

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

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CHARACTERISTICS

Compliance & Performances

	CISPR 25 & ISO 11452-2	
Measurement distance	1 m	1 m
Frequency range	(150 kHz) 70 MHz - 18 GHz	80 MHz - 18 GHz
Guaranteed performances	Reflectivity < -6 dB	Reflectivity < - 6 dB
Compliance	Full-compliant	Full-compliant

SHIELDING EFFECTIVENESS COMPLIES WITH EN 50147-1 (10 kHz - 18 GHz)

> About our absorbers

- HY absorbers power handling: 2 kW/m² (CW).
- Both absorbers coated with either aqueous or plastic paint are classified ISO class 4 (ISO 14644-1:2015) clean room conditions.

Dimensions (L x W x H)

Total overall including metallic frame	External shield to shield	Internal usable
5.7 x 4.2 x 3.3 m	5.7 x 4.2 x 3.2 m	5.1 x 3.7 x 2.9 m
19 x 14 x 11 ft	19 x 14 x 10 ft	17 x 12 x 9 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
- \oplus Guarantee of 20 years for the RF performances of our absorbers
 - Guaranteed performances
 - ↔ Control of performances before shipment
 - Measurement departement accredited ISO/IEC 17025:2005 (accreditation n° 1-6220, scope available on www.cofrac.fr)
 - Fast delivery: permanent stock available off the shelves
 - Setting-up of the chambers by our dedicated installation team





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CONFIGURATION



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



DOOR Manual single leaf swing door Clearance 1.2 x 2.1 m



WALL PANELS Penetration panel including coaxial feedthroughs and waveguides



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



POWER DISTRIBUTION Power filter single phase 32 A Power filter three-phase 32 A Electrical package : power distribution, lighting



OPTIMISED ABSORBER LINING

Ferrite absorbers (walls and ceiling) Hybrid truncated absorbers (full lining of walls and ceiling)



TEST TABLE Dimensions: 2.5 x 1 x 0.9 m with copper strips



PROJECT REALISATION Project management Technical design & study

PERFORMANCE VERIFICATION Shielding effectiveness at 900 MHz at critical locations

AVAILABLE OPTIONS

- Extended shielding performances up to 40 GHz
- > 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).
- > Military / RadioCom standards compliance
- Many other options on demand

