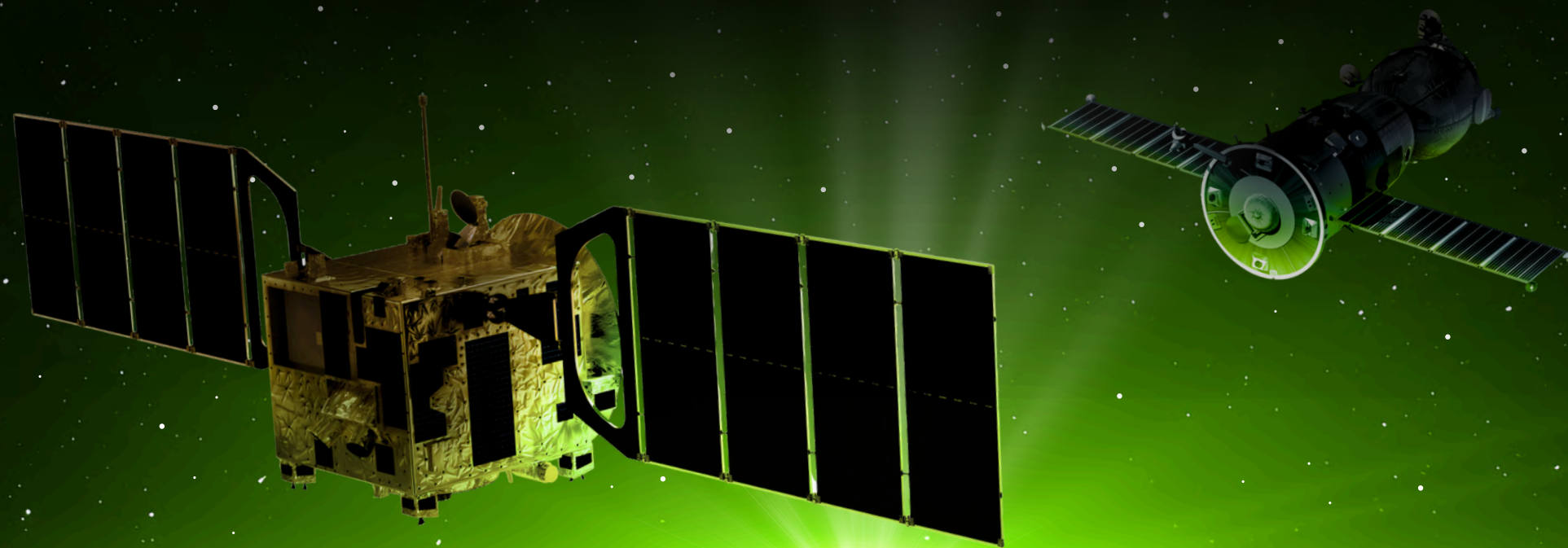
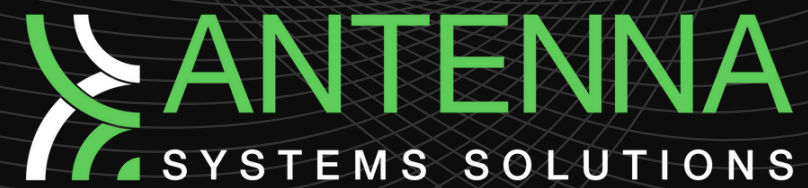




ANTENNA

SYSTEMS SOLUTIONS





CORPORATE OUTLINE



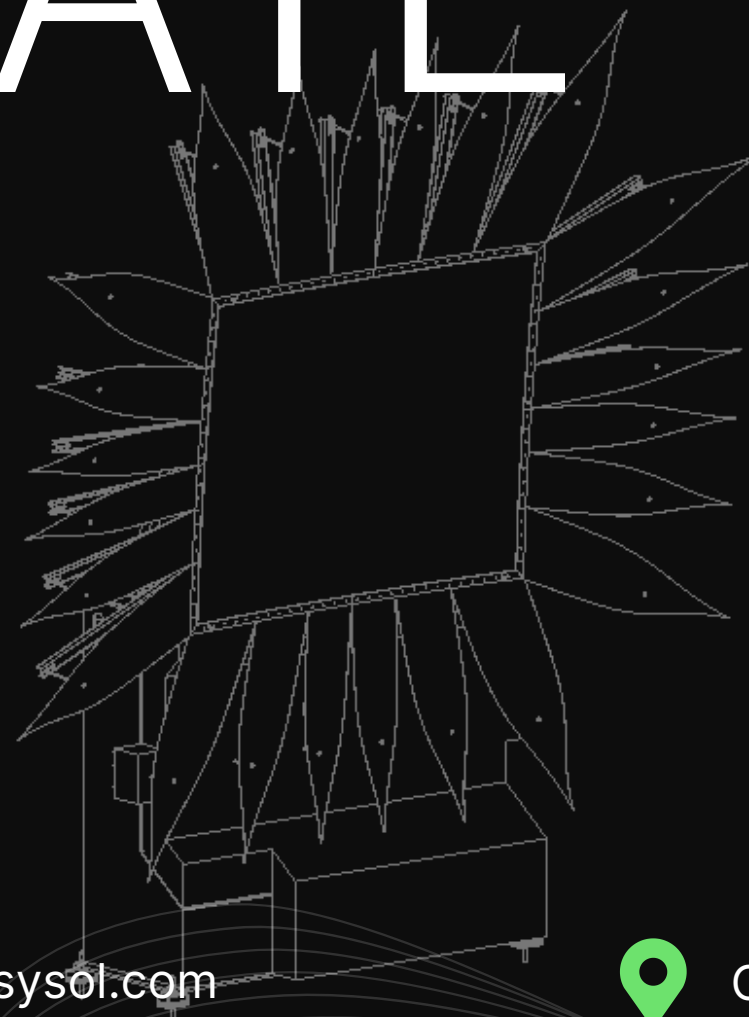
sales@asysol.com



www.asysol.com



C/ ISABEL TORRES 9, SANTANDER SPAIN



Agenda

● Who we are?

● Some numbers

● Technology capabilities

● Happy customers

● Management team

● Turnkey solutions

● OUR ANTENNAS

● ASYSOL excellence

Who we are?

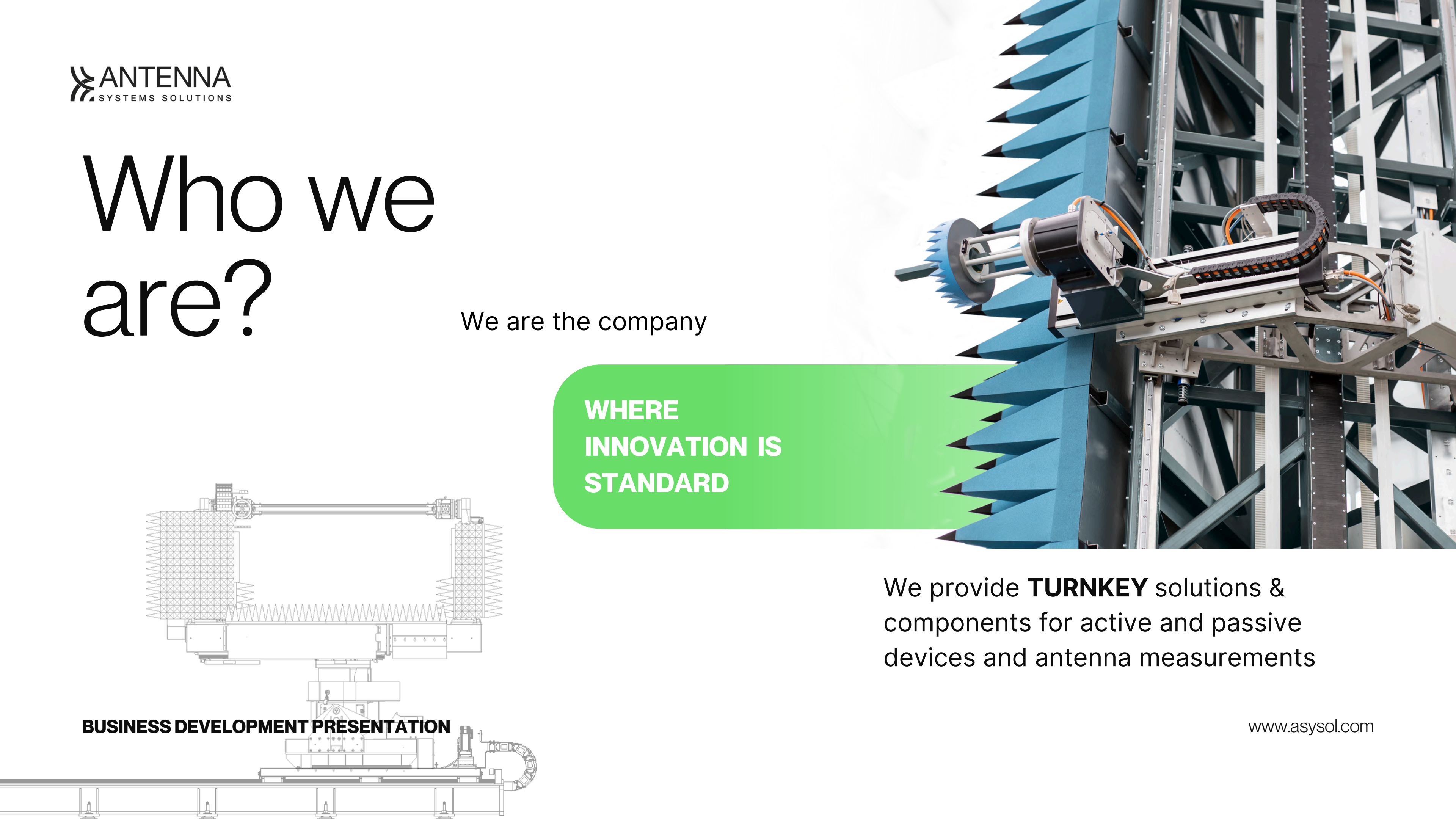
We are the company

**WHERE
INNOVATION IS
STANDARD**

BUSINESS DEVELOPMENT PRESENTATION

We provide **TURNKEY** solutions & components for active and passive devices and antenna measurements

www.asysol.com



Who we are?

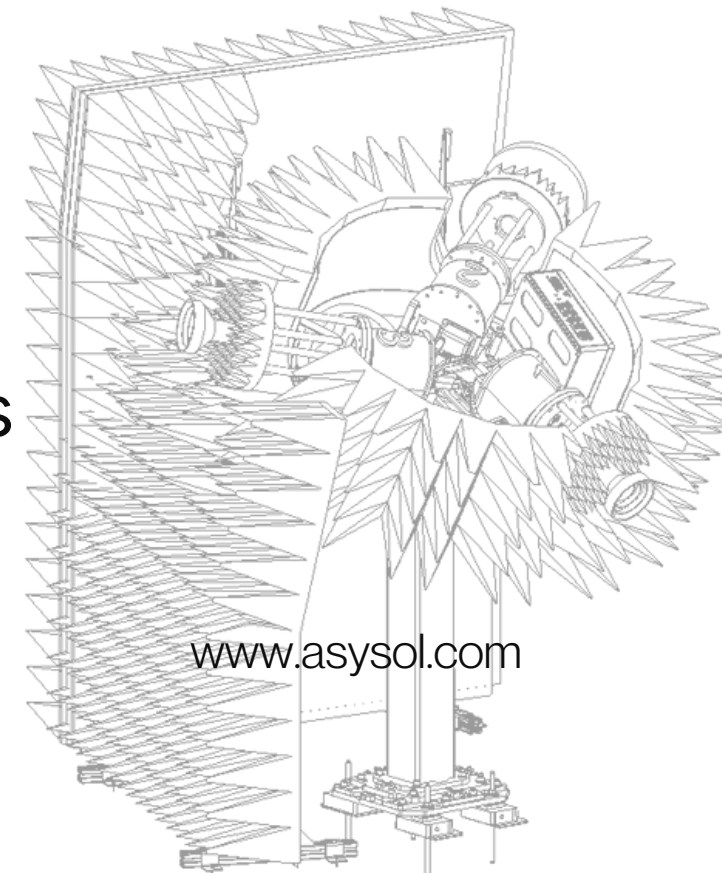
ANTENNA SYSTEMS and **NPM** form a strong consortium joining the classic ranges, classic positioners, with robot technologies. Both companies have worked together in several projects sharing their expertise.



