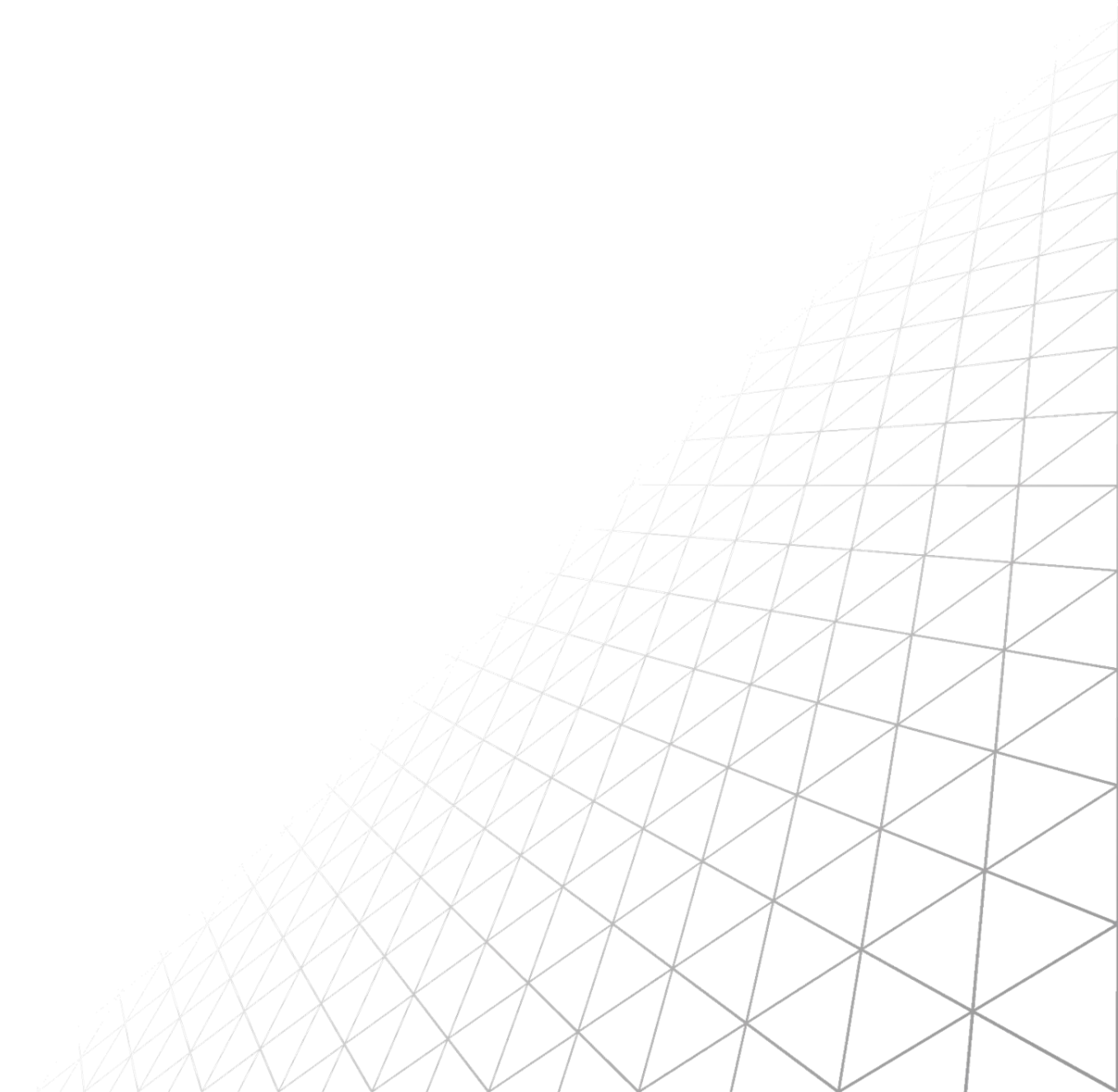




Dt&C

Company Profile



Contents

01 Company Introduction

02 History & Accreditation

03 Business by Industry

04 Service by Category

01

Company Introduction

Introduction

Dt&C is the largest private Testing and Certification company in Korea and the first one listed on **KOSDAQ**.



Name	Dt&C Co., Ltd.
CEO	EupJoon Jung, KiHyeog Nam
Business	Testing & Certification Services
Foundation	2000.10.18
Address	42, Yurim-ro 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042
Employees	261 Staffs (As of JUN 2022)
Web	www.dtnc.co.kr



Vission & Mission

Make a better world through challenge for the future and technology

We provide the best Testing & Certification Service in Korea and will increase the value of product safety and reliability.



