TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Central Address: MALIKÖY ANADOLU OSB MAH. 30 AĞUSTOS CAD. NO:18 A SİNCAN Ankara / Türkiye

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by TURKAK.

Accreditation Number : AB-1587-T

Accreditation Date : 14.12.2021

Revision Date / Number : 11.09.2024 / 03

This certificate shall remain in force until **13.12.2025**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.

Gülden Banu Müderrisoğlu
Secretary General

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.

This document has been signed by Gülden Banu Müderrisoğlu with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.

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AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Testing Laboratory

Address :
MALIKÖY ANADOLU OSB MAH. 30 AĞUSTOS CAD. NO:18 A SİNCAN Ankara / Türkiye

Phone : +90 312 905 0690
Fax : +90 312 905 5452
Email : oznur.okcun@stest.com.tr
Website : www.stest.com.tr

Ballistics and Explosives

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Mechanical, Electrical, Electronic Systems and Subsystems	Low Temperature Chamber-1 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-2 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-3 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-4 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-5 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-6 Dimensions: 1300x2000x2600 mm Temperature: -65 °C / +100 °C Humidity: 98%rh Max. Chamber-7 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max.. Chamber-8 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-9 Dimensions: 9500x4900x5000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-10 Dimensions: 12000x4900x4000 mm	MIL STD 810 G (Method 502.5 Procedure I,II) MIL STD 810 G w/Change-1 (Method 502.6 Procedure I,II) MIL STD 810 H (Method 502.7 Procedure I,II) MIL STD 810 H w/Change-1 (Method 502.7 Procedure I,II)

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	Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-11 Dimensions: 15000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-12 Dimensions: 21500x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max.	
Mechanical, Electrical, Electronic Systems and Subsystems	High Temperature Chamber-1 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-2 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-3 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-4 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-5 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98%rh Max. Chamber-6 Dimensions: 1300x2000x2600 mm Temperature: -65 °C / +100 °C Humidity: 98%rh Max. Chamber-7 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max.. Chamber-8 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-9 Dimensions: 9500x4900x5000 mm Temperature: -45 °C / +80 °C	MIL STD 810 G (Method 501.5 Procedure I,II) MIL STD 810 G w/Change-1 (Method 501.6 Procedure I,II) MIL STD 810 H (Method 501.7 Procedure I,II) MIL STD 810 H w/Change-1 (Method 501.7 Procedure I,II)

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	Humidity: 98%rh Max. Chamber-10 Dimensions: 12000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-11 Dimensions: 15000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max. Chamber-12 Dimensions: 21500x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98%rh Max.	
Mechanical, Electrical, Electronic Systems and Subsystems	Rain Test Chamber-1 Dimensions: 1000x1000x1000 mm Chamber-2 Dimensions: 13000x5250x5000 mm	MIL STD 810 G (Method 506.5 Procedure I,II,III) MIL STD 810 G w/Change-1 (Method 506.6 Procedure I,II,III) MIL STD 810 H (Method 506.6 Procedure I,II,III) MIL STD 810 H w/Change-1 (Method 506.6 Procedure I,II,III
Mechanical, Electrical, Electronic Systems and Subsystems	Salt Fog Test Chamber-1 Dimensions: 1200x1200x600 mm Temperature: +25 °C / +47 °C Chamber-2 Dimensions: 2000x1000x600 mm Temperature: +25 °C / +47 °C	MIL STD 810 G (Method 509.5) MIL STD 810 G w/Change-1 (Method 509.6) MIL STD 810 H (Method 509.7) MIL STD 810 H w/Change-1 (Method 509.8)
Mechanical, Electrical, Electronic Systems and Subsystems	Solar Radiation Test Chamber-1 Dimensions: 6000x4000x4000 mm Chamber-2 Dimensions: 1000x1000x1000 mm	MIL STD 810 G (Method 505.5 Procedure I,II) MIL STD 810 G w/Change-1 (Method 505.6 Procedure I,II) MIL STD 810 H (Method 505.7 Procedure I,II) MIL STD 810 H w/Change-1 (Method 505.7 Procedure I,II)

