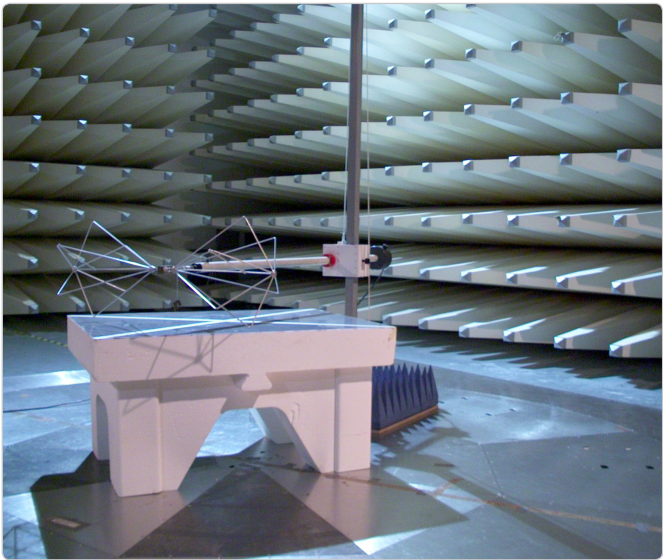
LOW REFLECTIVE TESTING TABLE – FTT

Frankonia's ISO testing table FTT was designed in accordance with CISPR 22. In order to not affect the EMC or RF measurements, this transparent test table is made of non-conductive material that generates no reflections and has a low dielectric constant. The top of the table is covered with PVC to offer a non-sensitive surface, and it provides a scale to facilitate the positioning of equipment under test. A hole in the center of the table allows a convenient guiding of EUT cables. The Frankonia testing table FTT is available in various sizes, as well as in square- and round-shaped versions.
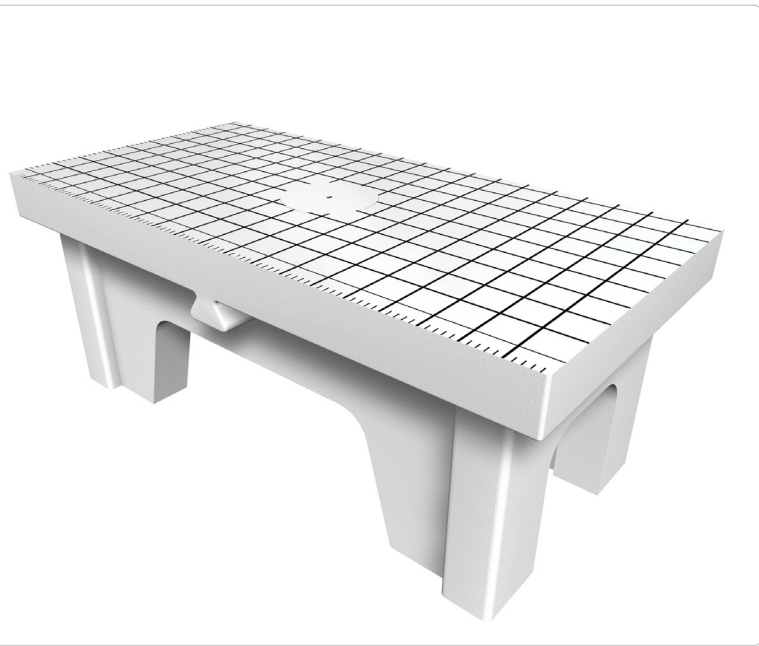
Features
- Compliance in accordance with CISPR 22
- EUT weight up to 200 kg
- Perfect integration into Frankonia chambers
- Grid pattern for EUT positioning

Low-Reflective Testing Table – FTT		
Technical specification		
Version	FTT square	FTT round
Dimension (L x W x H)	Square size: 1.0 m x 0.8 m x 0.8 m 1.5 m x 1.0 m x 0.8 m 2.0 m x 1.0 m x 0.8 m 1.5 m x 1.2 m x 0.8 m 2.0 m x 1.2 m x 0.8 m	Round size: ø 1.2 m x 0.8 m ø 1.5 m x 0.8 m
Table material	Styrofoam	
Compliance	CISPR 22	
Maximum load	200 kg	
Spot load	20 kg at 200 mm x 200 mm	
Color	White	
Cover material	PVC	
Center hole	ø 250 mm	

Frankonia's grounded testing table FGT was designed according to CISPR 25. It is available in two sizes of 2.5 x 1.0 x 0.9 m and 2.5 x 1.5 x 0.9 m. The table itself is made of wood and is optional equipped with wheels and brakes for easy handling. It is covered with a hot galvanized ground plane of 2.0 mm thickness. To ensure the grounding of the table, two grounding systems are available. It can be grounded with an F-contact system integrated either in the wall or the floor. The grounded test table can carry EUTs of up to 500 kg weight.

