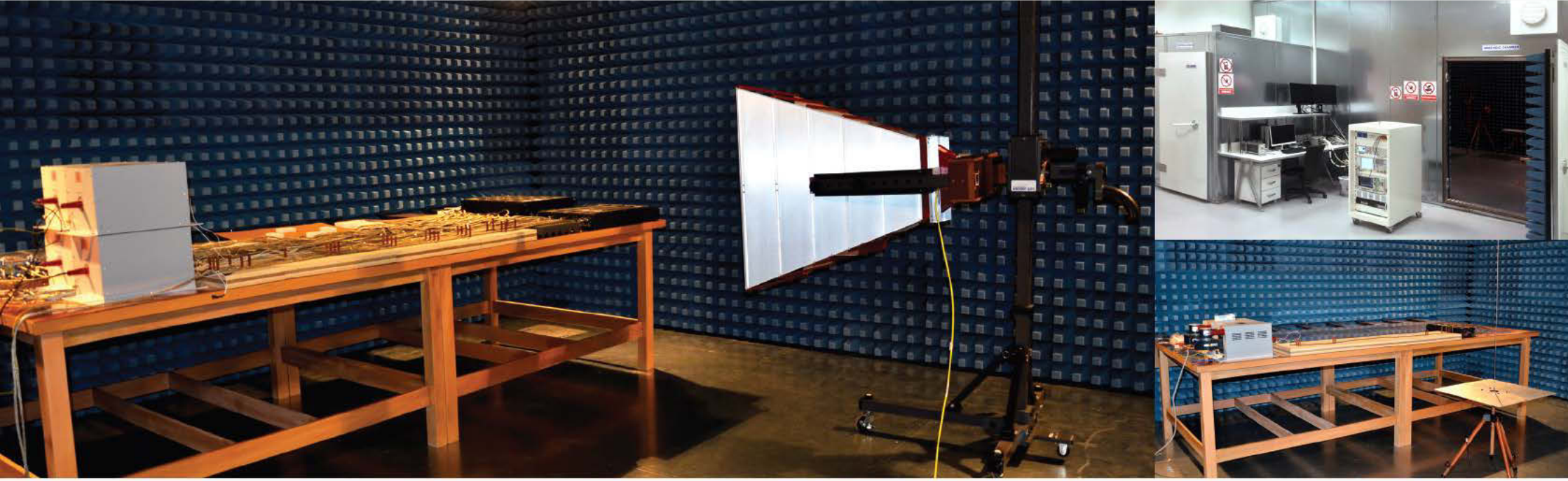


# SDT EMC Laboratuvarı Kabiliyetleri

## SDT EMC Laboratory Capabilities

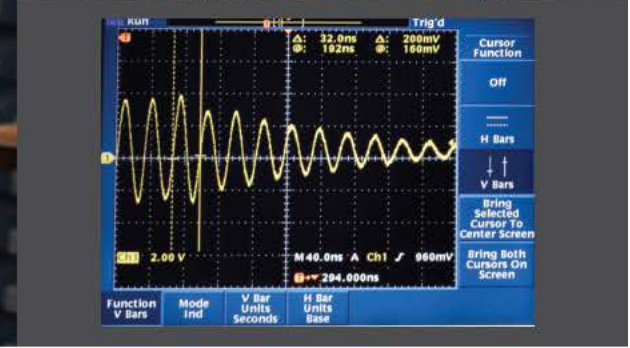
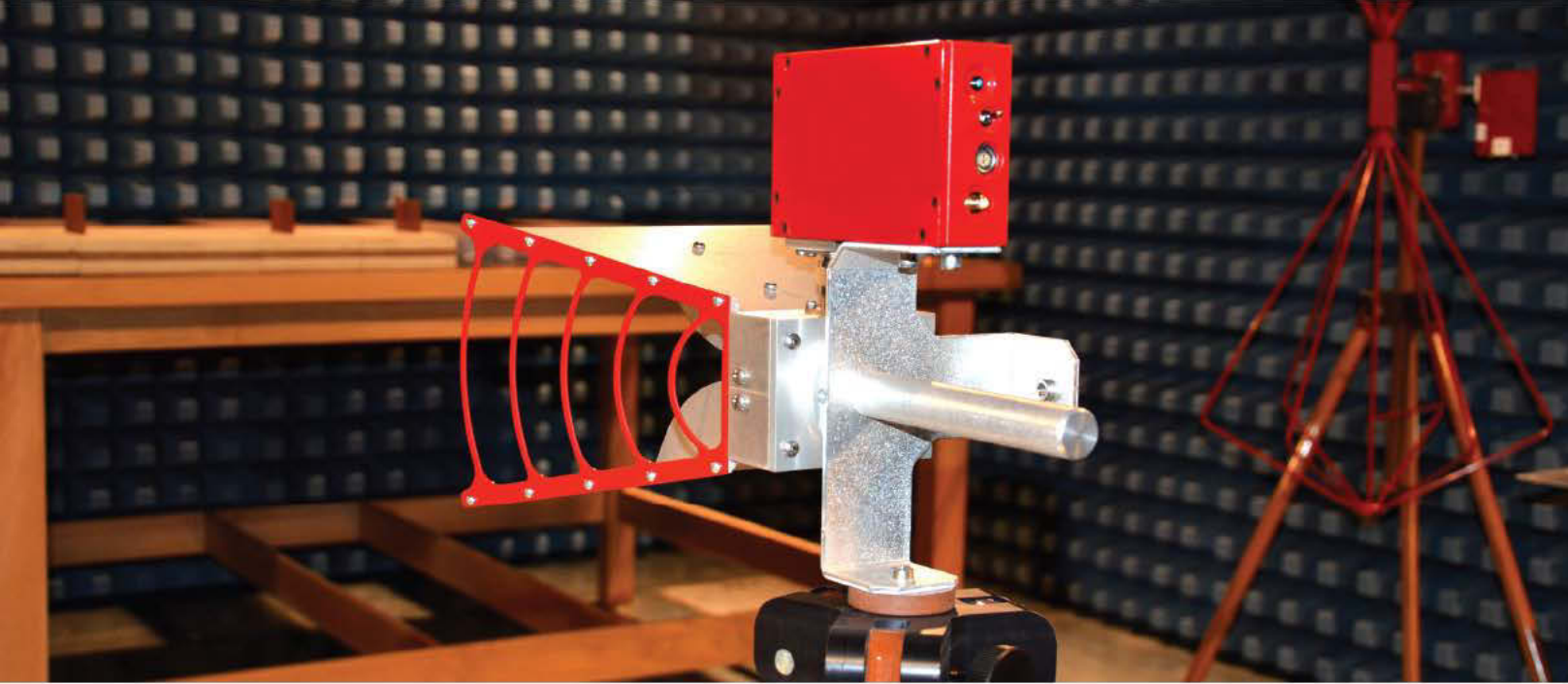