Classic antenna test ranges and systems
Antennas and probes



Robotic antenna test ranges and systems



Truly European

ANTENNA SYSTEMS SOLUTIONS
is proud of being a truly European
company for antenna test
measurement systems!

Some Numbers

- 
- Outstanding technical know-how and RF capabilities
 - Agile and innovative organization
 - Dynamic and customer-focused team, multicultural, worldwide located (Spain, Germany, Denmark, Holland...)

ORDER INTAKES



EMPLOYEES

+30 employees
+5 Nationalities
4 Country sites

PROJECTS

70+ Projects delivered worldwide

Category	Count
CATRs	+40
SNFs	+20
PNFs	+05
Multipurpose systems	+05

INDUSTRIES

- AeroSpace
- Defense
- Telecommunications
- Consumables
- Research
- Academic

Technology capabilities

With more than 15 years since its creation and **+75 years of experience** in the field of antenna measurement and RF devices, our company has established a strong reputation for expertise.

Our professionals are recognized as some of the most esteemed names in the industry on a global scale.

CATR SYSTEMS

Compact Antenna Test Ranges

Reconfigurable Test Ranges
(CATR+NF)

RADOME Test Systems (CATR based)

SNF SYSTEMS

Planar Near-Field Ranges

Cylindrical Near-Field Ranges

Far-Field/Spherical Near-Field
Ranges
(Roll/Azimuth and Gantry)

OTHERS

RCS Test Systems

Satellite Test Facilities

5G Test Systems

ENGINEERING SERVICES

Training and Teaching

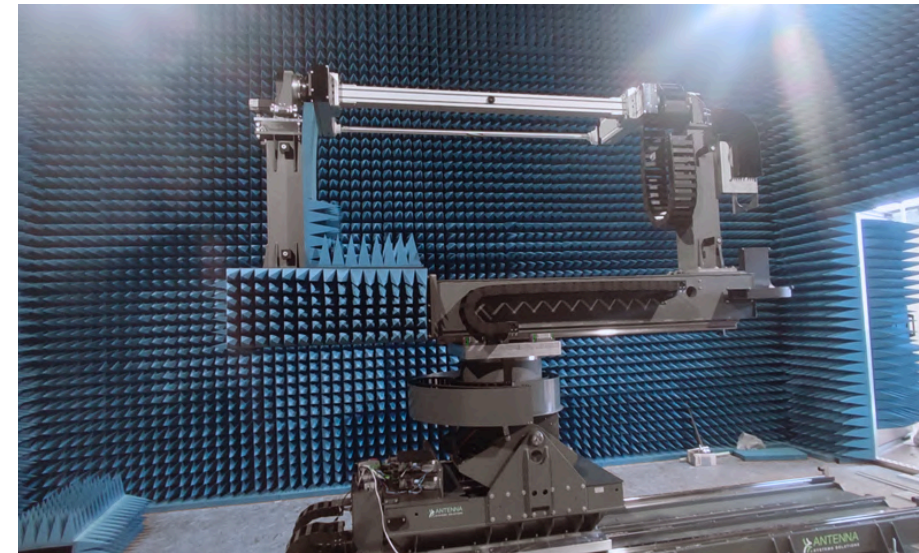
NEW! In-house Antenna
Test Facility

Taylormade Solutions

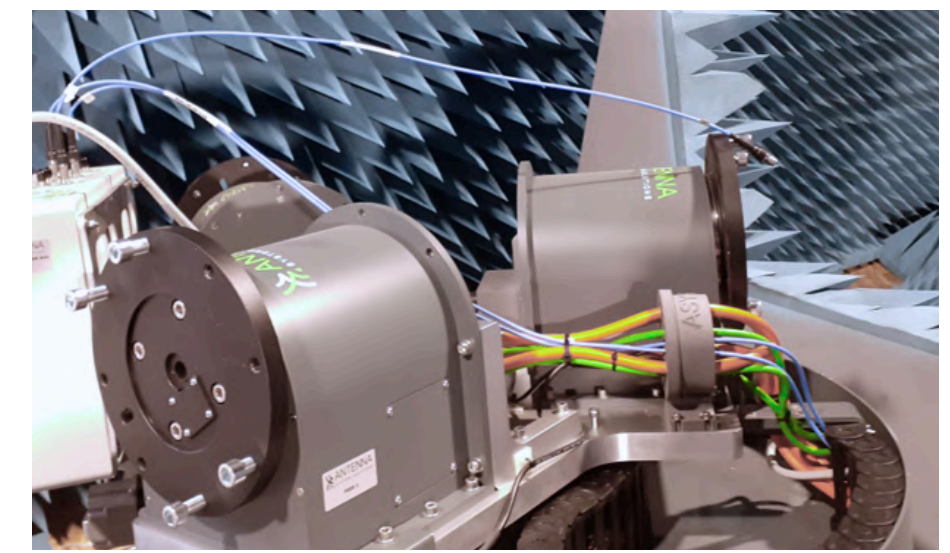
FULLY CUSTOMIZABLE SOLUTIONS

Customized sizing
Global positioning accuracy guaranteed
Guaranteed orthogonality 0.02°
Axes intersection 0.05mm or less
Multi axes simultaneously movement

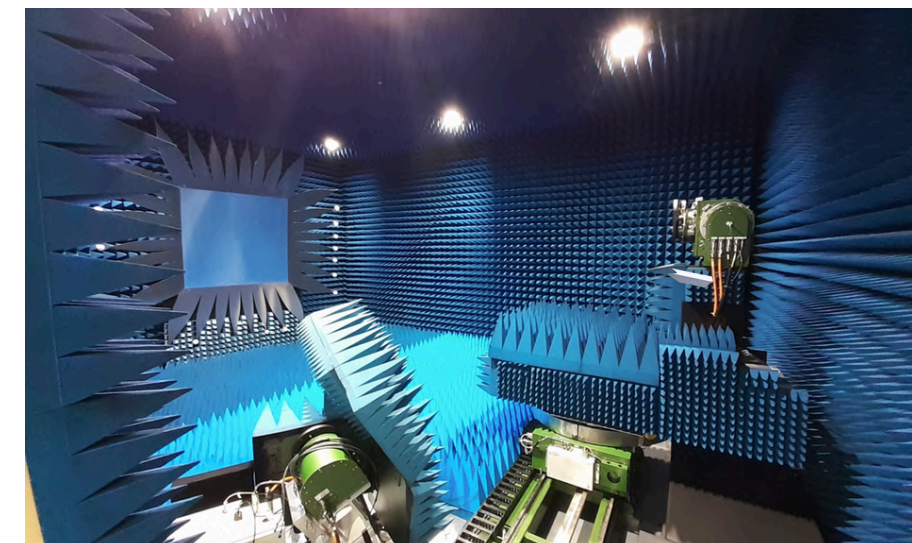
BUSINESS DEVELOPMENT PRESENTATION



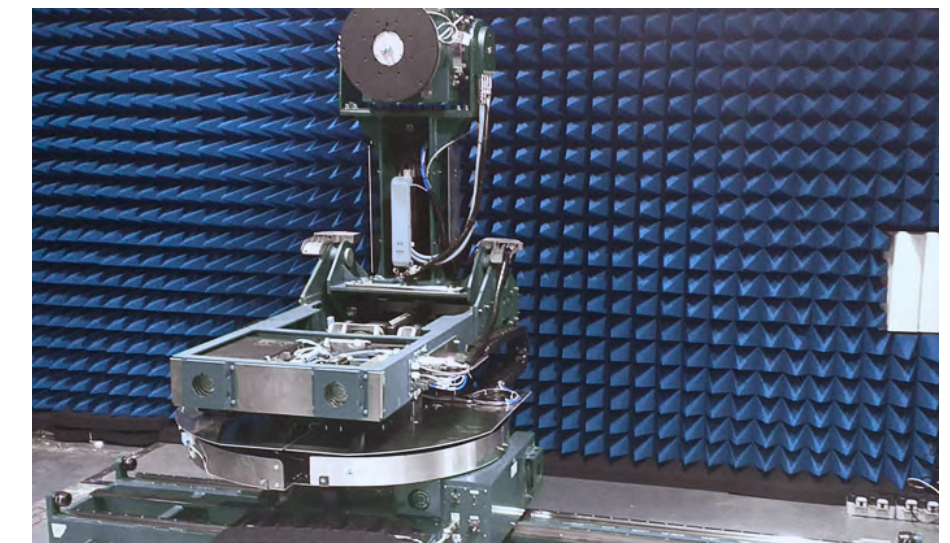
AUT POSITIONER 6 AXIS



FEEDER CAROUSEL



ALL TYPE OF RANGES



Multi AXIS AUT POSITIONER

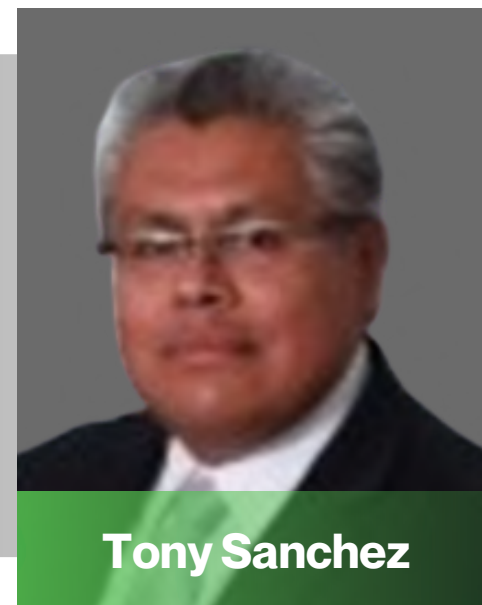
Management team

The human capital of ASYSOL is its greatest asset; we take care of it and strive to help it grow day by day. Our management team is composed of experienced individuals who bring valuable knowledge to help achieve the company's objectives.



José Alonso

Chairman & Partner
+40 years of experience,
physicist and founder of
high-tech companies



Tony Sanchez

Chief Executive Officer
+40 years of experience in
the industry



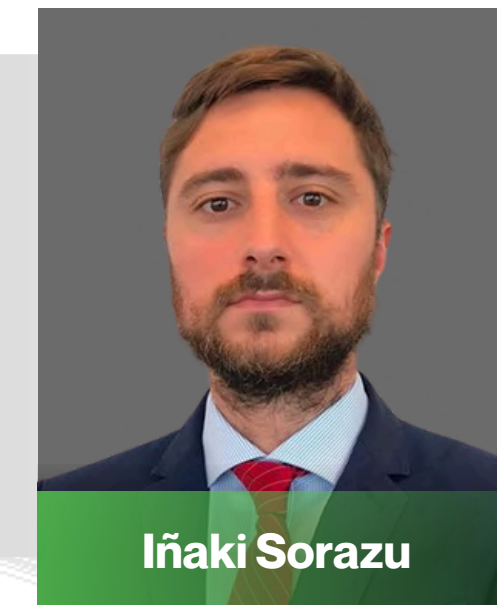
Sergiy Pivnenko

Chief Technology Officer
+30 years of experience in
the industry



Javier Portilla

**Business Development
Director**
+15 years of experience in
aerospace and RF industry



Iñaki Sorazu

Chief Financial Officer
Broadly experienced on
finance management roles
at consultancy firms

Turnkey solutions

Full turnkey solution provider, including shielding & absorbers design and layout

WORLDWIDE LEADING SUPPLIERS

ASYSOL works with all worldwide leading suppliers:

ETS Lindgren (sh. & abs.)
Global EMC (sh. & abs.)
Siepel (sh. & abs.)
Frankonia (sh. & abs.)
JV Micronics (sh. & abs.)
Dymstec (sh.)
Albatross (sh.)
Emerson & Cuming (abs.)