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Mechanical, Electrical, Electronic Systems and Subsystems	Humidity Test Chamber-1 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98% Max. Chamber-2 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98% Max. Chamber-3 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98% Max. Chamber-4 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98% Max. Chamber-5 Dimensions: 1000x1000x1000 mm Temperature: -70 °C / +150 °C Humidity: 98% Max. Chamber-6 Dimensions: 1300x2000x2600 mm Temperature: -65 °C / +100 °C Humidity: 98% Max. Chamber-7 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max. Chamber-8 Dimensions: 6000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max. Chamber-9 Dimensions: 9500x4900x5000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max. Chamber-10 Dimensions: 12000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max. Chamber-11 Dimensions: 15000x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max. Chamber-12 Dimensions: 21500x4900x4000 mm Temperature: -45 °C / +80 °C Humidity: 98% Max.	MIL STD 810 G (Method 507.5 Procedure I,II) MIL STD 810 G w/Change-1 (Method 507.6 Procedure I,II) MIL STD 810 H (Method 507.6 Procedure I,II) MIL STD 810 H w/Change-1 (Method 507.6 Procedure I,II)
Mechanical, Electrical, Electronic Systems and Subsystems	Sand and Dust Test Chamber-1 Dimensions: 12000x12000x6000 mm Chamber-2 Dimensions: 2000x2000x1700 mm	MIL STD 810 G (Method 510.5 Procedure I,II) MIL STD 810 G w/Change-1 (Method 510.6 Procedure I,II) MIL STD 810 H (Method 510.7 Procedure I,II) MIL STD 810 H w/Change-1 (Method 510.7 Procedure I,II)

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Website : www.stest.com.tr

Mechanical, Electrical, Electronic Systems and Subsystems	Icıng/Freezing Test Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-9 Dimensions: 9500x4900x5000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-10 Dimensions: 12000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-11 Dimensions: 15000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-12 Dimensions: 21500x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	MIL STD 810 G (Method 521.3) MIL STD 810G w/Change-1 (Method 521.4) MIL STD 810 H (Method 521.4) MIL STD 810 H w/Change-1 (Method 521.4)

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Mechanical, Electrical, Electronic Systems and Subsystems	Vibration Test 50 kN Shaker Rated Random/Sine Force: 50 kN Rated Shock Force 100/150 kN Usable Frequency 5-2700 Hz Maximum Velocity: 2/2,5 m/s Maximum Acceleration: 900 m/s^2 Maximum Payload: 800 kg Rezonans Frequency: 2300 ±%5 Hz Maximum Diplacement: 76 mm Test Axis: X,Y,Z Table Dimensions: 700x700 mm 10 kN Shaker Rated Random/Sine Force: 10 kN Rated Shock Force 20 kN Usable Frequency 5-3000 Hz Maximum Velocity: 1,8 m/s Maximum Acceleration: 1000 m/s^2 Maximum Payload: 300 kg Rezonans Frequency: 2400 ±%5 Hz Maximum Diplacement: 51 mm Test Axis: Z Table Dimensions: 700x700 mm	MIL STD 810 G (Metod 514.6) MIL STD 810 G w/Change-1 (Metod 514.7) MIL STD 810 H (Metod 514.8) MIL STD 810 H w/Change-1 (Metod 514.8)
Mechanical, Electrical, Electronic Systems and Subsystems	Shock Test 50 kN Shaker Rated Random/Sine Force: 50 kN Rated Shock Force 100/150 kN Usable Frequency 5-2700 Hz Maximum Velocity: 2/2,5 m/s Maximum Acceleration: 900 m/s^2 Maximum Payload: 800 kg Rezonans Frequency: 2300 ±%5 Hz Maximum Diplacement: 76 mm Test Axis: X,Y,Z Table Dimensions: 700x700 mm 10 kN Shaker Rated Random/Sine Force: 10 kN Rated Shock Force 20 kN Usable Frequency 5-3000 Hz Maximum Velocity: 1,8 m/s Maximum Acceleration: 1000 m/s^2 Maximum Payload: 300 kg Rezonans Frequency: 2400 ±%5 Hz Maximum Diplacement: 51 mm Test Axis: Z Table Dimensions: 700x700 mm	MIL STD 810 G (Metod 516.6) MIL STD 810 G w/Change-1 (Metod 516.7) MIL STD 810 H (Metod 516.8) MIL STD 810 H w/Change-1 (Metod 516.8)
Mechanical, Electrical, Electronic Systems and Subsystems	Low Pressure (Altitude) Length: 1500 mm Diameter: 1300 mm Temperature Range: -45 °C / + 80 °C Humudity: Maximum %98 rh Pressure: Ambient Pressure to 40 mbar	MIL STD 810 G (Metod 500.5) MIL STD 810 G w/Change-1 (Metod 500.6) MIL STD 810 H (Metod 500.6) MIL STD 810 H w/Change-1 (Metod 500.6)