SDT EMC Laboratuvarı bünyesinde 1 adet 5,92m x 5,60m x 3,50m ölçülerinde, 40 GHz'e kadar sızdırmazlık sağlayan MIL-STD-461-E/F standart speklerine uygun yansımaz oda bulunmaktadır. Oda içerisinde 40 GHz'e kadar sönümlenme sağlanabilmektedir. MIL-STD-461E/F' ye göre uygulanan testler ekipman bazlı testler olup ışıma yolu ile bağışıklık, ışıma yolu ile yayılım, iletim yolu ile bağışıklık ve iletim yolu ile yayılım başlıkları altında toplanabilir.

Ayrıca hava ve kara araçlarında kullanılan ekipmanlar için elektriksel güç karakteristik standartları MIL-STD-704 ve MIL-STD-1275 testleri ile AECTP-500/Category 501 ve RTCA/DO-160 standartlarına göre ESD testleri laboratuvarın test kabiliyetleri arasındadır.

*SDT EMC Laboratory test facility contains an anechoic chamber with dimensions 5,92m x 5,60m x 3,50m that is capable of RF shielding up to 40 GHz. This anechoic room is fully compliant to MIL-STD-461E/F standard specifications. The interior of the room provides signal attenuation up to 40 GHz. The tests according to MIL-STD-461E/F are equipment based tests and can be summarized as follows: Radiated susceptibility, radiated emission, conducted susceptibility and conducted emission.*

*In addition ; besides the MIL-STD-704 and MIL-STD-1275 tests for electrical power characteristics of aircraft and military ground platforms , ESD tests according to AECTP-500/Category 501 and RTCA/DO-160E are in the scope of the laboratory test capability.*



## Uygulanan Testler / Applied Tests:

| STANDART / STANDARD   | TEST TANIMI /TEST DEFINITION  |
|-----------------------|---|
| <b>MIL-STD-461E/F</b> | CE101 Conducted Emissions, Power Leads, 30 Hz to 10 kHz   |
|                       | CE102 Conducted Emissions, Power Leads, 10 kHz to 10 MHz  |
|                       | CS101 Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz   |
|                       | CS106 Conducted Susceptibility, Transients, Power Leads   |
|                       | CS114 Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 200 MHz                                 |
|                       | CS115 Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation                                |
|                       | CS116 Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz |
|                       | RE101 Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz  |
|                       | RE102 Radiated Emissions, Electric Field, 10 kHz to 18 GHz  |
|                       | RS101 Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz   |

| STANDART / STANDARD                | TEST TANIMI /TEST DEFINITION                  |
|------------------------------------|---|
| <b>MIL-STD-704<br/>A/B/C/D/E/F</b> | MIL-HDBK-704-8<br>28VDC                       |
|                                    | MIL-HDBK-704-2<br>115Vac, 400Hz, Single Phase |
|                                    | MIL-HDBK-704-3<br>115Vac, 400Hz, Three Phase  |
|                                    | Emitted Voltage Spikes                        |
|                                    | Emitted Voltage Surges                        |
| <b>MIL-STD-1275D/E</b>             | Injected Voltage Spikes                       |
|                                    | Injected Voltage Surges                       |
|                                    | Operational Voltage Range                     |
|                                    | Reverse Polarity                              |
|                                    | Starting Operation                            |
| <b>ESD</b>                         | Voltage Ripple                                |
|                                    | RTCA/DO-160D/E<br>AECTP-500/Category 501      |