www.asysol.com

BUSINESS DEVELOPMENT PRESENTATION

Planar Near-Field ranges

High accuracy planarity

uncorrected 0.15mm

corrected < 0.06mm

Scan area up to 40.0m x 17.2m

Inverted "T" frame design

X axis speed: 400mm/sec

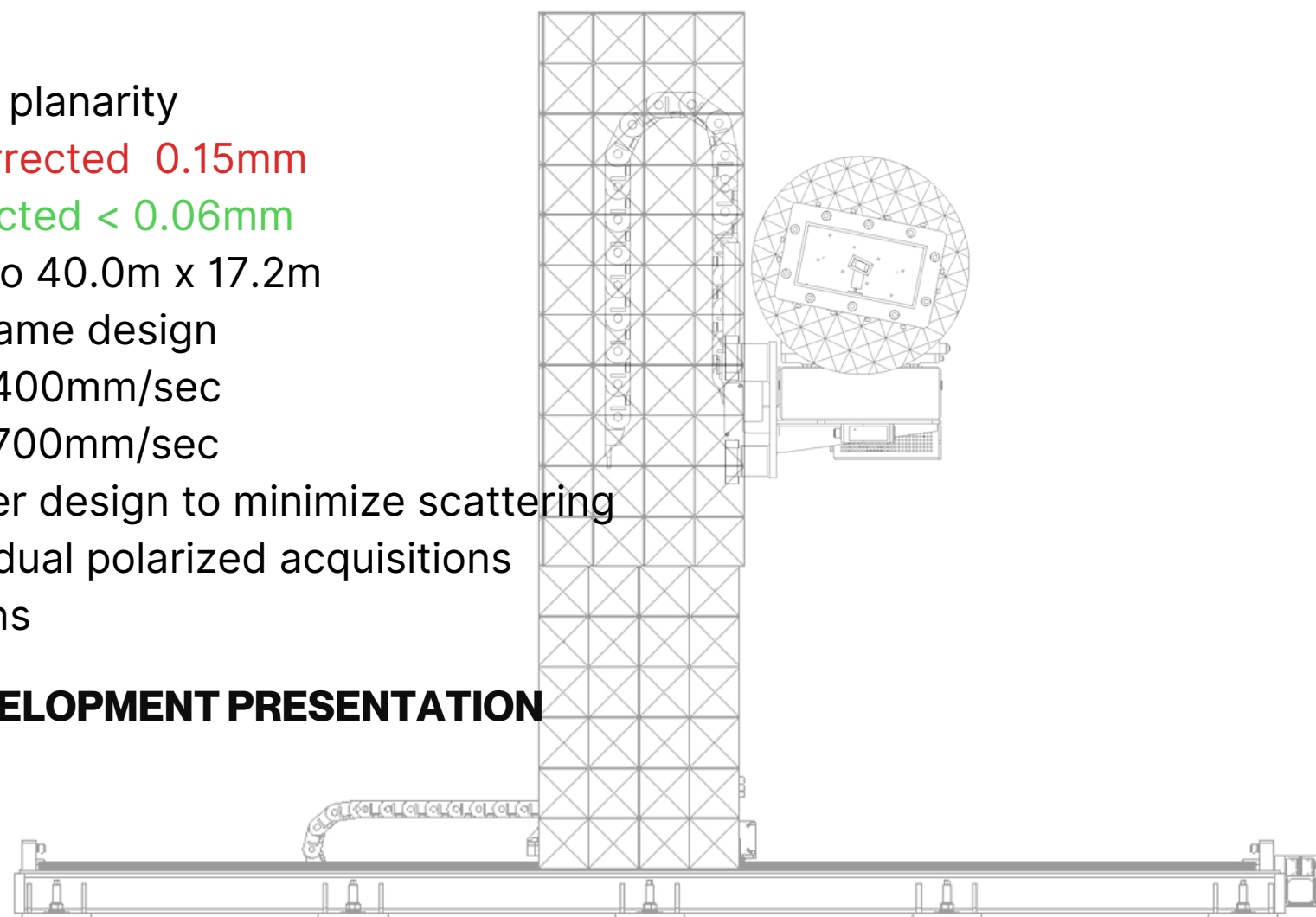
Y axis speed: 700mm/sec

Improved tower design to minimize scattering

Simultaneous dual polarized acquisitions

+10 installations

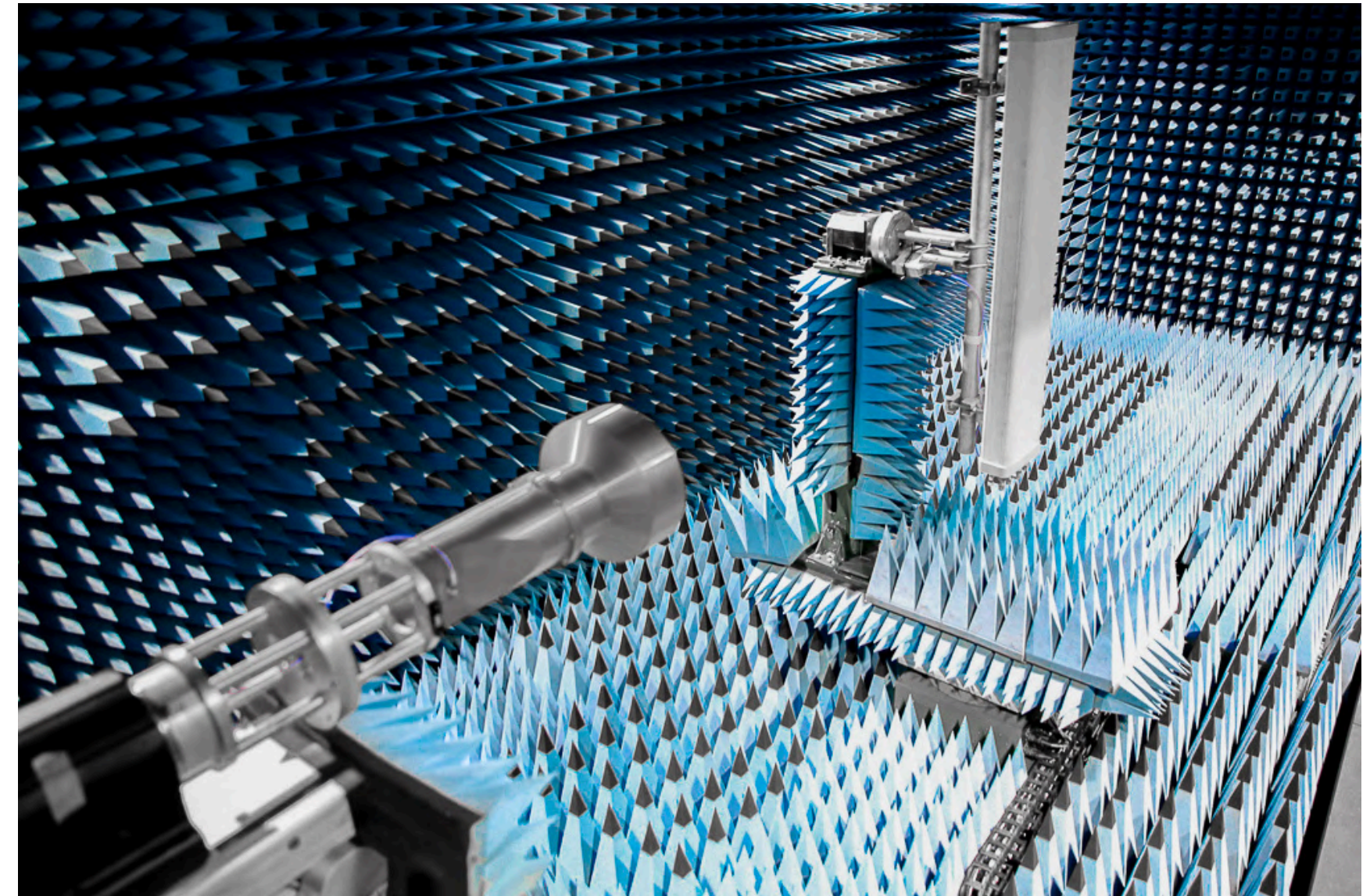
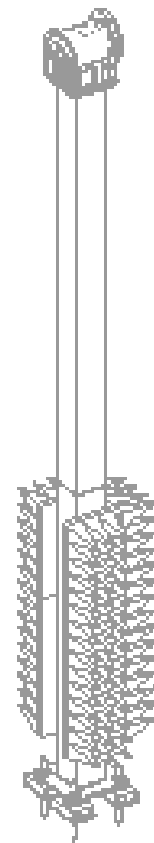
BUSINESS DEVELOPMENT PRESENTATION



Spherical Near-Field ranges

- Antenna load: up to **1500Kg**
- Lower Freq. <200 MHz**
- Rotation speed: **>5 rpms**
- Position repeatability: 0.02°
- Simultaneous dual-polarized acquisitions
- +20 installations

BUSINESS DEVELOPMENT PRESENTATION



CATRs

Serrated edge single reflector series (500MHz to 300GHz+)

