

# ANTERAL



## Anteral Space Background

Anteral, spin-off company of the Antenna research group of the Public University of Navarra, has been working since 1999 designing most advanced feed horn antennas for satellites and space applications.

### Specialized in

Design, manufacture and verification of high performance horn antennas for on-board satellite systems. Those horn antennas are used for every type of satellite reflector systems.

### Our values

We try to be the best in what we do, offering our clients innovative solutions in a short period of time and with a personal treatment.

### Capabilities

We develop innovative horn antennas to obtain the best solutions for each frequency band (commercial and scientific bands) and systems.

Most used feed horn antenna types are:

- Circular smooth-walled spline horn.
- Axially and radial corrugated horn.
- Corrugated horn with axial corrugations.
- Corrugated horn with radial corrugations.
- Smooth-walled spline horn with axial.

Feasible designs:

- Customized copolar radiation pattern with low side-lobe level.
- Single band or multiband design, with a relative bandwidth up to 50%.
- Low maximum cross-polarization level ( $< -45$  dB).
- Very low return losses ( $< -35$  dB).
- Anteral uses innovative profiles to obtain very compact corrugated horns.

Measurements:

Anteral has at its disposal an anechoic chamber with high precision equipment to measure return loss, radiation pattern, cross polar and isolation.

- Near Field Radiation Pattern.
- Far Field Radiation Pattern.
- Spherical Radiation Pattern.

### Success stories

- Amazonas 3: 3 Spline profile horns (Ka-band)
- Measat 3B: 1 Axially and radial corrugated horn (X-band)
- SES-10: 1 Axially and radial corrugated horn (Ku-band)
- SES-12: 1 Axially and radial corrugated horn (Ku-band)
- Hispasat 1F: 2 Spline profile horn with axial corrugations (Ka-band)
- Amazonas 5: 1 Axially and radial corrugated horn (Ku-band)
- 5 Spline profile horns (Ka-band)
- 1 Septum polarizer (Ka-band)



### Our clients

Some of our clients are:



More info:

[www.antal.com](http://www.antal.com)



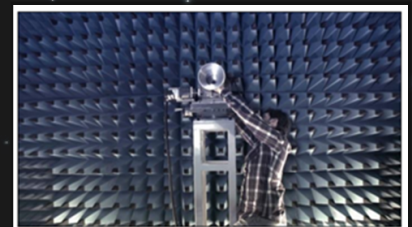
Corrugated profile horn antenna



Spline profile horn antenna



Spline profile horn antenna (Ka band)



Anechoic chamber with positioner

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