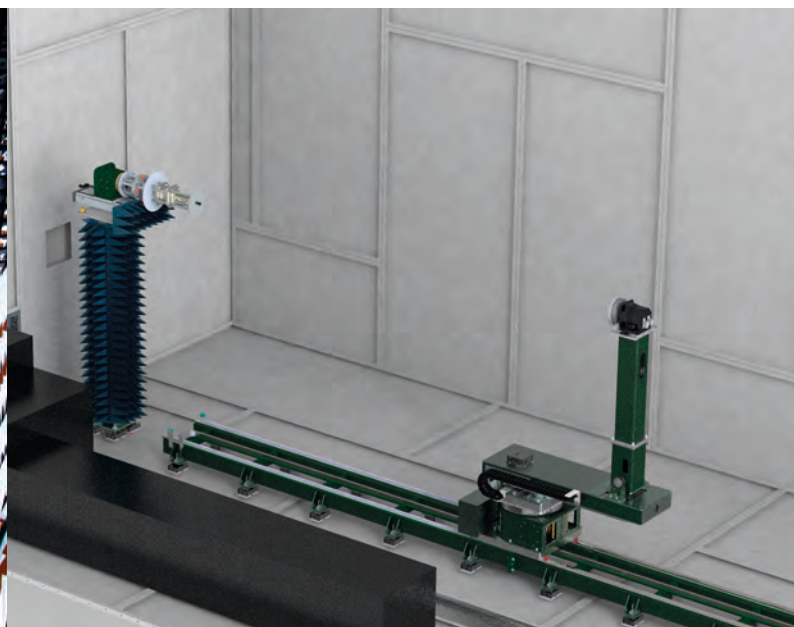
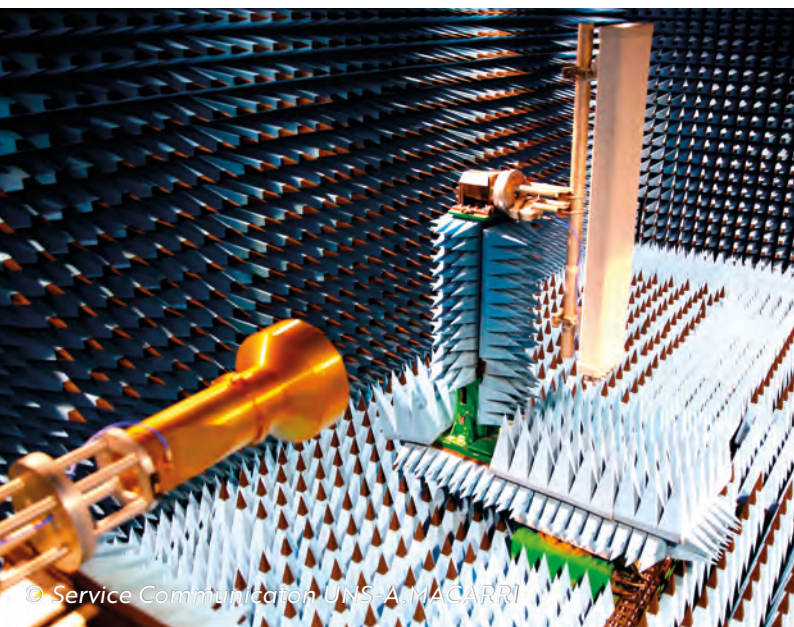




ASY-(SNF\FF)-RL Series Spherical Near-Field Far-Field Measurement System (Roll over Azimuth)



- Medium size **SNF/FF** systems are intended for the characterisation of antenna parameters by spherical Near-Field or direct Far-Field measurements on antennas up to $\text{Ø}2\text{m}$ and under 150kg. Optionally, a floor slide can be added to change the measurement distance from approx. 1.5m to the maximum length allowed by the anechoic chamber, e.g. 4-8m thus allowing reconfiguration of the setup from SNF to direct FF measurements.
- A lower elevation stage (pick-up) can also be added as an option to facilitate the mounting of larger antennas, or an upper elevation stage can be added to facilitate the main beam measurement of steering beam antennas on a FF setup. The frequency range is limited at the lower end by the performance of the anechoic chamber and at the upper end by the rotary joints.
- Applications:
 - Base Station Antenna Measurements
 - Wireless Antenna Measurements
 - Microwave Point-to-Point Antenna Measurements



Antenna positioner	Roll-over-Upper Slide-over-Azimuth, continuous 360deg rotation both for the Roll and Azimuth axes
Probe positioner	Polarisation positioner over adjustment fixture
Motors	Robotic AC brushless servo motors. Integrated absolute encoders
Max antenna diameter, m	up to 2, depending on specific design
Max antenna mass, kg	up to 150, depending on specific design
Angular accuracy, deg	Azimuth: 0.03 (RMS); Roll, Polarisation: 0.05 (RMS)
Repeatability, Az, Roll, Pol,deg	0.01 (RMS)
Resolution, Az, Roll, Pol, deg	0.001
Rotation speed, deg/s	Azimuth: 12 (2 RPM); Roll, Polarisation: 30 (5 RPM)
Position controller	Sequential control of up to 16 axes, simultaneous display of 8 axes, supporting stepper and servo motors, incremental and absolute encoders. Includes wireless Local Control Unit
Workstation	Standard PC with large LCD display
Software	ASYSOFT: company proprietary data and analysis software.
Probes	Set of single or dual-polarised probes covering standard waveguide bands
Standard Gain Horns	Set of calibrated SGHs covering standard waveguide bands
Cables, rotary joints, amplifiers	3 rotary joints, set of RF cables, necessary RF amplifiers, up to 18/26/40/50/67 GHz depending on the desired upper frequency
Antenna control	Slip rings with 12 lines for control and power supply
Supported VNA manufacturers	Keysight Technologies, Rohde & Schwarz and Anritsu

■ The antenna positioner stack-up allows the necessary rotations of the antenna under test to the desired directions making use of the following positioners:

- Roll positioner
- Upper slide
- Azimuth positioner



Positioner stack-up



Floor slide



■ Options:

- Manual or motorised floor slide to facilitate changing the distance between the probe and the antenna positioner
- Pick-up elevation stage or upper elevation stage
- Spherical Near-Field transformation

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