Quiet zone size of >6m

Larger or custom size and shape upon request

Reflectors machined from solid aluminum

Provision for single or dual linear polarized feeds

Cost-effective solutions

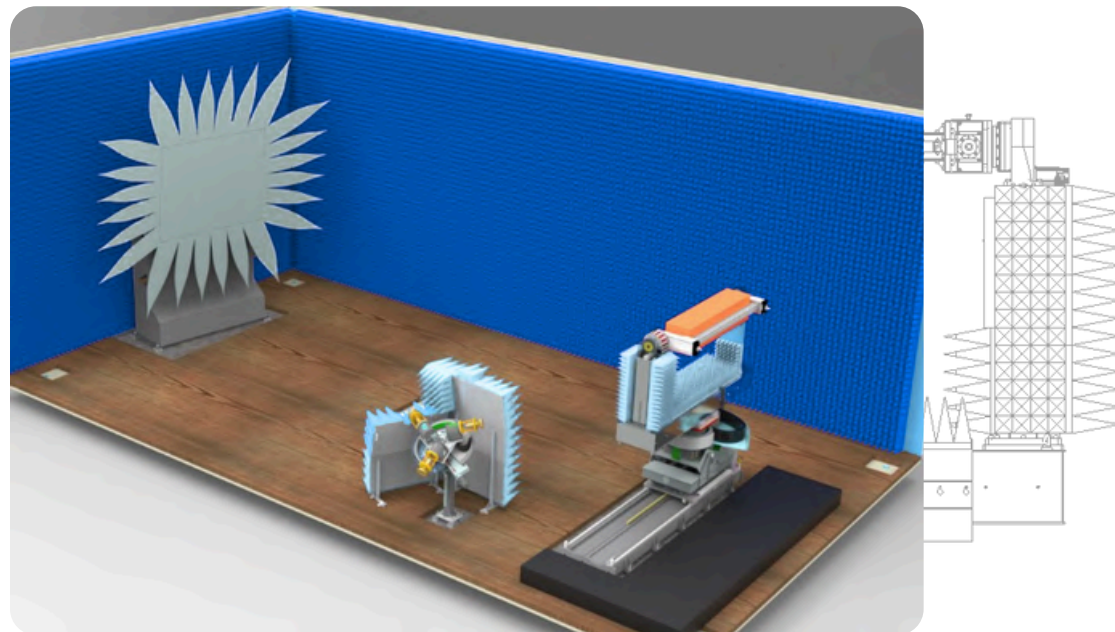
+40 installation

BUSINESS DEVELOPMENT PRESENTATION

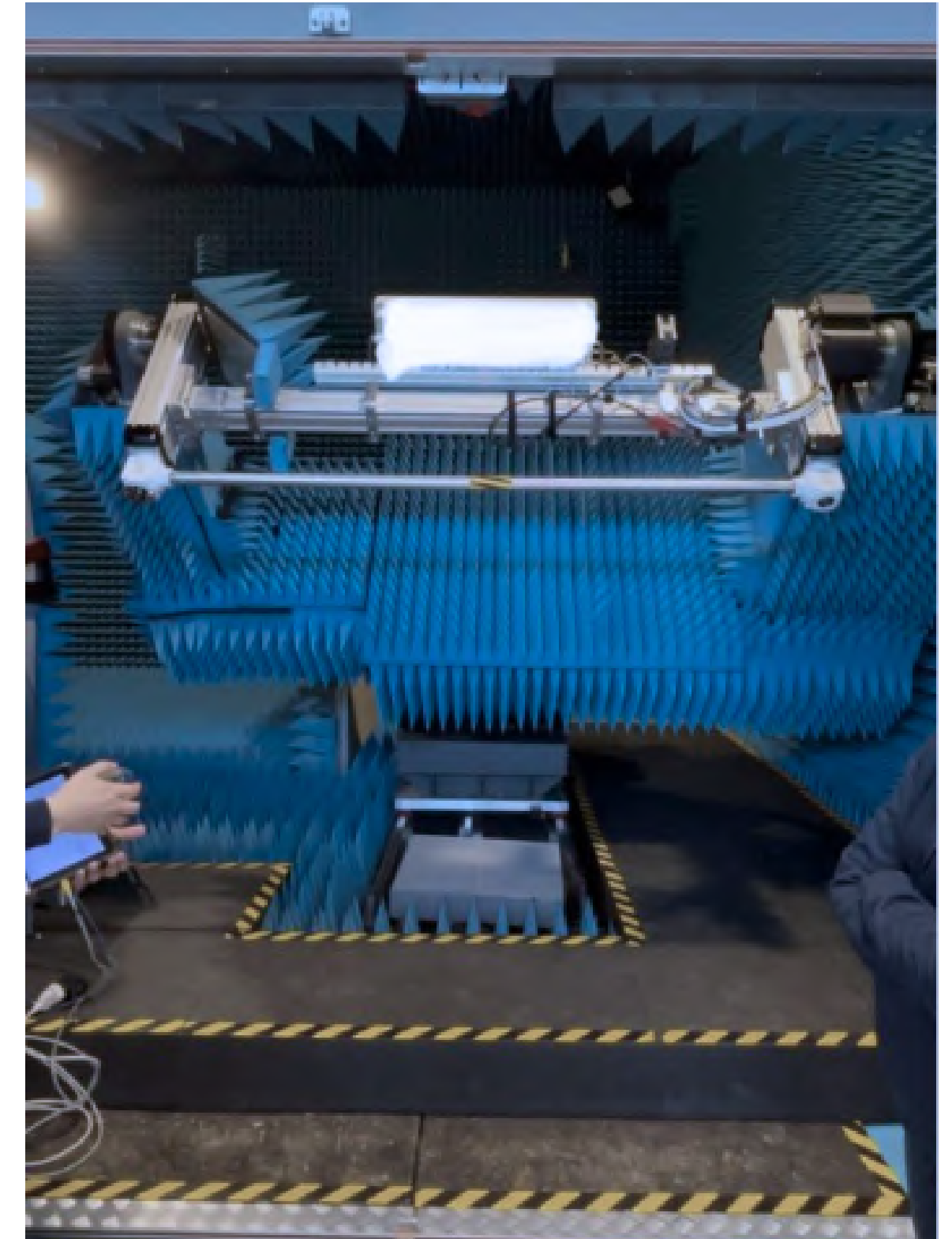
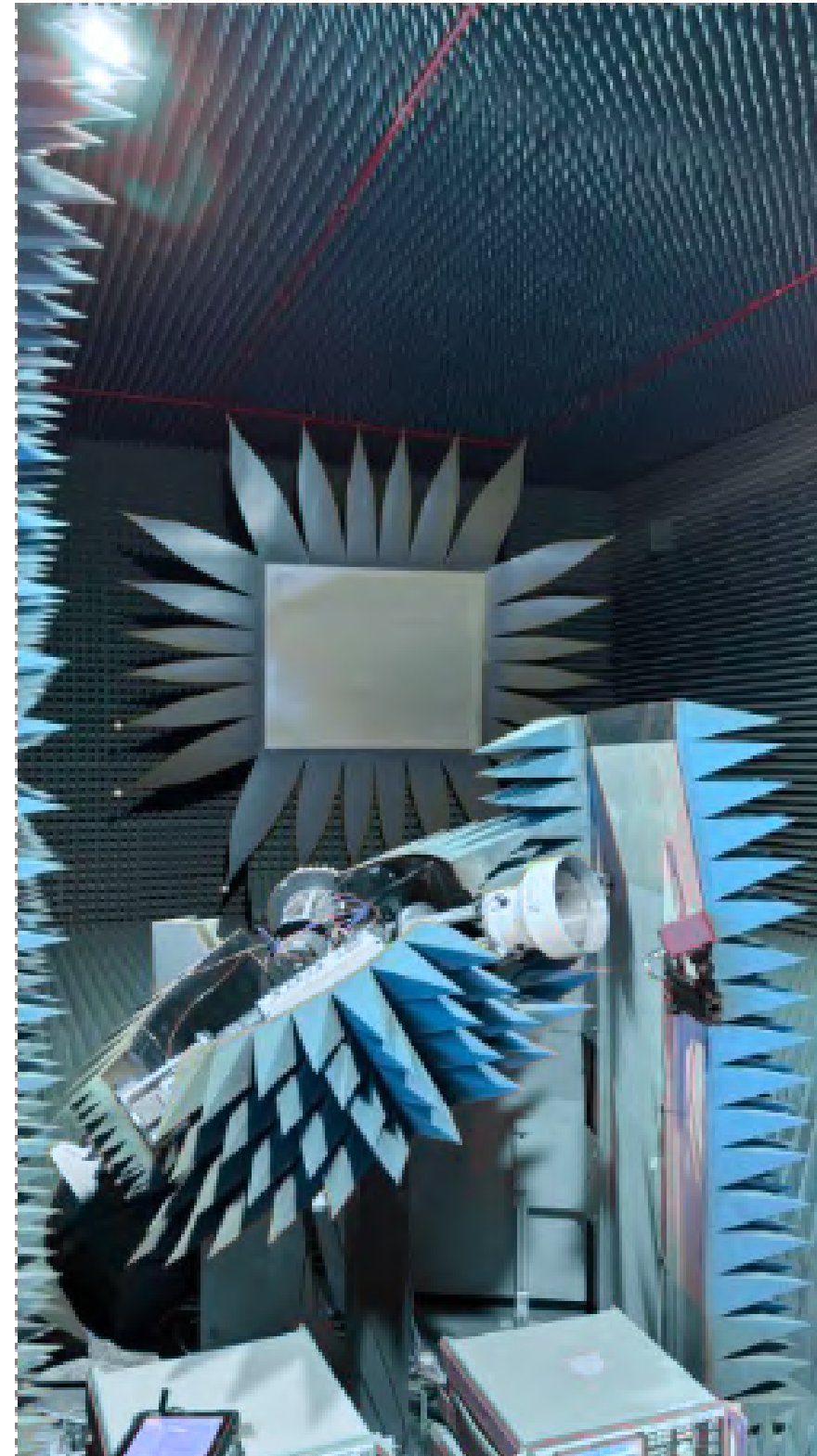