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Mechanical, Electrical, Electronic Systems and Subsystems	Temperature Shock Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	MIL STD 810 G (Method 503.5 Procedure I,II,III) MIL STD 810 G w/Change-1 (Method 503.6 Procedure I,II,III) MIL STD 810 H (Method 503.7 Procedure I,II,III) MIL STD 810 H w/Change-1 (Method 503.7 Procedure I,II,III)

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Marine Navigation and Radio Communication Equipment and Systems	Dry Temperature Range Testi Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-9 Dimensions: 9500x4900x5000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-10 Dimensions: 12000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-11 Dimensions: 15000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-12 Dimensions: 21500x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	TS EN 60945 EN 60945 IEC 60945 Clause 8.2

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Marine Navigation and Radio Communication Equipment and Systems	Wet Temperature Range Testi Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-9 Dimensions: 9500x4900x5000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-10 Dimensions: 12000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-11 Dimensions: 15000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-12 Dimensions: 21500x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	TS EN 60945 EN 60945 IEC 60945 Clause 8.3

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Marine Navigation and Radio Communication Equipment and Systems	Low Temperature Test Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-9 Dimensions: 9500x4900x5000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-10 Dimensions: 12000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-11 Dimensions: 15000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-12 Dimensions: 21500x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	TS EN 60945 EN 60945 IEC 60945 Clause 8.4

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Marine Navigation and Radio Communication Equipment and Systems	Thermal Shock Test Chamber-1 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-2 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-3 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-4 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-5 Dimensions: 1000x1000x1000 mm Temperature Range: -70 °C / +150 °C Humudity: Maximum %98 Chamber-6 Dimensions: 1300x2000x2600 mm Temperature Range: -65 °C / +100 °C Humudity: Maximum %98 Chamber-7 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-8 Dimensions: 6000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-9 Dimensions: 9500x4900x5000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-10 Dimensions: 12000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-11 Dimensions: 15000x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98 Chamber-12 Dimensions: 21500x4900x4000 mm Temperature Range: -45 °C / +80 °C Humudity: Maximum %98	TS EN 60945 EN 60945 IEC 60945 Clause 8.5
Marine Navigation and Radio Communication Equipment and Systems	Drop Test	TS EN 60945 EN 60945 IEC 60945 Clause 8.6

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Marine Navigation and Radio Communication Equipment and Systems	Vibration (All Ewipment Category) Test 50 kN Shaker Rated Random/Sine Force: 50 kN Rated Shock Force 100/150 kN Usable Frequency 5-2700 Hz Maximum Velocity: 2/2,5 m/s Maximum Acceleration: 900 m/s^2 Maximum Payload: 800 kg Rezonans Frequency: 2300 ±%5 Hz Maximum Diplacement: 76 mm Test Axis: X,Y,Z Table Dimensions: 700x700 mm 10 kN Shaker Rated Random/Sine Force: 10 kN Rated Shock Force 20 kN Usable Frequency 5-3000 Hz Maximum Velocity: 1,8 m/s Maximum Acceleration: 1000 m/s^2 Maximum Payload: 300 kg Rezonans Frequency: 2400 ±%5 Hz Maximum Diplacement: 51 mm Test Axis: Z Table Dimensions: 700x700 mm	TS EN 60945 EN 60945 IEC 60945 Clause 8.7
Marine Navigation and Radio Communication Equipment and Systems	Rain and Spray Test Chamber-1 Dimensions: 1000x1000x1000 mm Chamber-2 Dimensions: 13000x5250x5000 mm	TS EN 60945 EN 60945 IEC 60945 Clause 8.8
Marine Navigation and Radio Communication Equipment and Systems	Immersion Test Chamber-1 Dimensions: 1500x1500x1500 mm Chamber-2 Dimensions: 2000x1000x1500 mm	TS EN 60945 EN 60945 IEC 60945 Clause 8.9
Marine Navigation and Radio Communication Equipment and Systems	Solar Radiation (Portable Equipment) Test Chamber-1 Dimensions: 6000x4000x4000 mm Chamber-2 Dimensions: 1000x1000x1000 mm	TS EN 60945 EN 60945 IEC 60945 Clause 8.10
Marine Navigation and Radio Communication Equipment and Systems	Oil Resistance (Portable Equipment) Test	TS EN 60945 EN 60945 IEC 60945 Clause 8.11
Marine Navigation and Radio Communication Equipment and Systems	Corrosion (Salt Fog) (All Equipment Cetgory) Test Chamber-1 Dimensions: 1200x1200x600 mm Temperature Range: +25 °C / +47 °C Chamber-2 Dimensions: 2000x1000x600 mm Temperature Range: +25 °C / +47 °C	TS EN 60945 EN 60945 IEC 60945 Clause 8.12