Features

- Compliance in accordance with CISPR 25
- EUT weight up to 500 kg
- Perfect integration into Frankonia chambers
- Adjustable contact strips either to the floor or into the wall
- Wheels on option
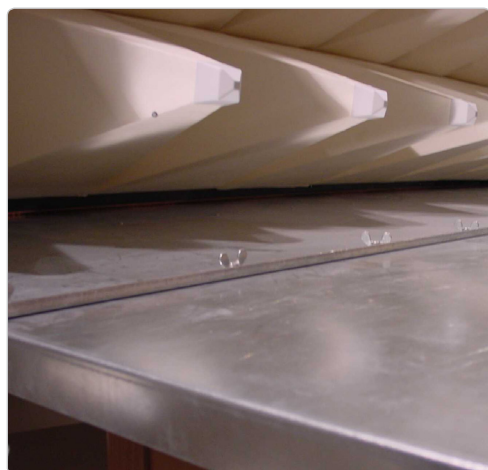
Grounded Testing Table – FGT		
Technical specification		
Version	FTG-1.0	FTG-1.5
Dimension (L x W x H)	2.5 m x 1.0 m x 0.9 m	2.5 m x 1.5 m x 0.9 m
Compliance	CISPR 25	
Maximum load	500 kg	
Spot load	50 kg at 200 mm x 200 mm	
Table cover	2.0 mm hot galvanized ground plane Optional: brass or copper ground plane	

Frankonia as a specialist in RF-shielding and EMC testing chambers provides complementary, standardized and customized products to maintain its position as a turnkey provider. This includes, for instance, connection boxes located in the floor, penetration panels incl. connectors located on the wall, wave-guide components for liquids, air or gases, fiberglass feed-through components, special cable feed-through via RFI trap, and all kinds of ventilation and air conditioning.

Ventilation

The ventilation in chambers and shielded rooms is a very important aspect for the comfort of users, but is mainly necessary to ensure a stable temperature during the test procedure, a cooling of the equipment under test (EUT), and is furthermore required in order to reproduce testing conditions. The shielded ventilation can be realized via special filters called honeycomb with a frequency range from 10 kHz up to 18 GHz (40 GHz as option), and can be located individually on the shielding modules that meet any applications, e.g., for air balancing, gas exhaustion, or with a tube adapter. Frankonia's honeycombs are designed in such a way that local air ducts can be easily mounted. In the scope of Frankonia's turnkey capabilities, a complete air conditioning unit is available for any kind of chamber size and application. Gas evacuating and protection systems as well as extinguishing systems are available too.

Features
- Honeycombs up to 18 GHz (40 GHz as option)
- Complete AC unit for specific applications and chamber sizes
- Additional gas evacuating and protection systems and extinguishing systems available
- Turnkey solution
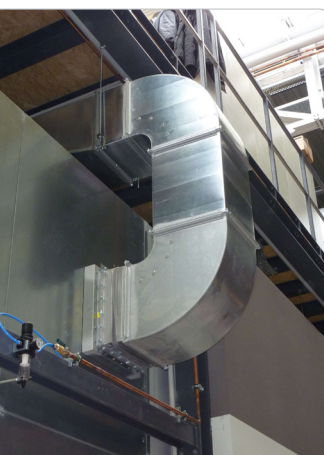
Feed-through and wave-guide components

Feed-through components of any kind are required to meet RF standards without minimizing the shielding attenuation. Frankonia's broad range of feed-through components meet all requirements at the highest standards, covering the whole frequency range. All feed-through components are located on penetration panels in order to easily modify the configuration due to future tasks. Replacing a complete penetration panel or even just a connector or feed-through component is very simple. Our standard range of feed-through components includes fiber optics and wave-guide components for compressed air, liquids or gases.

Features
- Individual penetration panels
- Broad range of feed-through components, e.g., fiber optics
- Broad range of wave-guide components, e.g., compressed air, liquids or gases
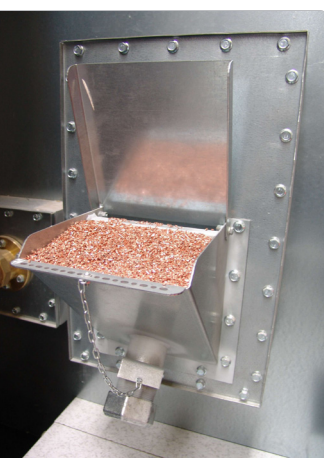
RFI trap

In the case of feeding through a special or non-standardized cable, the RFI trap offers the right characteristics. It is designed as a drain siphon mountable on a penetration panel. Frankonia's RFI trap is filled with copper granulates that ensures the right conductivity, and allows a continuous cable installation without an interface, e.g., connector.