CATRs

1.8 m QZ
carousel multi Feeder
250 kg AUT positioner bbq option



BUSINESS DEVELOPMENT PRESENTATION



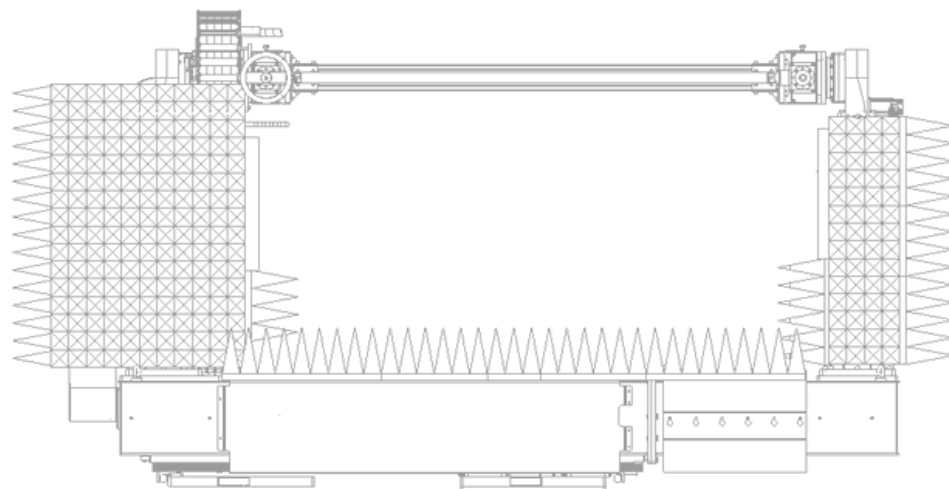
CATRs

2.5 m QZ

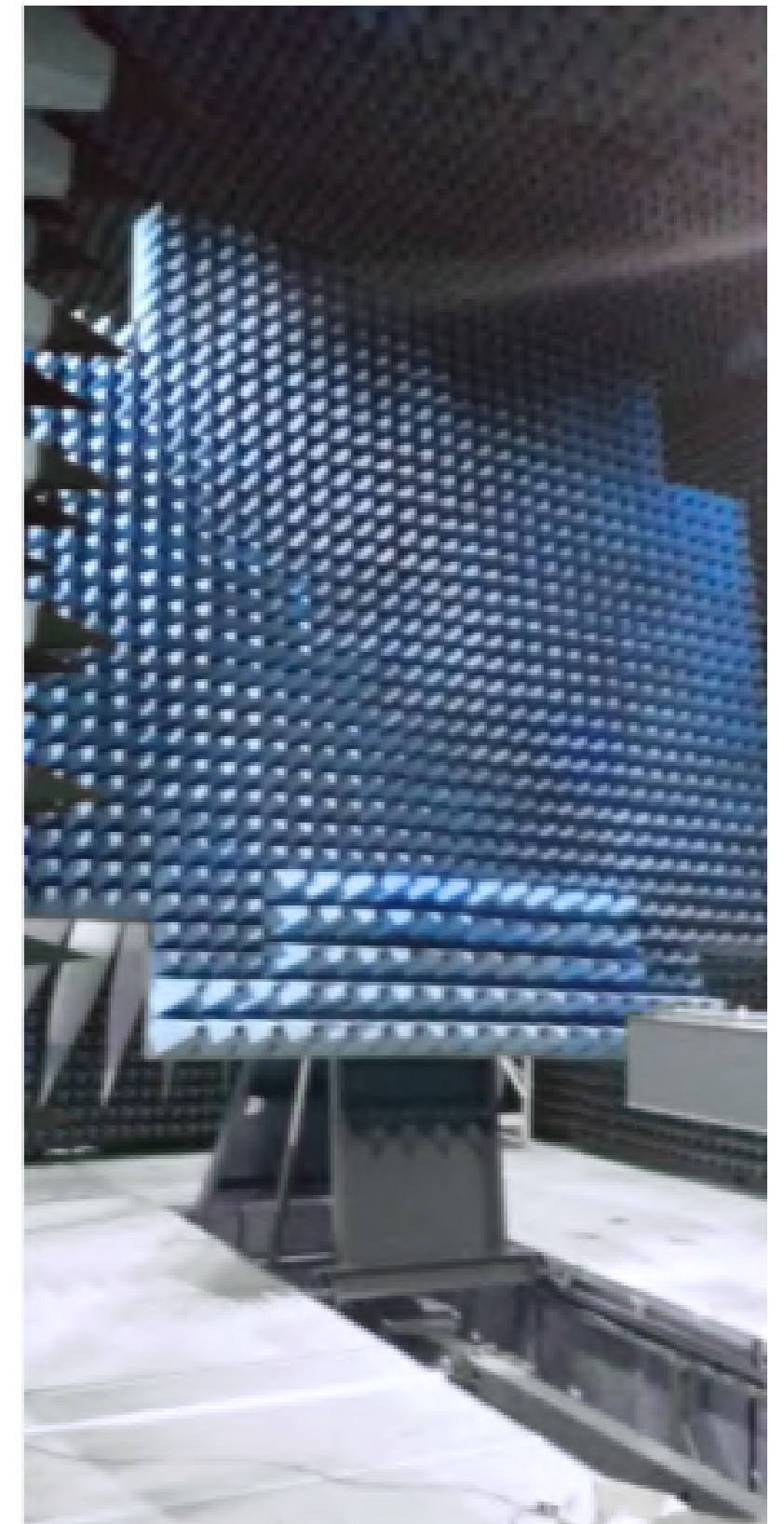
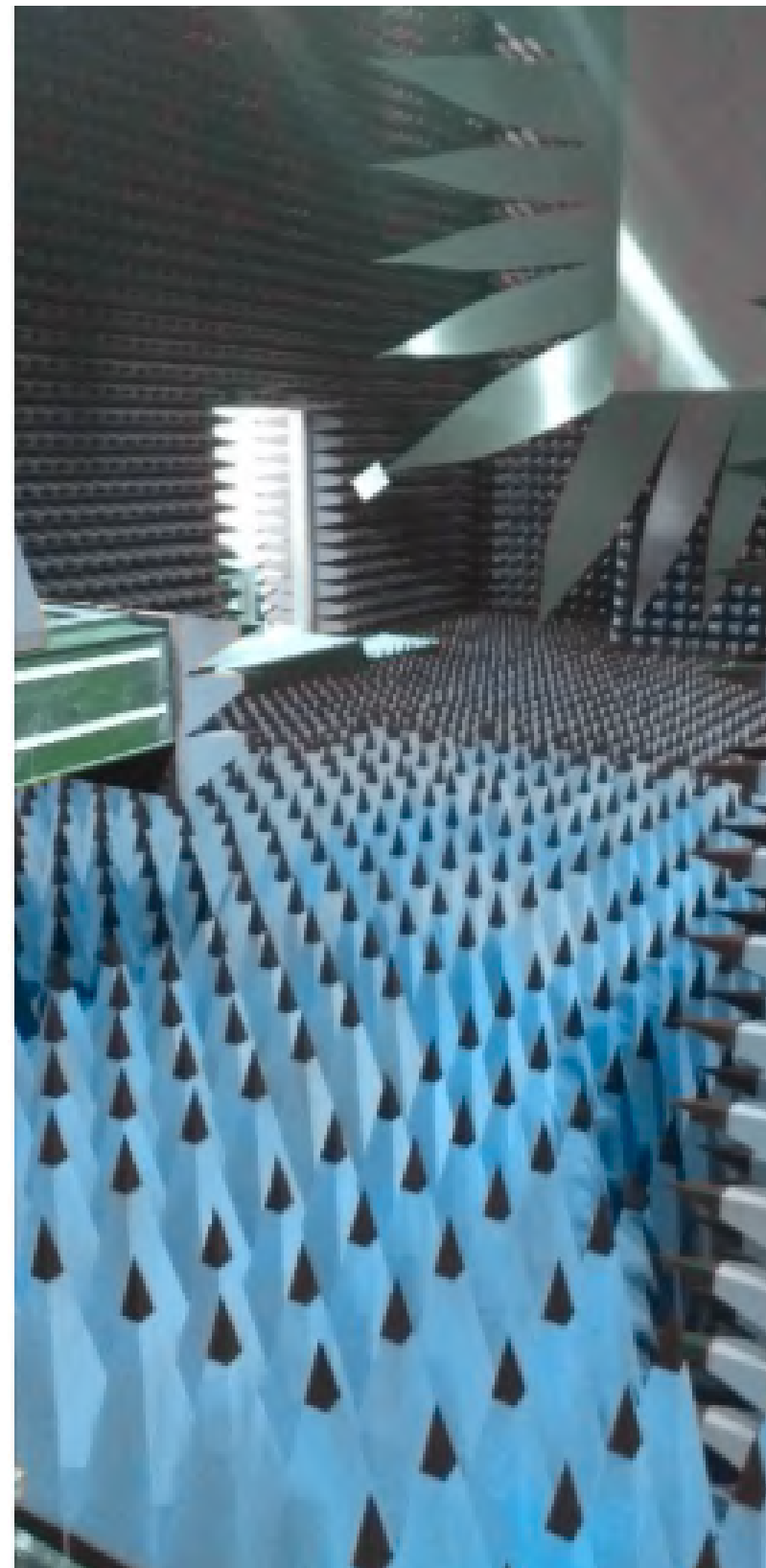
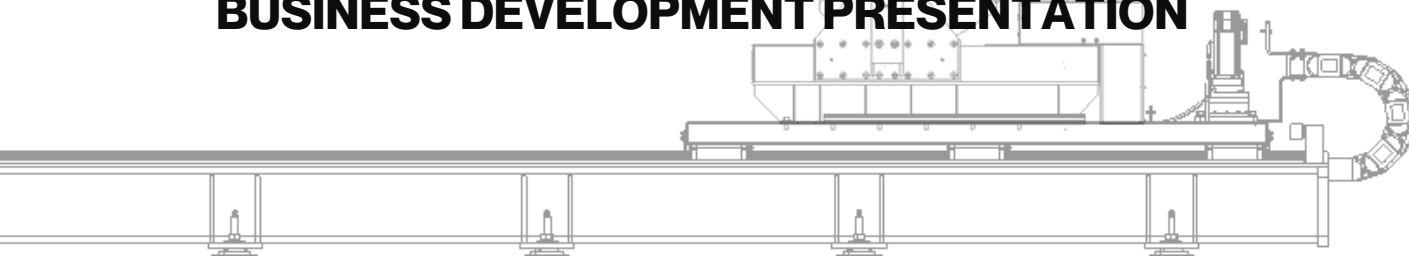
Reconfigurable system

SNF 200 MHz

CATR 6 GHz



BUSINESS DEVELOPMENT PRESENTATION



Signature Blended rolled edge Reflectors

Unique performance tailored by simulation
Blended rolled edge reflector series (500MHz to 200GHz+)
Maximum quiet zone size on demand

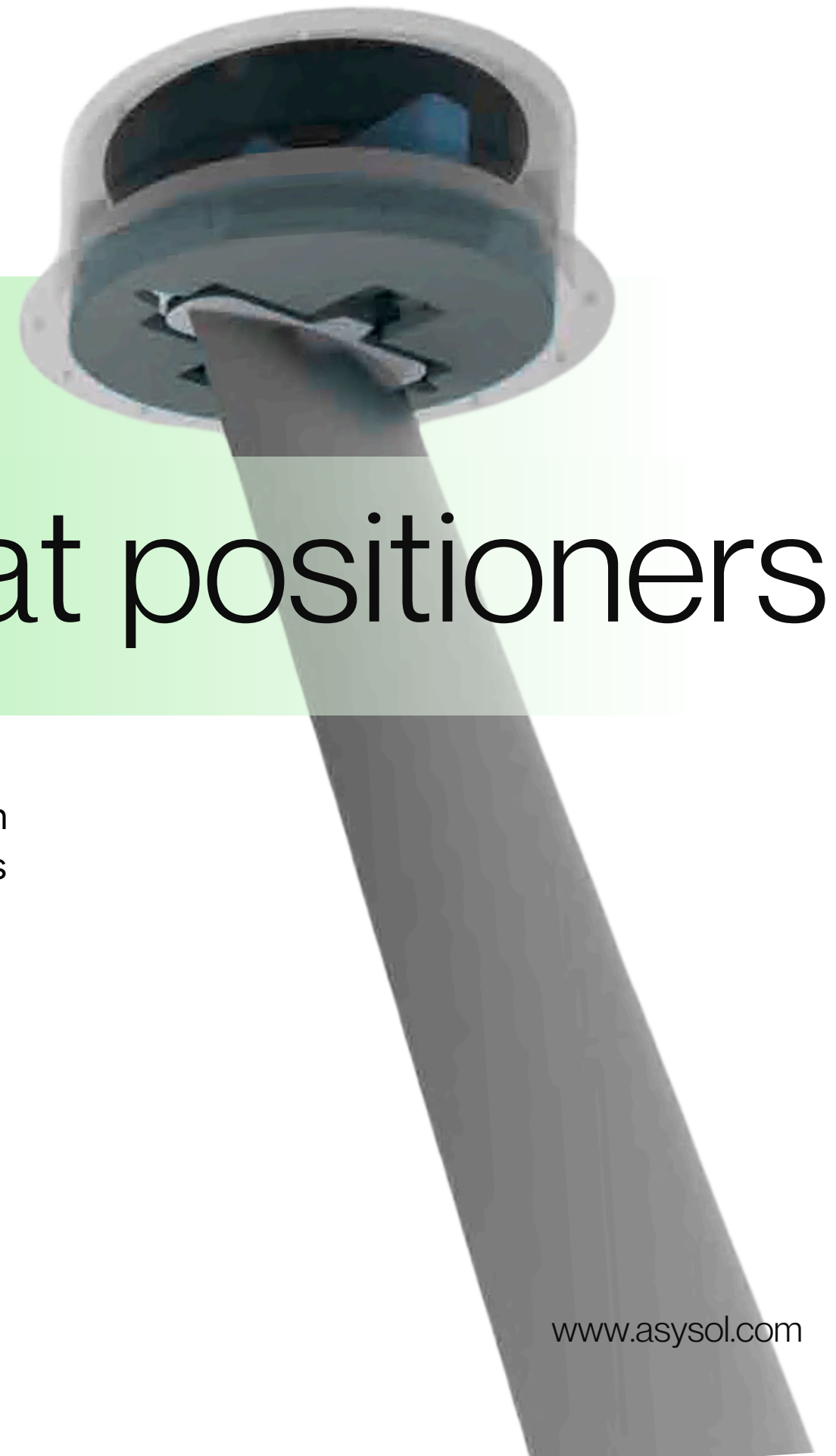


RCS Signature Pylons and top Hat positioners

ASY-PLN pylon series design is based on a longitudinal axis inclined at an angle of 60° toward the RF source while leading and trailing edges have angles of 55° and 65° respectively. Horizontal cross section is a 4/1 ogive standard design. The final machining and polishing treatment ensure a surface smoothness better than 1.8 microns. Edge sharpness is better than 0.15mm, and typically 0.1mm

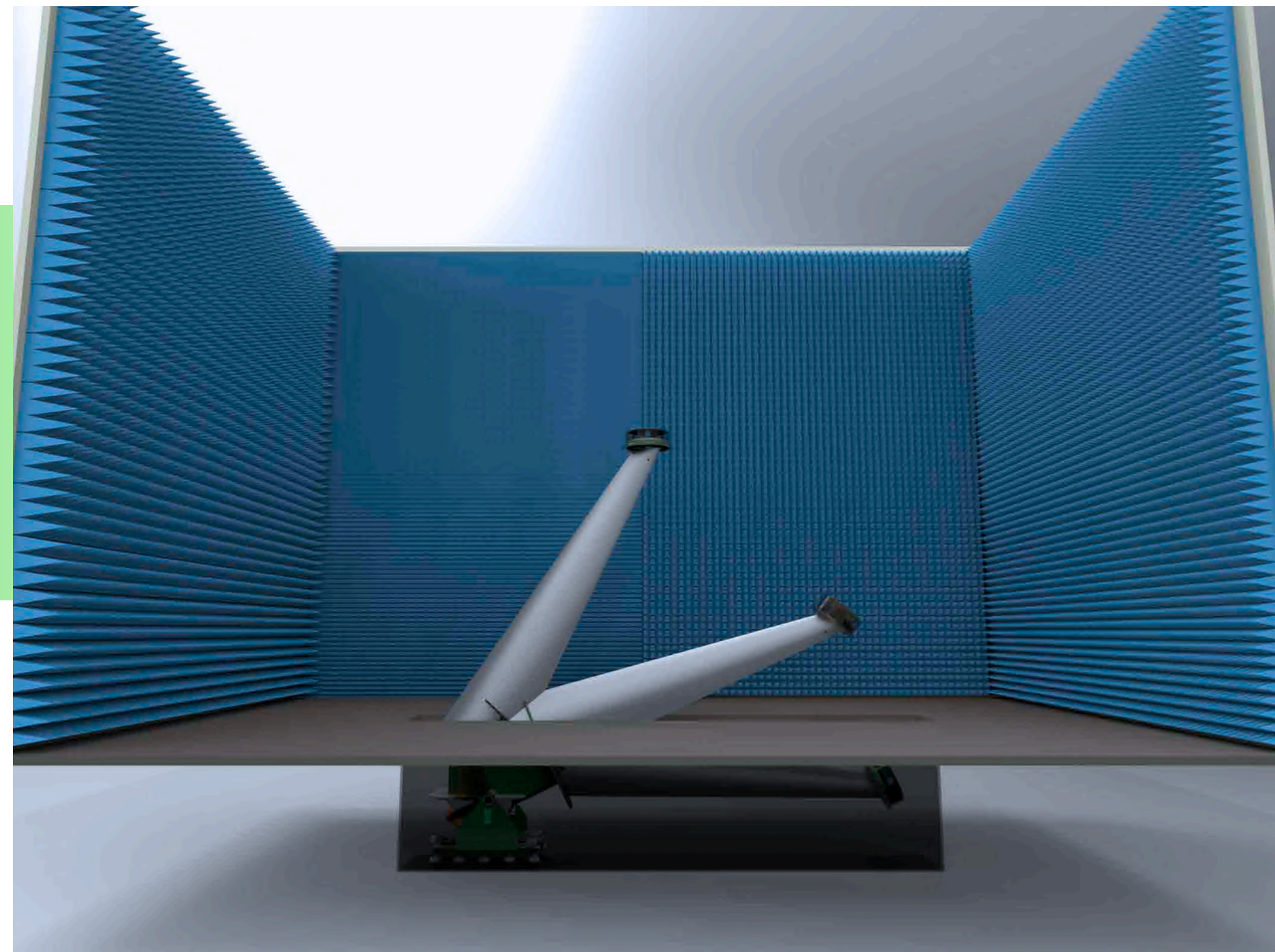
Pylon top can be equipped either with calibration tip or positioner.