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Electrical,Electronic and IT Products and Devices

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requırements For The Control Of Electromagnetıc Interference Characterıstıcs Of Subsystems And Equıpment Conducted Emission Test (Power Lines) (CE 102) (10 kHz-10MHz)	MIL STD 461 E MIL STD 461 F MIL STD 461 G
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requırements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Conducted Emission Tests (CE 101)	MIL STD 461 E MIL STD 461 F MIL STD 461 G Clause 5.4
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requırements For The Control Of Electromagnetıc Interference Characterıstıcs Of Subsystems And Equıpment Conducted Susceptibility Tests (CS 118) (ESD)	MIL STD 461 G Clause 5.16
Earth-moving and building construction machinery	Earthmoving and building construction machinery - Electromagnetic compatibility between machine and internal electrical Power supply (EMC) - Section 1 : General EMC requirements under typical electromagnetic environmental conditions Emission Test with Narrow Band Radiation Path Emission Test with Narrow Band Radiation Path	TS EN ISO 13766-1 Clause 4.2 CISPR 12 CISPR 25
Earth-moving and building construction machinery	Earthmoving and building construction machinery - Electromagnetic compatibility between machine and internal electrical Power supply (EMC) - Section 1 : General EMC requirements under typical electromagnetic environmental conditions Emission Test with Narrow Band Radiation Path Emission Test with Broad Band Radiation Path	TS EN ISO 13766-1 Clause 4.3 CISPR 12 CISPR 25
Earth-moving and building construction machinery	Earthmoving and building construction machinery - Electromagnetic compatibility between machine and internal electrical Power supply (EMC) - Section 1 : General EMC requirements under typical electromagnetic environmental conditions Emission Test with Narrow Band Radiation Path Immunity Test by Radiation Path	TS EN ISO 13766-1 Clause 4.4 ISO 11451-1 ISO 11451-2
Earth-moving and building construction machinery	Earthmoving and building construction machinery - Electromagnetic compatibility between machine and internal electrical Power supply (EMC) - Section 1 : General EMC requirements under typical electromagnetic environmental conditions Emission Test with Narrow Band Radiation Path Electrostatic Discharge Immunity Tests (ESD)	TS EN ISO 13766-1 Clause 4.8
Earth-moving and building construction machinery	Earthmoving and building construction machinery - Electromagnetic compatibility between machine and internal electrical Power supply (EMC) - Section 1 : İşlevsel güvenlik için ilave EMC gerekleri Immunity Test by Radiation Path	TS EN ISO 13766-2
Earth-moving and building construction machinery	Earth-moving and building construction machinery - Electromagnetic compatibility (EMC) of machines with internal electrical power supply - Part 2: Additional EMC requirements for functional safety	TS EN ISO 13766-2 Clause 5.2 (Tablo-1 Absorber-lined chamber test) ISO 11451-2
Maritime navigation and radiocommunication equipment and systems	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	TS EN 60945 EN 60945 IEC 60945 Madde 9 Madde 10

