

The Ares 1F is designed to perform emission and immunity tests on military and aeronautic devices. The design of the structure is optimised for maximum performances, in minimum space. The shielding and its pyramidal absorbers are manufactured by SIEPEL.

## CHARACTERISTICS

### ➤ Compliance & Performances

	DO-160G & MIL-STD-461G	
Measurement distance	1 m	1 m
Frequency range	80 MHz - 250 MHz	250 MHz - 40 GHz
Guaranteed performances	< -6 dB	< -10 dB
Compliance	Full-compliant	Full-compliant

**SHIELDING EFFECTIVENESS COMPLIES WITH EN 50147-1 (10 kHz - 40 GHz)**

### ➤ About our absorbers

- HY absorbers power handling: 2 kW/m<sup>2</sup> (CW).
- Both absorbers coated with either aqueous or plastic paint are classified ISO class 4 (ISO 14644-1:2015) clean room conditions.

### ➤ Dimensions

Total overall including metallic frame	Internal usable
4.7 x 3.7 x 2.6 m	3.8 x 2.8 x 2.1 m
15 x 12 x 8 ft	12 x 9 x 7 ft

### ➤ Quality

- All absorbers batches are tested by SIEPEL for reflectivity performances between 30 MHz – 1000 MHz.
- Our raw materials are compliant to RoHS / REACH and free of substances in the current list of Substances of Very High Concern (SVHC) published by the European Chemicals Agency (ECHA).

## OUR STRENGTHS

- ⊕ High-quality components & parts
- ⊕ Guarantee of 20 years for the RF performances of our absorbers
  - ⊕ Guaranteed performances
  - ⊕ Control of performances before shipment
- ⊕ Measurement department accredited ISO/IEC 17025:2005 (accreditation n° 1-6220, scope available on [www.cofrac.fr](http://www.cofrac.fr))
- ⊕ Fast delivery: permanent stock available off the shelves
- ⊕ Setting-up of the chambers by our dedicated installation team

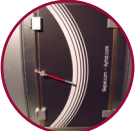


## CONFIGURATION



### MODULAR SHIELDING

Self-standing structure up to 18 (40) GHz  
Steele stiffeners



### DOOR

Single leaf swing door  
Clearance 0.9 x 2.1 m  
Manual latching



### WALL PANELS

Penetration panel including coaxial feed-throughs and waveguides



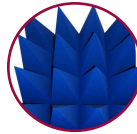
### VENTILATION

Honeycomb air vents  
300 x 300 mm up to 18 (40) GHz



### POWER DISTRIBUTION

Power filter single phase 110/230 V - 32 A - 50/60 Hz  
Power filter three-phase 400 V - 32 A - 50/60 Hz  
Electrical package: power distribution, lighting



### OPTIMISED ABSORBER LINING

Microwave pyramidal absorbers (optimised lining walls and ceiling)  
Ferrite absorber (full lining of walls and ceiling)



### TEST TABLE

Dimensions: 2.5 x 1 x 0.9 m with metallic ground plane and connection stripes



### PROJECT REALISATION

Project management  
Technical design & study  
On-site installation



### PERFORMANCE VERIFICATION

Shielding effectiveness at 900 MHz at critical locations

## AVAILABLE OPTIONS

- Shielded control and amplifier rooms
- Plastic paint for pyramidal absorbers with wide range of colors
- Other types and dimensions of doors
- Electrically-assisted door latching/unlatching
- Antenna positioners
- Floor hatches with connection points
- Additional power filters, data filters and special feedthroughs
- CCTV / Audio monitoring systems
- Fire detection systems
- On request, some measurements can be accredited ISO 17025 (accreditation number 1-6220, scope available on [www.cofrac.fr](http://www.cofrac.fr)).
- Automotive / RadioCom standards compliance
- Many other options on demand

FOR OTHER EMC CHAMBERS  
PLEASE REFER TO OUR  
DATASHEET

«HOW TO CHOOSE AN  
ANECHOIC CHAMBER»