Single azimuth or azimuth-over elevation positioners can be configured, with low profile option (100 and 250 kg) or high load option (500 and 1.000kg). Moving mechanisms remain hidden inside the pylon (low profile option) or in the radome below turntable (high load option).



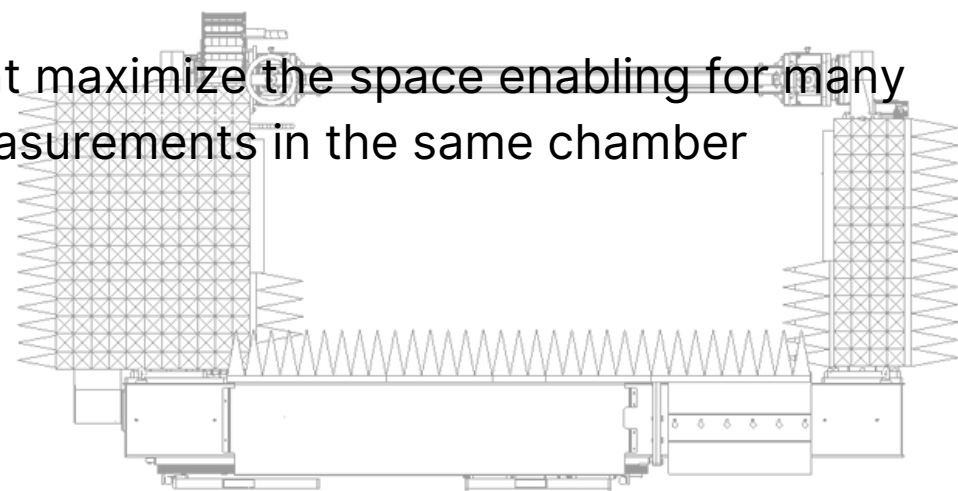
RCS

ASY-PNL Series is fully compatible with ASYSOL Elevator & Pick-up positioners, allowing automated folding and parking of pylon in multipurpose reconfigurable facilities.

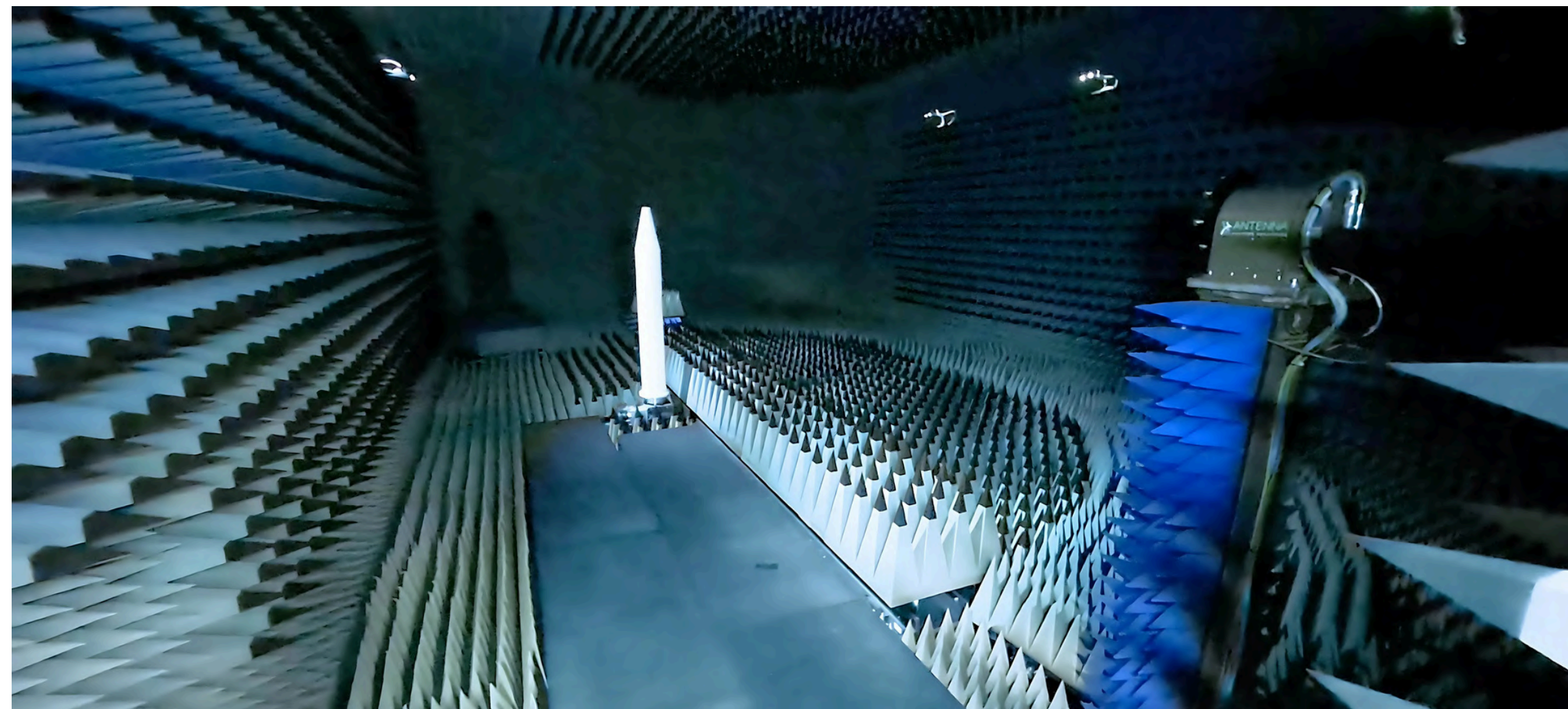
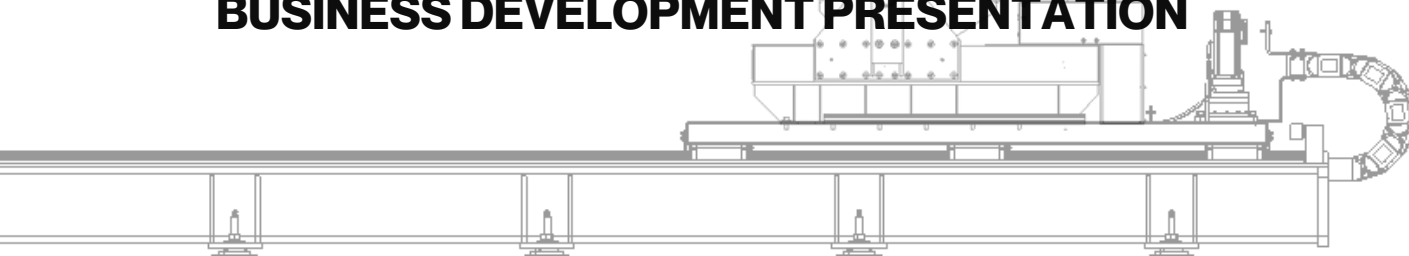


Multi purpose systems

Systems that maximize the space enabling for many types of measurements in the same chamber