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Road Vehicles	Road vehicles -- Electrical disturbances from conduction and coupling -- Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines	TS ISO 7637-3 ISO 7637-3 Clause 4.5 Capacitive Coupling Clamp (CCC) Method
Road Vehicles	Road vehicles -- Electrical disturbances from conduction and coupling -- Part 2: Electrical transient conduction along supply lines only	TS ISO 7637-2 ISO 7637-2 ECE R10.rev05 Annex 10 ECE R10.rev06 Annex 10
Electromagnetic compatibility	Electromagnetic compatibility (EMC) -- Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	TS EN 61000-4-11 EN 61000-4-11 IEC 61000-4-11
Electromagnetic compatibility (EMC)	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	TS EN 61000-4-8 EN 61000-4-8 IEC 61000-4-8
Electromagnetic compatibility (EMC)	Electromagnetic compatibility (EMC) -- Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	TS EN 61000-4-6 EN 61000-4-6 IEC 61000-4-6
Electromagnetic compatibility (EMC)	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	TS EN 61000-4-5 EN 61000-4-5 IEC 61000-4-5
Electromagnetic compatibility (EMC)	Electromagnetic compatibility (EMC) -- Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	TS EN 61000-4-4 EN 61000-4-4 IEC 61000-4-4
Electromagnetic compatibility	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test (20 MHz-6 GHz ve 1-3-10-30 V/m)	TS EN 61000-4-3 EN 61000-4-3 IEC 61000-4-3
Electromagnetic compatibility	Electromagnetic compatibility (EMC) -- Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	TS EN 61000-4-2 EN 61000-4-2 IEC 61000-4-2
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation (CS 115)	MIL STD 461 E MIL STD 461 F MIL STD 461 G
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Conducted Susceptibility, Damped Sinusoid Transients, Cables and Power Leads (CS 116)	MIL STD 461 E MIL STD 461 F MIL STD 461 G
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Radiated Emission (Magnetic Field) (30Hz-100kHz) (RE 101)	MIL STD 461 E MIL STD 461 F MIL STD 461 G
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Radiated Emission (Electric Field) (10kHz-18GHz) (RE 102)	MIL STD 461 E MIL STD 461 F MIL STD 461 G
Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Radiated Immunity (Magnetic Field) (30Hz-100kHz) (RS 101)	MIL STD 461 E MIL STD 461 F MIL STD 461 G

Accreditation Scope

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Military Equipment; Electronic, Electrical and Electromechanical Equipment and Subsystems	Requirements For The Control Of Electromagnetic Interference Characteristics Of Subsystems And Equipment Radiated Susceptibility (Electric Field) (Frequency Band at a distance of 1 meter: 10 kHz-18GHz 200 V/m - Field Intensity: 18 GHz-40 GHz 50 V/m) (RS 103)	MIL STD 461 E MIL STD 461 F MIL STD 461 G

This document has been signed by Gülden Banu Müderrisoğlu with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Mechanical Products

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Air Conditioning (Cooling) Systems	ATP Cooler Device Type Test (Class C Cooling) Electric Motor Running (Electric Motor: rpm) Vehicle Engine at Idle Speed (Vehicle Engine: 1000 rpm) Vehicle Engine at Maximum RPM (Vehicle Engine: 2400 rpm)	ATP Handbook 2020 ATP Handbook 2021 TS EN 16440-1
Air Conditioning (Cooling) Systems	Insulated Equipment Test	ATP Handbook 2020 ATP Handbook 2021 TS EN 16440-1 Clause 4.2.1 ve Clause 4.2.2.

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Vehicles

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Automotive	Emission Test by narrowband radiation	ECE R10.rev05 Annex 5 ECE R10.rev06 Annex 5 2005/83/EC 2004/104/EC 2014/30/EC 95/54/EC 72/245/EEC 72/245/AT AB 167/2013 AB 168/ 2013 AB 2018/858 EU 2015/208 Ek-15 CISPR 12 CISPR 25
Automotive	Emission Test with Broad Band Radiation Path	ECE R10.rev05 Annex 4 ECE R10.rev06 Annex 4 2005/83/EC 2004/104/EC 2014/30/EC 95/54/EC 72/245/EEC 72/245/AT AB 167/2013 AB 168/ 2013 AB 2018/858 EU 2015/208 Ek-15 CISPR 12 CISPR 25