Features
- Non-standardized cable feed-through
- High conductivity
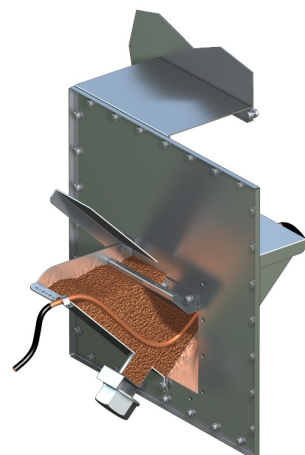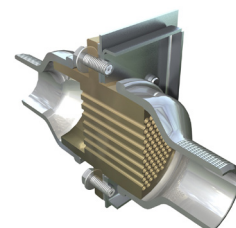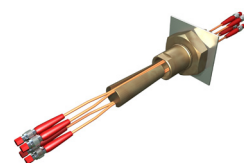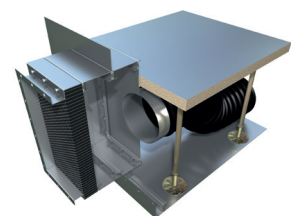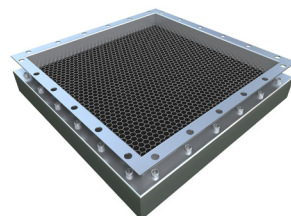
Chamber interior

Frankonia's shielded rooms and chambers of every kind provide an appealing internal finish. This includes an adapted inner lining for walls and ceilings that can be made with almost every material our customers desire, for instance, glass, plasterboard, PVC or stainless steel. The floor is designed as a false floor that is adjustable in height in order to ensure a minimum space for all necessary ducting.

The standard version allows a load of 500 kg/m2, but is almost without limitation according to customers' requirements. In the case of a semi-anechoic chamber, a ground plane of 2.0 mm made of hot-galvanized steel is installed on the false floor that is perfectly connected to the shielding modules on the walls. In order to support any kind of EUT weights, Frankonia has special solutions to support heavyweight EUT's, even taking into account more than 80.0 tons. Inside a fully anechoic chamber the requirement is different, and a lifted floor made of wood or plastic is necessary. In this case, the lifted floor can be realized for the whole surface, as a catwalk in certain parts of the chamber, or as free walkway around the front of the absorbers.

Features
- Internal cladding with various materials possible
- False floors and heavyweight floors without limitations in weight
- Ground plane for SAC or non-reflective lifted floors for FAC available

Electrical integration

The complete electrical integration for each chamber is designed according to EU safety standards and is prepared as an upgradable solution that allows future modifications. In its standard configuration, an electrical distribution box with MCBs and RCDs, illumination with halogen or LED lights, connection panels for the false floor, and an emergency panic button incl. a battery buffered emergency light are considered.

Depending on which absorber lining is selected, Frankonia's electrical distribution box is accessible from inside or outside, and ensures at all times a user-friendly control. All our lights are optionally available with a lamp lifter in order to change the lighting situation or to change bulbs. Along with our white-colored absorbers and their ability to reduce possible reflections, the quantity of lights can be configured to a minimum and offer optimum lighting conditions. In order to provide the necessary power and data line connections for the EMC testing procedures, Frankonia's connection panels can be placed in the false floor and individually configured with power outlets and connectors. Additional to the connection panels in the floor are the penetration panels located at the walls. Furthermore, a complete range of power line, data line, and signal line filters are available, too. Frankonia's specially designed ducting and electrical engineering ensures the shortest cable length and highest flexibility for future modifications, as well as a cost-effective and state-of-the-art integration.

Features
- Complete and integrative electrical installation
- Upgradable for future tasks
- Optimum lighting conditions with halogen or LED lights; lamp lifter as option
- Connection panel (CP) for the false floor with individual configurations
- Penetration panels (PP) for the walls with individual configurations
- Complete range of power line, data line, and signal line filters
- Turnkey solution

www.frankoniagroup.com
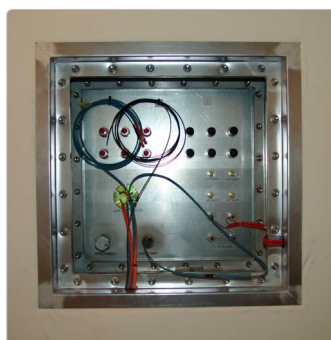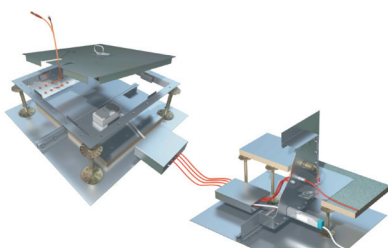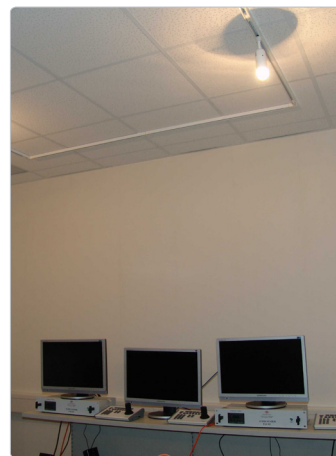
Frankonia EMC Test-Systems GmbH
Daimlerstraße 17, 91301 Forchheim
Germany
Office: +49 (0) 91 91 / 73 666 – 0
Fax: +49 (0) 91 91 / 73 666 – 20
Mail: sales@frankonia-emv.com

Frankonia GmbH
Industriestraße 16, 91180 Heideck
Germany
Office: +49 (0) 9177 / 98 – 500
Fax: +49 (0) 9177 / 98 – 520
Mail: info@frankoniagroup.com

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