BUSINESS DEVELOPMENT PRESENTATION



Our Probes

Corrugated aperture (choke) CWGs

Application: **spherical near-field and CATR**

Rotational symmetric pattern

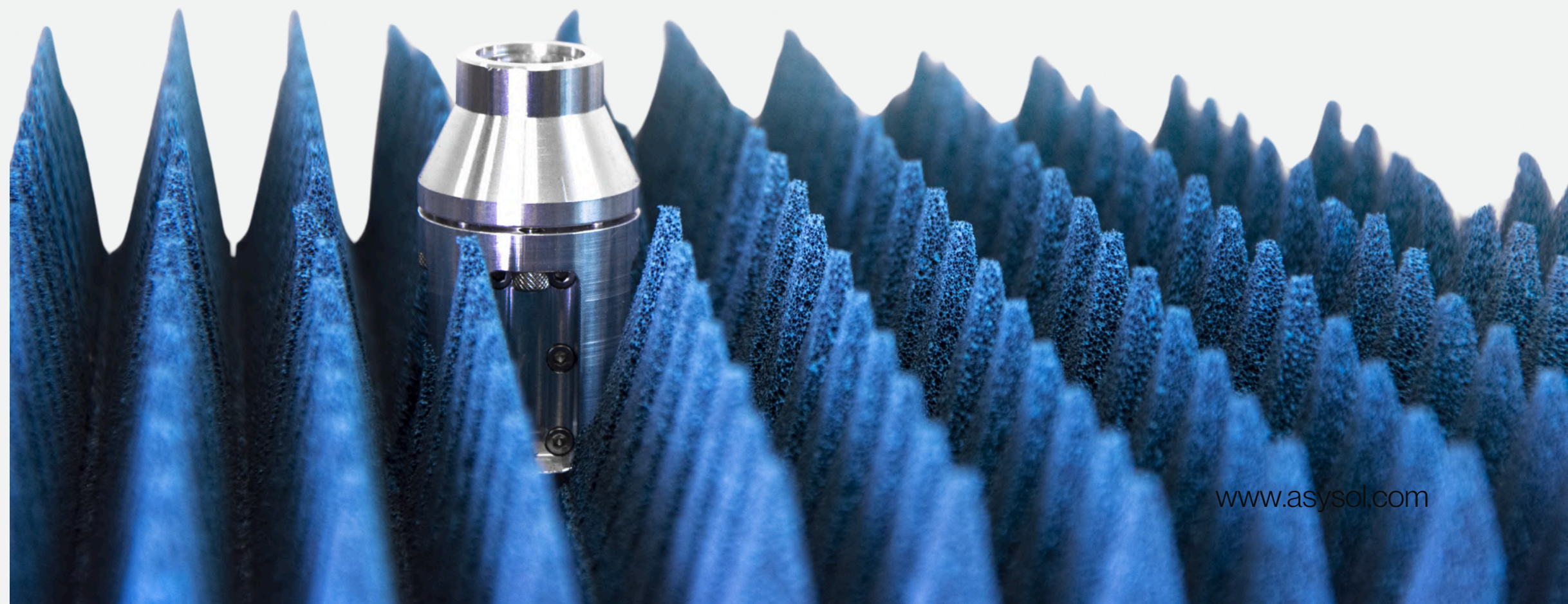
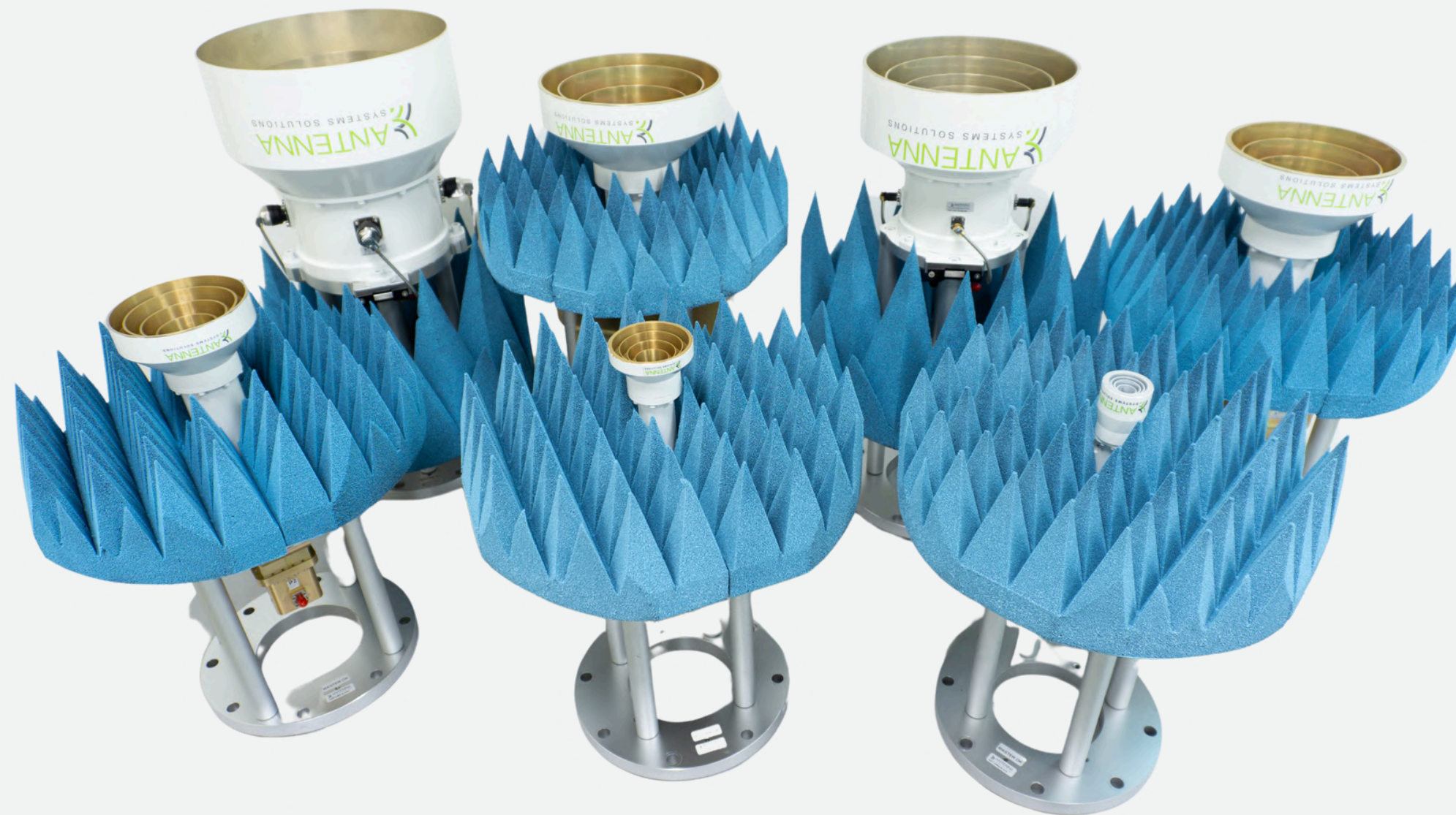
Very low cross-polar radiation

From **500MHz** up to **170GHz**

More than **500 units** sold worldwide!!



BUSINESS DEVELOPMENT PRESENTATION



Our Horns

Standrad gain horn design

Very low on axis **cross-polar radiation**

Lightweight for ease of handling

Low error aperture phase

More than 300 units sold worldwide!!



BUSINESS DEVELOPMENT PRESENTATION

Our Open Ended Waveguides

Application: **planar and cylindrical near-field measurements**

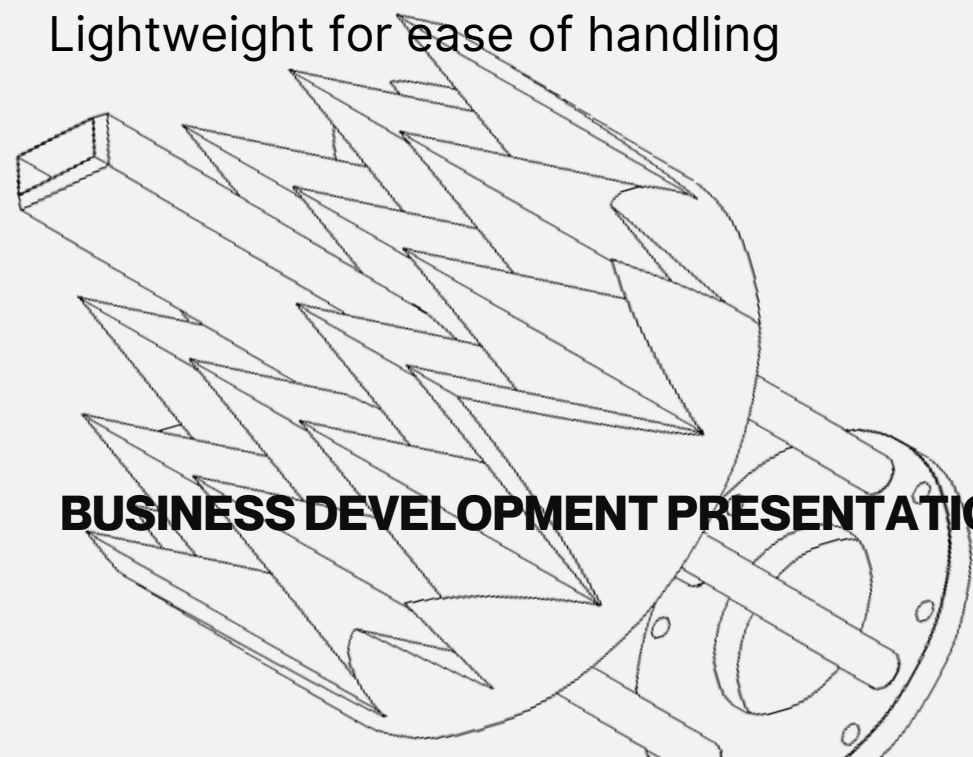
Low diffraction effect

Low loss and high efficiency

Standard ASYSOL circular interface

Waveguide input for standard waveguide bands

Lightweight for ease of handling



BUSINESS DEVELOPMENT PRESENTATION

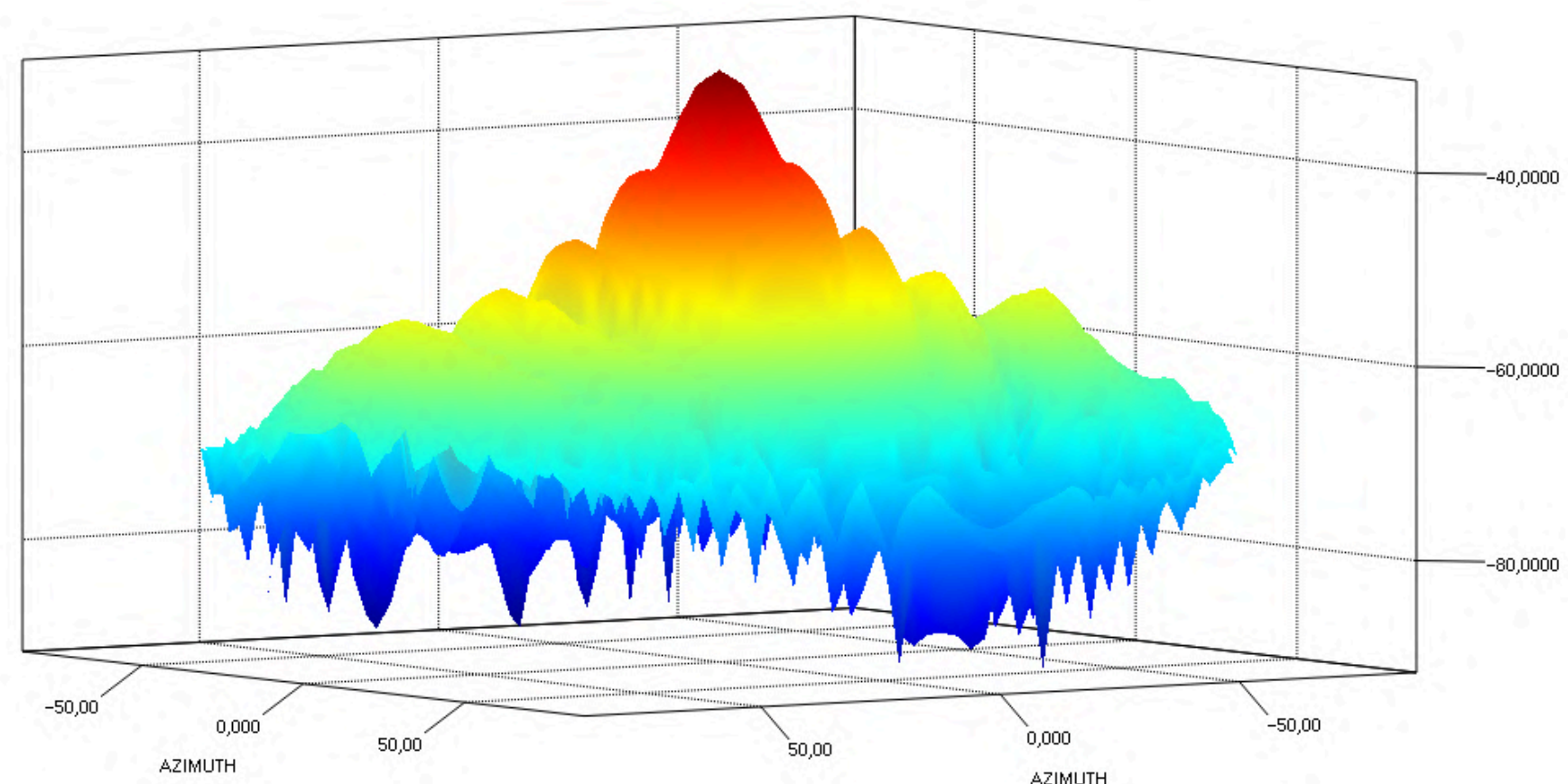
ASYSOFT

ASYSOFT enables the operator to interface with the measurement system hardware. It is a stable, modular platform allowing for full flexibility and optional customization. ASYSOFT will allow the measurement and display of all key antenna parameters in a friendly environment.

We are proud of our **flagship software** product and committed to ongoing development and innovation for the benefit of the end user.

Compatible with industry leader SW such as Tycra for SNF to FF transformation, AMS from NPM and others.