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Automotive	Immunity Test by Radiation	ECE R10.rev05 Annex 6 ECE R10.rev06 Annex 6 2005/83/EC 2004/104/EC 2014/30/EC 95/54/EC 72/245/EEC 72/245/AT AB 167/2013 AB 168/ 2013 AB 2018/858 EU 2015/208 Ek-15 ISO 11451-2
Auto Parts (Electrical / Electronic Units - ESA)	Emission Test with Broad Band Radiation Path	ECE R10.rev05 Annex 7 ECE R10.rev06 Annex 7 2004/104/EC 2014/30/EC 72/245/AT
Auto Parts (Electric / Electronic Subunits - ESA)	Emission Test with Narrow Band Radiation	ECE R10.rev05 Annex 8 ECE R10.rev06 Annex 8 2004/104/EC 2014/30/EC 72/245/AT
Auto Parts (Electric / Electronic Subunits - ESA)	Immunity Test by Radiation	ECE R10.rev05 Annex 9 ECE R10.rev06 Annex 9 2004/104/EC 2014/30/EC 72/245/AT

Accreditation Scope

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Automotive electrical / electronic sub-equipment	Motor Vehicles - Provisions on the Confirmation of Vehicles on Radio Parasitic Equipment - All tests	ECE R10.rev05 ECE R10.rev06 2005/83/EC 2004/104/EC 2014/30/EC 95/54/EC 72/245/EEC 72/245/AT AB 167/2013 AB 168/ 2013 AB 2018/858 EU 2015/208 Ek-15
Road vehicles	Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 2: Absorber-lined shielded enclosure	ISO 11452-2
Road vehicles	Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 4: Harness excitation methods (1-400 MHz) Excluded tests: TWC method	ISO 11452-4
Construction and Excavation Machines	Earth-moving machinery - Operator enclosure environment - Part 4: Heating, ventilating and air conditioning (HVAC) test method and performance	ISO 10263-4
Tractors and Self-Propelled Machines for Agriculture and Forestry	Operator enclosure environment - Part 2: Heating, ventilation and air-conditioning test method and performance	ISO 14269-2 AB 2015/208 Ek-17
Construction and Excavation Machines	Earth-moving machinery - Operator enclosure environment - Part 5: Windscreen defrosting system test method	ISO 10263-5
Tractors and Self-Propelled Machines for Agriculture and Forestry	Operator enclosure environment - Part 5: Pressurization system test method	ISO 14269-5
Agricultural Tractors and Self-propelled Sprayers	Protection of the operator (driver) against hazardous substances - Part 1: Cab classification, requirements and test procedures	EN 15695-1 AB 1322/2014 Ek-29

Test
TS EN ISO/IEC 17025
AB-1587-T

STANDART KONTROL VE TEST HİZMETLERİ ANONİM ŞİRKETİ

Accreditation Nr: AB-1587-T
Revision Nr: 03 Date: 11.09.2024

Construction Materials, Products and Buildings

Tested Materials / Products	Name of Test	Testing Method (National, International Standards, In-house Methods)
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Dry Heat (Operational) Test	EN 54-11 Clause 5.7
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Dry Heat (Endurance) Test	EN 54-11 Clause 5.8
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Cold (Operational) Test	EN 54-11 Clause 5.9
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Damp Heat, Cyclic (Operational) Test	EN 54-11 Clause 5.10
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Damp Heat, Cyclic (Endurance) Test	EN 54-11 Clause 5.11
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Damp Heat, Steady State (Endurance) Test	EN 54-11 Clause 5.12
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices SO_2 Corrosion (Endurance) Test	EN 54-11 Clause 5.13
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Shock (Operational) Test	EN 54-11 Clause 5.14
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Impact (Operational) Test	EN 54-11 Clause 5.15
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Vibration, Sinusoidal (Operational) Test	EN 54-11 Clause 5.16
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Vibration, Sinusoidal (Endurance) Test	EN 54-11 Clause 5.17
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Electromagnetic Compatibility (EMC) (Operational) Test	EN 54-11 Clause 5.18
Fire detection and fire alarm systems	Fire detection and fire alarm systems manually operated alarm devices Enclosure Protection Test	EN 54-11 Clause 5.19