Vision

Asia's most valuable testing
and certification agency



Mission Statement

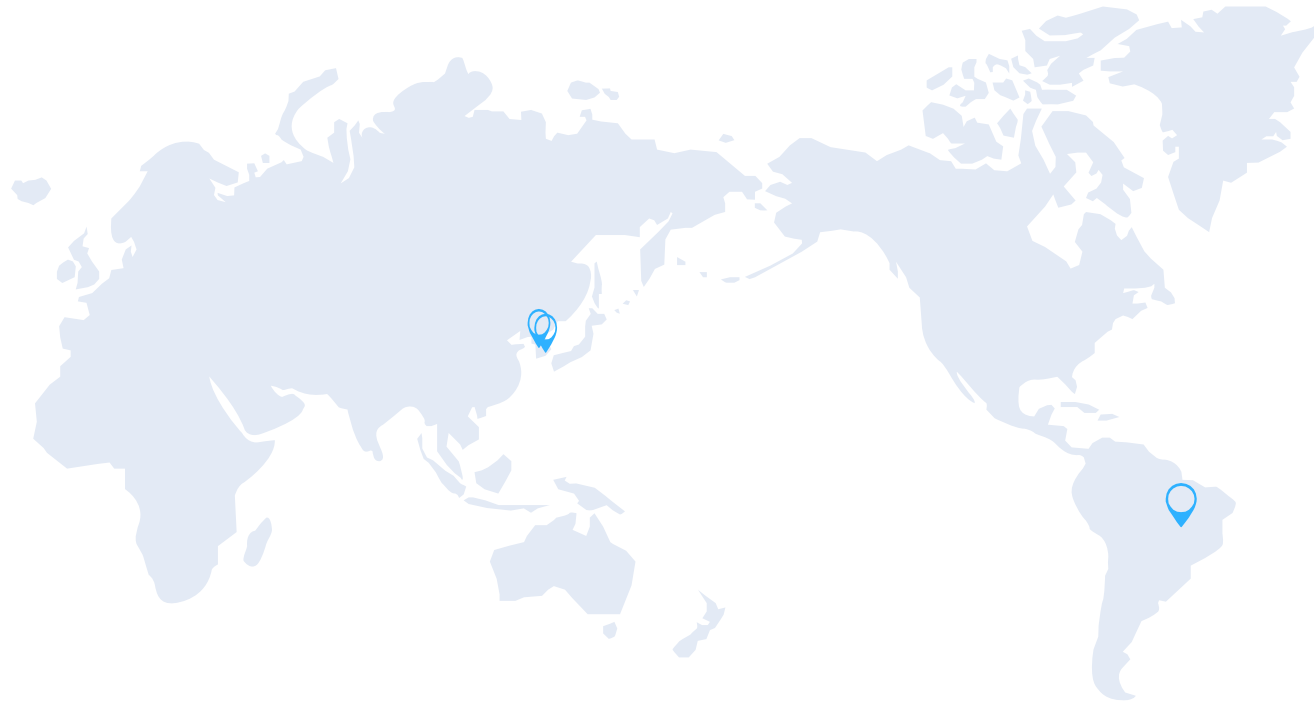
Provide the solution and maximize the
product value through R&D for new field.



Movement

Creative, Passion,
Friendship and Movement

Network



■ Headquarters

42, Yurim-ro, 154 beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, KOREA

■ BUSAN Branch

Leaders Bldg 602, 241, Gyedong-ro, Gimhae-si, Gyeongsangnam-do, Korea, 51004

■ Brazil Joint Venture

Rua Maestro Manuel Da Silva, 85 Santa Genebra, Campinas, Brazil



Electrical Electronics



Testing & Certification



Testing & Certification



Software V&V and Development

Biotechnology



Non-Clinical, Toxicity Test,
Bioequivalence, Clinical (Phase I)



Contract Research Organization



Central Lab for Clinical Trial
(JV with Chung-Ang University)

Financial Services



Venture Capital

Global



Software V&V,
Automotive Testing
(JAPAN)



Testing & Certification
(Vietnam)

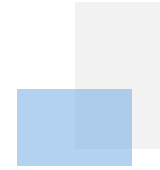


Testing & Certification
(China)

02

History & Accreditation

History



2000 -

Establishment (Digital EMC)

Designated by the Ministry of Information and Communication, Korea (EMC/SAR/RF)

Certification of a Laboratory by 美FCC ,SAR/EUR, R&TTE, TCB

2006 -

**10M Full Chamber completed
(Korea's 1st Private Institute)**

Certification Body of Uzbek Standard(GOST)