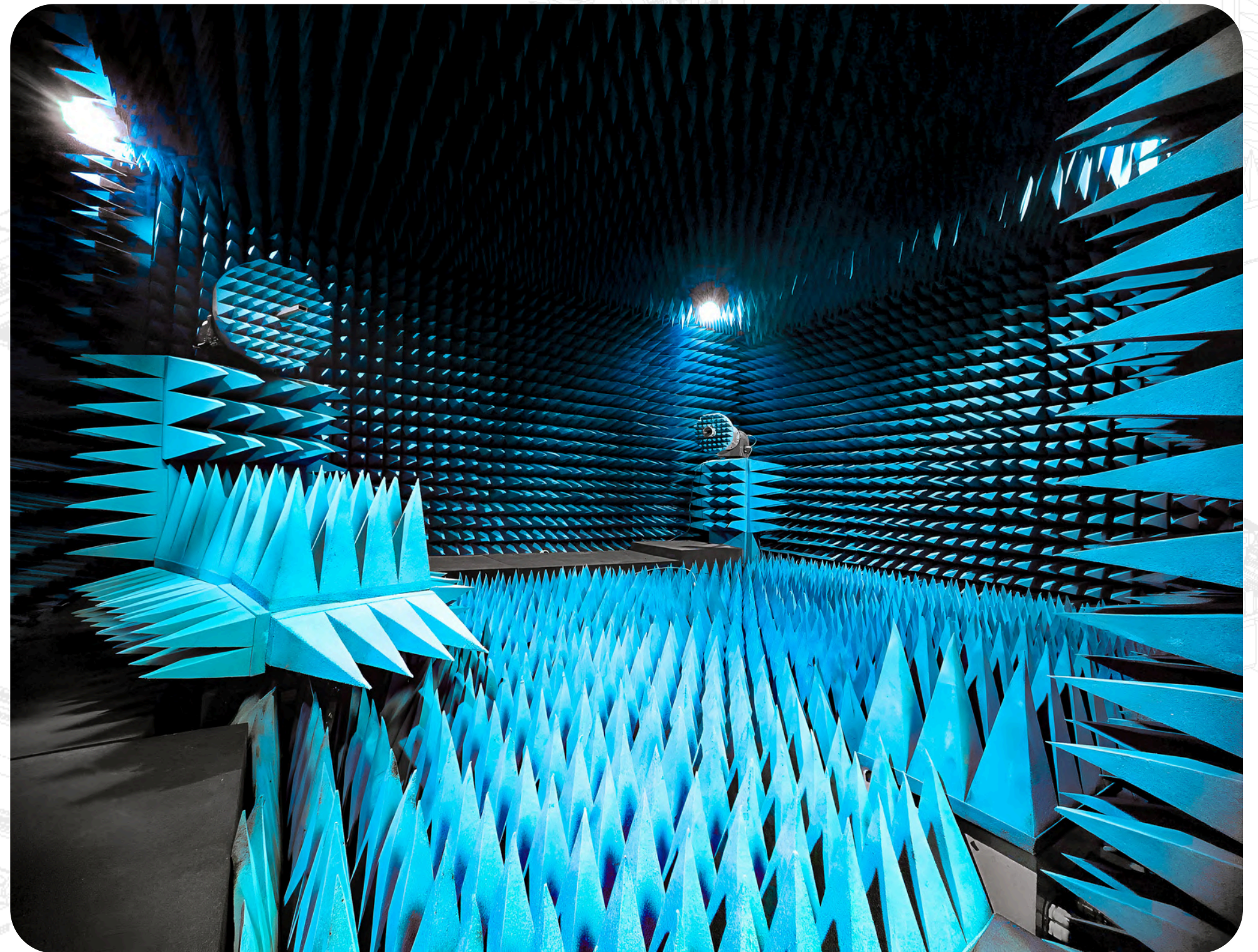
STABLE • MODULAR • FLEXIBLE



Our services

ASYSOL has its own **Antenna Test Facility (ATF)**, where our team of qualified engineers perform **antenna measurement services** that include direct Far-Field, CATR, and Spherical Near-Field measurements.

While we primarily serve for testing ASYSOL products, our facility **is available for rental to academia and industry** to meet their specific testing requirements.



Key points of excellence

Outstanding technical **know-how** and RF capabilities

Agile and flexible organization

Dynamic and customer-focused team, multicultural, worldwide located (Spain, Germany, Denmark, Holland...)

Superior mechanical design and accuracy for positioners, scanners and reflector systems

Excellent customer satisfaction

Experts in customization and adapting to existing facilities

Customer First

Once our customer,
always our customer!

Warranty, Maintenance, Support, and Training services

Support:

- Fast response e-mail and phone support for system & software operation
- Regular software and firmware upgrades.

Training:

- Full training on Antenna Measurement Theory as well as ASYSOL Systems Operation during installation and validation
- ASYSOL regularly takes part in workshops and conferences worldwide. EuCAP, AMTA and many more
- we can arrange on-site support and training anytime!

Customer First

Once our customer,
always our customer!

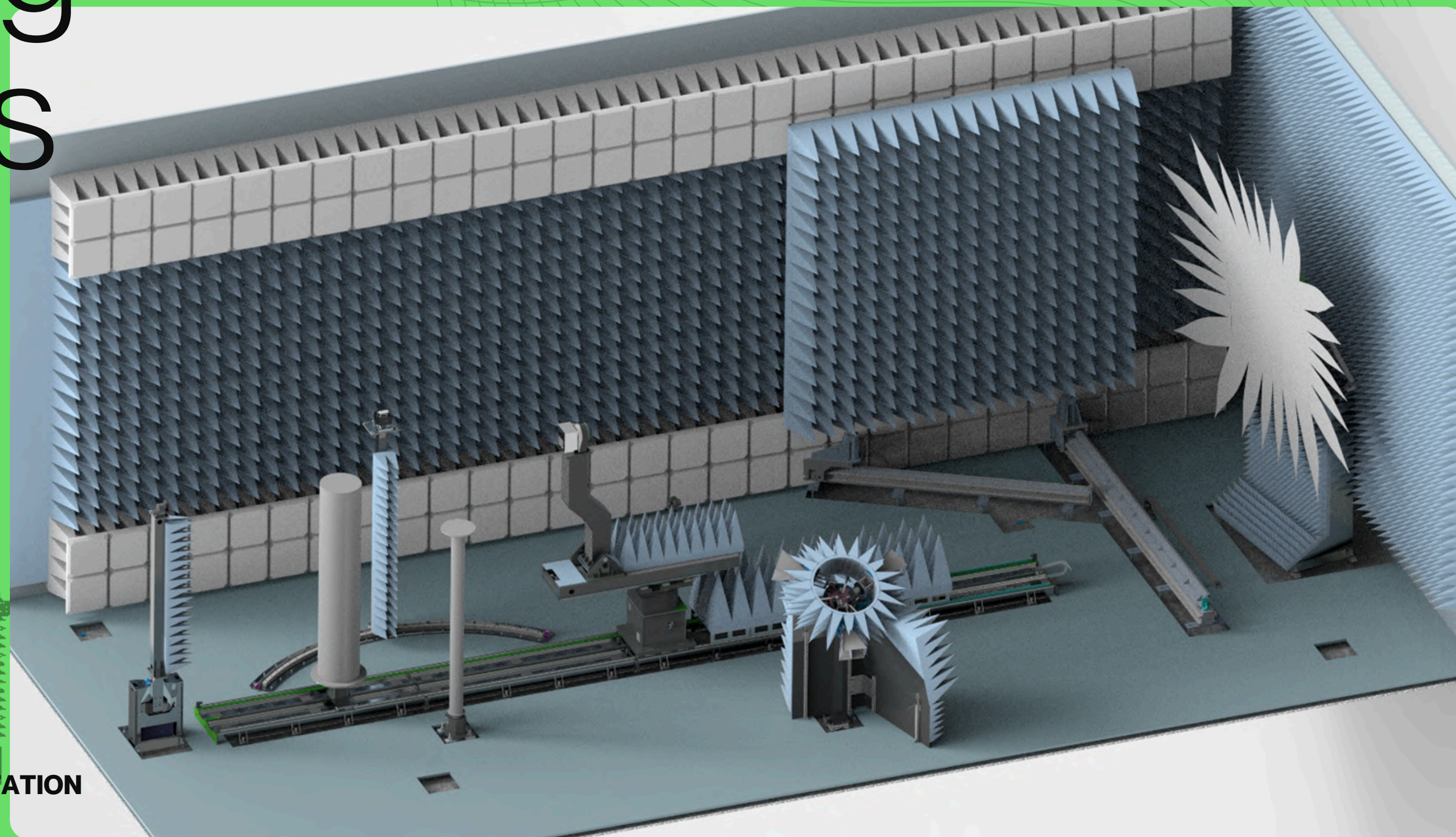
Warranty:

- Standard COTS products, long life cycle (> 10 years)
- Spares on demand or kept at ASYSOL premises upon agreement
- Typical spares: Rotary Joints, motors, drives, sliprings

Maintenance:

- Alignment and calibration services, provided either by ASYSOL or qualified and trained staff from local distributors
- Remote alignment & validation successfully completed due to Covid 19 restrictions!!

Ongoing Projects



BUSINESS DEVELOPMENT PRESENTATION

Have a question?

We are here to help, you can use these channels to contact us

Phone

+34 942 05 04 85

Website

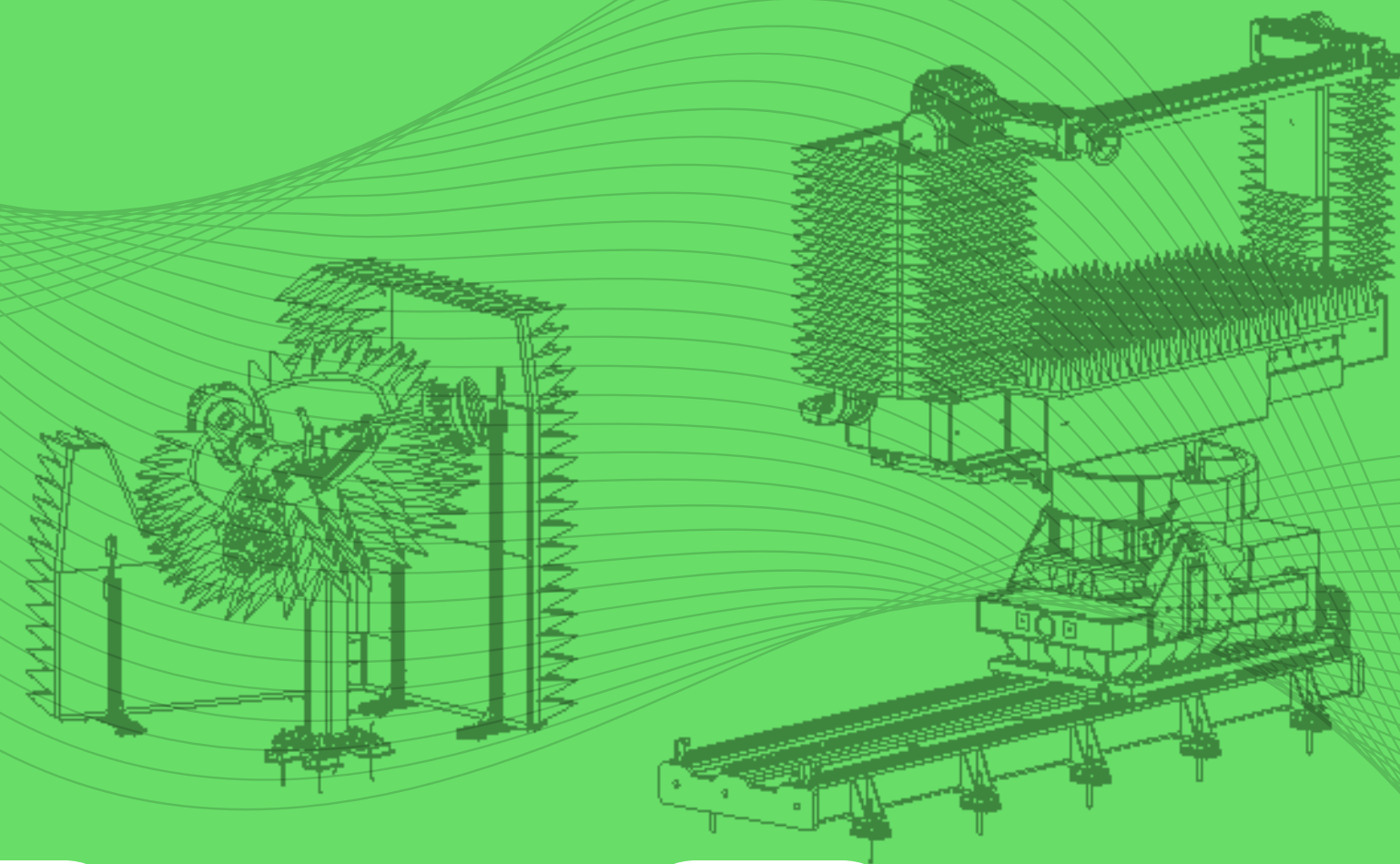
asysol.com

Email

sales@asysol.com

Address

c/ Isabel Torres 9,
39300 Santander,
Cantabria, Spain



Thank You!



WHERE

INNOVATION

IS STANDARD