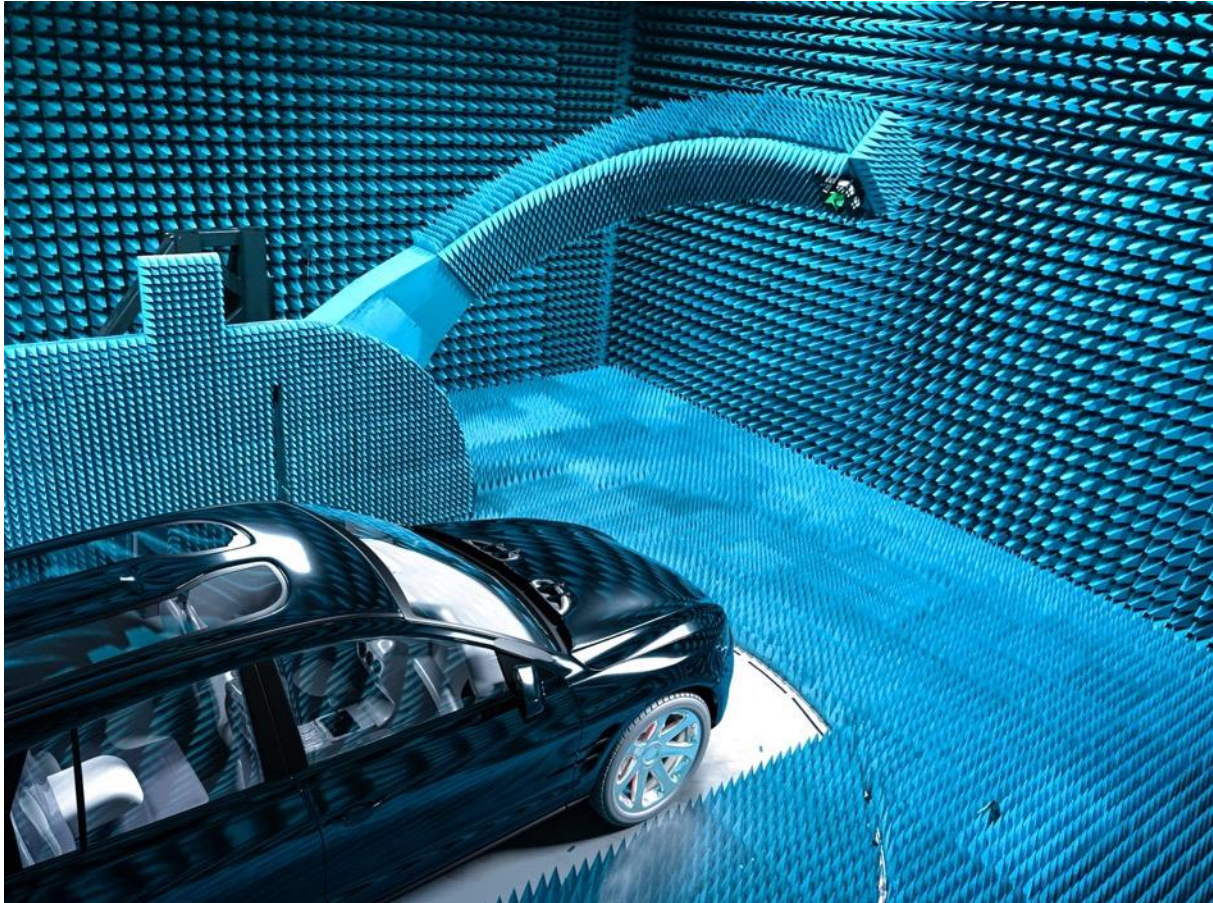


Spherical Gantry SG 4.5 - 10 kg - 0.01

Turntable TT 6.0 - 5 t - 0.01

Properties of the Positioning System

- High-Precision Spherical Gantry and Turntable
- Spherical Conical-Cut system
- High accurate antenna measurement capabilities for both, near-field and far-field data acquisition
- 5G NR FR1 / FR2 OTA testing capabilities
- Positioning accuracy up to 0.01°
- Ideal for Antenna-Under-Test (AUT) e.g. installed in vehicles
- Independent rotations of all motion axis
- Variable speed adjustments at all axis
- Possibility of operation in manual, semi-automatic and simultaneous remote control mode via IEEE 488.2 (GPIB bus) and Ethernet with the controller NCD using fibre optic control
- Readout by high accurate encoders
- Integrated rotary joint for EUT and antennas available upon request



Technical data of the Spherical Gantry SG4.5-10kg-0.01

Range length	4500 mm (from pivot point to antenna mounting flange)
Rotation axis height	1600 mm – 3000 mm above chamber floor
Position accuracy	0.01° at the pivot point
Load capability	10 kg
Rotating angle (rotation axis height: 2000 mm – 3000 mm above chamber floor)	0° - 95°
Rotation angle (rotation axis height: 1600 mm – 2000 mm)	0° - 90°
Rotating speed	up to 1.2°/s
Material of antenna boom	aluminium
Material absorber plate	wood
Motors	servo motor, frequency inverter shielded and radio interference suppressed under EN 55011:2018 – 05 class B
Rotation drive	cam drive
Linear drive (up and down)	ball screw spindle

Technical data of the Turntable TT6.0-5t-0.01:

Diameter	6.0 m
Load capability	5000 kg
Point load	750 kg at area of 10 cm x 10 cm
Height	1000 mm
Material cover plate	stainless steel
Rotating speed adjustable	1.0°/s - 12°/s
Rotating angle	endless
Position accuracy	0.01° at the pivot point
Motor	servo motor, frequency inverter
Interference suppression	20 dB under limits EN 55022 class B
Turntable drive	cam drive
Concentricity tolerance	+/- 3mm
Elevation tolerance	< 5 mm
Ground plane connecting	every 50 mm
Square border interface (for easy connection to ground plane)	6.5 m x 6.5 m, stainless steel

General technical data of the system:

Compressed air	6 bar
Control cable	Fibre optic lines
Remote control via	LAN (TCP/IP)
Required fuse	63 A
Discharge current	30 mA (higher in the moment when powering on)
Voltage	380 VAC – 480 VAC, 50 Hz / 60 Hz , 3-phases
Recommended RCD	300 mA
Operating temperature	5° C – 30 ° C, the room temperature influences the accuracy of the positioner
Accessories	Interface to NCD Controller 1.5 m power supply cable Service manual

Brief description:

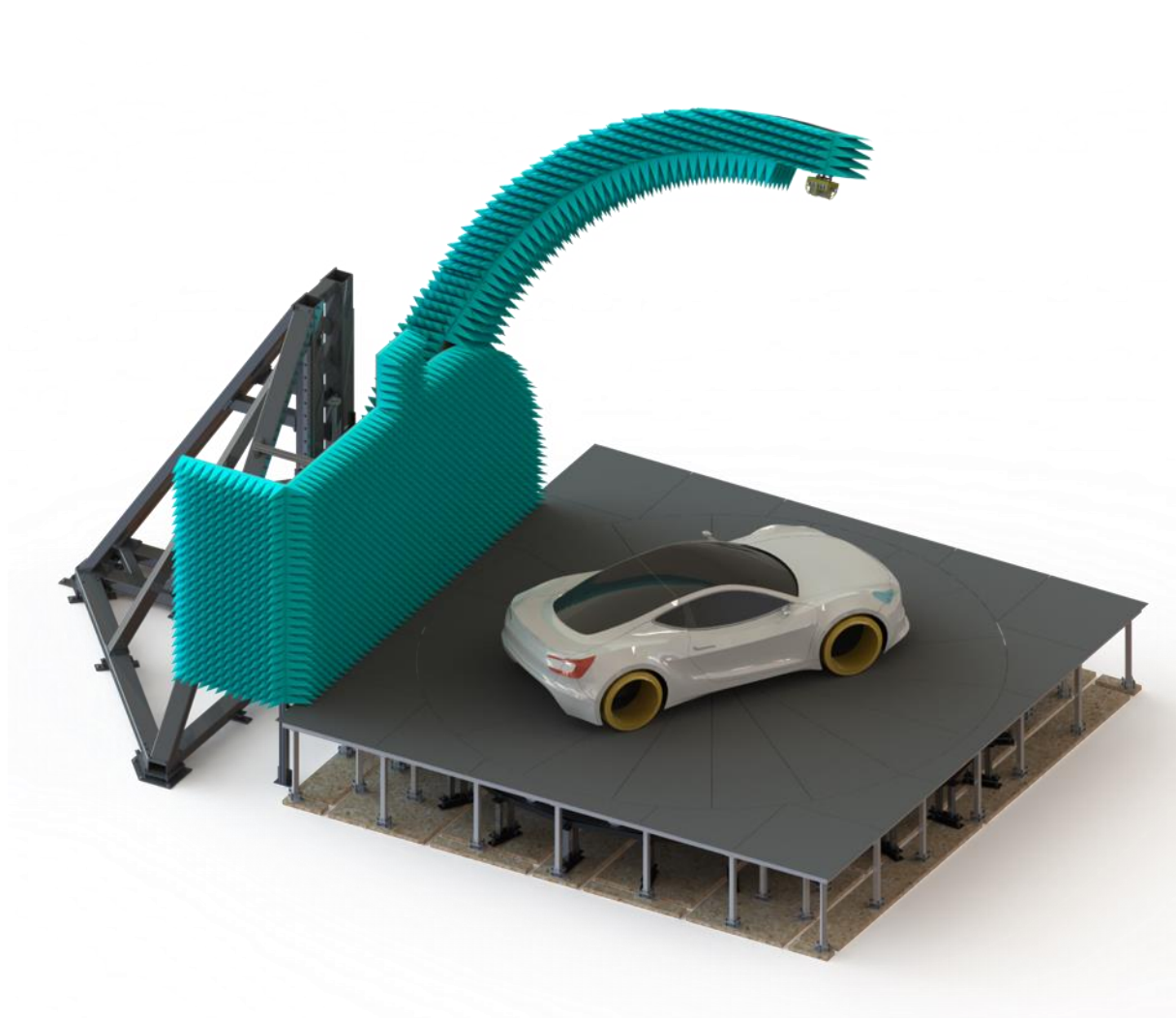
The high precision positioning system existing of the Spherical Gantry SG 4.5 – 10 kg – 0.01 and the Turntable TT 6.0 – 5 t – 0.01 is suitable in electromagnetic absorption chambers.

The structure is made of metal, which can be covered with absorbers.

Antenna adapters for all commercially available antennas are available upon request.

The system has a high precision antenna and DUT/EUT positioner with a very high repeatability.

The LAN (TCP/IP) interface provides an additional control option for all functions, when operating with the NCD Controller. Other specifications are available upon on request.



Information presented enclosed is subject to change as product enhancements are made regularly. Pictures included are for illustration purposes only and do not represent all possible configurations.