KOLAS Accredited Testing laboratory

IECEE CBTL

HDMI Authorized Testing Center (ATC)

2011 -

Automotive Component Test Set-up

Designated as a medical device testing organization (MFDS)

The mobile communication terminal test system, patent registration (Article No. 10-1381943)

Listed on KOSDAQ

2016 -

Korea Register of Shipping(KR) Testing Laboratory Approved

Accredited by KORSAGE for Nuclear Power

Registered as a test organization for Quality Inspection (CGID) of general products of Korea Hydro & Nuclear Power
Launching Chemical & Failure analysis service

Ministry of Trade, Industry and Energy Efficiency Management & Safety confirmation Test Agency Designated Testing Lab.

Authorized As a OCF Test Lab & Launching IoT Open Lab

Recognized as a testing laboratory by RRA for 5G 3.5, 28GHz(Milimeter wave)

Agreement with KTR for KC Safety Certification Testing Laboratory

Designation of a CA testing laboratory for air purifiers










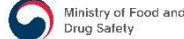



















Registration of qualified suppliers of the Korea Hydro & Nuclear Power Co. and registration of CGID specialized testing institutions(Mechanical)

2020 -

Patent registration for EMC test method (Article No. 10-2083215)

Authorized As Test Lab for FiRa certification (UWB)

Accreditation

<p>RRA Designated Testing lab</p> 	<p>KOLAS Accredited Testing lab</p> 	<p>FCC Accredited Testing Lab</p> 	<p>IC Accredited Testing Lab</p> 	<p>VCCI Registered Testing lab</p> 	<p>TÜV SÜD CARAT Designated Testing lab</p> 
<p>IECEE CBTL</p> 	<p>Standby Power Test , Safety Confirmation, Energy Efficiency Designated Testing Lab</p> 	<p>TÜV Rheinland Designated Testing Lab</p> 	<p>MFDA Medical Device Designated Testing lab</p> 	<p>5GAA Membership</p> 	<p>Noise Level Testing Organization Designated Testing Lab</p> 
<p>Hyundai Motor Designated Testing lab</p> 	<p>KIA Motor Designated Testing lab</p> 	<p>Renault Designated Testing lab</p> 	<p>ISTA Certified Testing Lab</p> 	<p>SZU Designated Testing lab</p> 	<p>Korean Register of Shipping Approval Testing lab</p> 
<p>KoFONS Qualification Agency Certification</p> 	<p>BWMS of Ministry of Oceans and Fisheries Designated Environmental Testing lab</p> 	<p>CGID of Korea Hydro & Nuclear Power Registered Testing lab</p> 	<p>CCC Authorized Testing Agencies</p> 	<p>Accepted as a Sub-IL USCG for BWMS</p> 	<p>OCF Authorized Test Lab</p> 
<p>Ssangyong Designated Testing Lab</p> 	<p>RMRS Recognition of Testing Lab</p> 	<p>General Motors Designated Testing lab</p> 	<p>Bluetooth SIG Test Facility</p> 	<p>Korea Air Cleaning Association Member</p> 	

03

Service by Industry

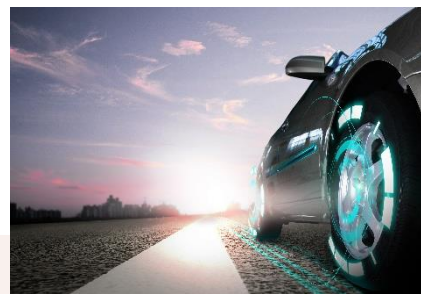
Industry



ICT Equipment
(ICT, IoT, 5G, etc.)



Appliance



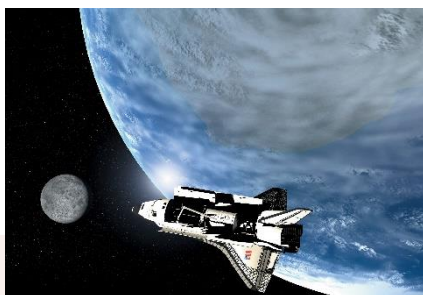
Automotive



Railway



Defense



Aerospace



Vessel



Industrial Equipment



Medical Device



Nuclear Power



Safety



Energy Efficiency



EMC



RF/SAR



Reliability



Chemical & Failure
Analysis



Software V&V



Interface



Global Certification

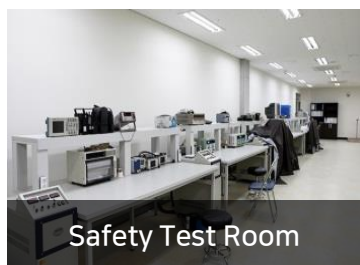
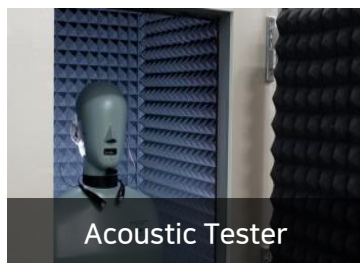
04

