



Shielded Enclosure Combination (SEC I)

SEC I is our relatively large and new semi-anechoic room, taken into use in 2007. This room is very suitable for military as well as civil test standards. It complies with the requirements for shielding effectiveness, site-attenuation and field uniformity up to and including 18 GHz. Radiated emission measurements up to and including 40 GHz. The requirements of the latest CISPR-16-1-4 are fully met by means of the size of the room in combination with the application of new and very effective absorbing material. In our lab we have a very high degree of automation, resulting in fast measurements.

Dimensions:	Test room:	Instrumentation room:
Length	13.06m	5.00m
Width	6.94m	5.00m
Height	5.59m	2.90m
-Shielding	110dB	110dB
-Anechoic material	Ferrite-tiles + Hyfral absorbers	
-Entrance doors	4.00 x 4.00m 0.9 x 2.05m	0.9 x 2.05m
-Maximum EUT-weight	15 ton	



Available:

-Mains power supply		
115V/60Hz	2.5kVA	2.5kVA
115V/400Hz	12kVA	2.5kVA
220V/50Hz	16kVA	16kVA
400V/50Hz	37kVA	16kVA
440V/60Hz	45kVA	27kVA
-Water-cooling		
-Vehicle exhaust gas removal		
-Compressed air	Turntable 1.8m diameter	



Shielded Enclosure Combination (SEC II)

SEC II is our medium size large and new full-anechoic room, taken into use at the end of 2007. This room is suitable for military as well as civil test standards. It complies with the requirements for shielding effectiveness, site-attenuation and field uniformity up to and including 18 GHz. The requirements of the latest CISPR-16-4-1 are fully met by means of the size of the room and the application of new and very effective absorbing material.

In our lab we have a very high degree of automation, resulting in fast measurements.

Dimensions:

Length

Width

Height

-Shielding

-Anechoic material

-Entrance doors

Test room:

9.15m

5.50m

3.70m

110dB

Ferrite-tiles + Hyfral
absorbers

2.3 x 2.05m
0.9 x 2.05m

Instrumentation room:

2.5m

3.15m

2.52m

110dB

0.9 x 2.05m



Available:

-Mains power supply

115V/60Hz

12kVA

115V/400Hz

16kVA

230V/50Hz

16kVA

400V/50Hz

37kVA

16kVA

440V/60Hz

45kVA

7kVA

Turntable 1.8m diameter

Available:

-Mains power supply

115V/60Hz

2.5kVA

115V/400Hz

2.3kVA

230V/50Hz

380V/50Hz

16kVA

16kVA

440V/60Hz

27kVA

-Applications: shielding, experimental measurements

EMC



Electrical facilities .

TEM cells.

TEM cells are the result of development in the last few years. High field strengths can be generated at relatively low costs.

Double TEM cell, DC - 1GHz, height 10cm

Conical TEM cell, DC - 1 GHz, height 45 cm

Triple TEM cell, DC - 1 GHz, height 50 cm, 3 polarizations

(Invention of Thales, presented by publications at several symposia).



Other possibilities:

Transfer impedance

Test set-up

Workbench test set-up

Quick scans and consultancy

On site measurement and consultancy.

EMC



VIRC (Vibrating Intrinsic Reverberation Chamber).

A flexible and economical way for testing the Electromagnetic Compatibility (EMC) of large systems on site.



Conventional EMC testing of large (fixed) systems are very costly (Meuro's). VIRC gives High field strength with moderate input power (major cost saver), a mediumsize 'tent' yields 10.000 V/m with only 100W input power. This enables in-situ testing in a cost effective way (no infrastructure movements and therefor large cost savings). One remark must be made about this new testmethod. The properties of the Equipment Under Test should be known. Patents are filed in November 1999 (WO00034795A1, 06/15/2000). Technique are used for APAR EMC (and HIRF/HPM) testing in 2000, cost reduction approximatly 750.000 Euro. Various EMC tests are made using this methodology within THALES Naval Netherlands, CKC Lab USA and several Research institutes and Universities.

EMC

EMC workbench facilities.

We have a lot of facilities available for workbench testing. A concise list of phenomena which can be applied or measured is:

Electrostatic discharges, Current injection, many Transients and Surges, Voltage variations and interruptions, Current Harmonics, Voltage Fluctuations and Flicker, Magnetic fields, High-voltage and di-electric strength tests for electrical safety, Power measurements and analysis, also on-site.

Many military as well as civil standards are covered by means of our available test equipment.



If you need specific information on measurement accuracy, number of measurement channels or likewise, please contact us:

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