Service by Category

Our Service

Electrical Safety

Provide the one-stop solutions for Electrical Safety Certification of Product



Test Scope

ICT Equipment

IEC 60950-1, IEC 62368-1, IEC 60950-22, IEC 62040-1

Appliance

IEC 60335-1,
IEC 60335-2-2, 4, 5, 7, 8, 9, 11, 14, 15, 16, 21, 23, 24, 32, 34, 40, 58, 65, 75, 80, 89, 98,
IEC/KC 60335-2-6, 9, 13, 30, 31, 35, 43, 84

Audio/Video

IEC 60065, IEC 62368-1

Measurement, Control and Laboratory Equipment

IEC 61010-1, IEC 61010-2-010, 020, 040, 051, IEC 61010-2-81, IEC 61010-2-101

Battery

IEC 62133-2, IEC 62133, GB 31241-2014, IEC 61960-3, IEC 62281, UN Manual 38.3, UL 1642, UL 2054, UL 2056, JIS C 8712

Our Service

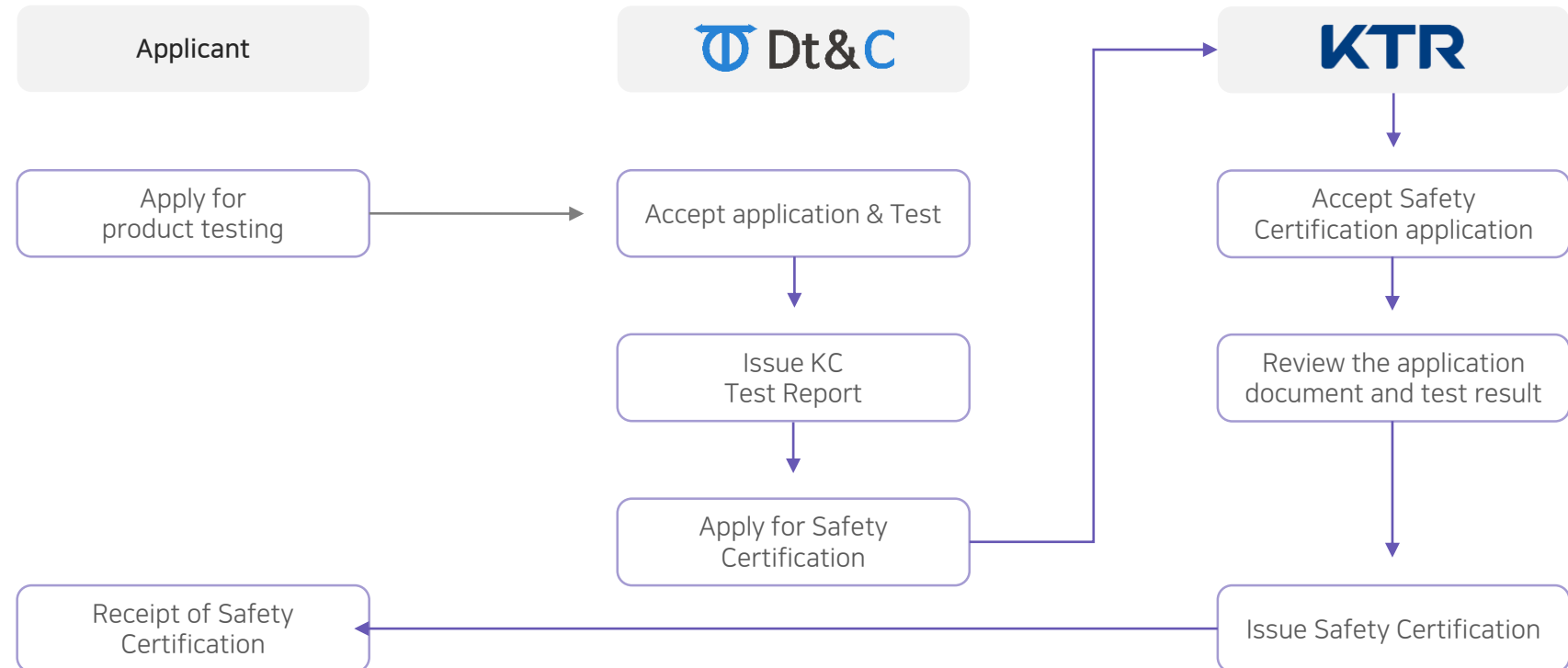
KC Certification

Dt&C has contracted with Korea Testing & Research Institute (KTR) for mutual recognition on safety certification Of product test results. As a first private institute, we provide KC Safety Certification Test Service.

Products

Heating Kitchen appliance, Washing machine & Spin Extractors, hair care equipment, kitchen appliance (A.C.), Electric, calorifier, Electric Dispenser, Refrigerator, Electric Dryer, Electric Heating Appliance, Massage machines, Air conditioner, Fan/Range hood, Appliance for bathroom, DC power supply and so on

Process



Our Service

Air Cleaning

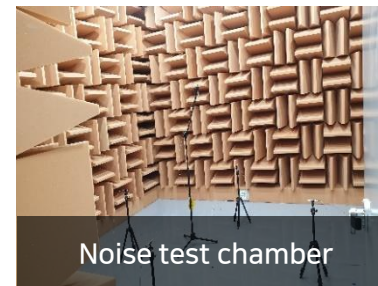
Total Service for securing performance and safety of air-cleaning

Total Service



Air cleaning Field

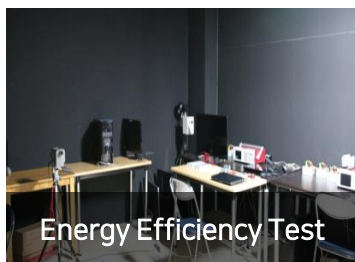
Safety	KC 60335-1, KC 60335-2-65, IEC/EN 60335-1, IEC/EN 60335-2-65
Energy Efficiency	KS C 9314
CA	SPS-KACA002-132
CAC	KACA-CAC 2011



Our Service

Energy Efficiency

Compliance with energy efficiency standards is mandatory for major markets around the world. Accordingly, we provide performance testing services to increase energy efficiency



Energy Efficiency Test



Walk-in Temperature & Humidity Chamber



Freezers for Test Packages



Energy Saving



Standby Power Reduction



Energy Efficiency Rating Labeling



High-efficiency Energy Material



ENERGY STAR



CEC



DOE



NSAC



NRCAN



Energy Labeling



Energy Rating



CEL



ECCJ



Our Service

Electronic EMC

Due to the increase of the electronic devices used in everyday life, EMC Test is an essential to enter the market and we provide the testing services in variety of industry.

Test Scope

ICT Equipment (IT, AV, Etc)

EN 55032, EN 55035, EN 55022, EN 55024, CISPR 32, CISPR 35, CISPR 22, CISPR 24, KN 32, KN 35, VCCI, PART 15b, ICES-003, AS/NZS CISPR 22, ETSI EN 303 345, ETSI EN 303 340, ETSI EN 303 372-2

Wireless Equipment

EN 301 489 Series, KN 301 489 Series

Industrial Equipment

IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, KN 61000-6-1, KN 61000-6-2, KN 61000-6-3, KN 61000-6-4, CISPR 11, KN 11, EN 55011

Appliances

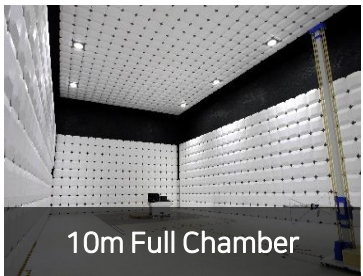
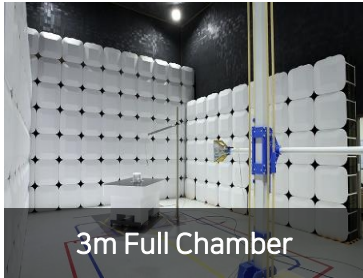
EN 55014-1, EN 55014-2, CISPR 14-1, CISPR 14-2, KN 14-1, KN 14-2, AS/NZS CISPR 14.1

Medical devices

IEC 60601-1-2, IEC 60601-1-4, ISO 80601-2-12, ISO 80601-2-55, KN 60601-1-2, EN 60601-1-2

Other Equipment

Contact



Our Service

RF/SAR

Established the latest test equipment for the first 5G test in Korea and received the first designation from the National Radio Research Agency. We provide differentiated testing & certification services for wireless devices.

SAR 6 Systems

Type:
Dasy 5 & 6 System

Spec.:
300MHz-40GHz

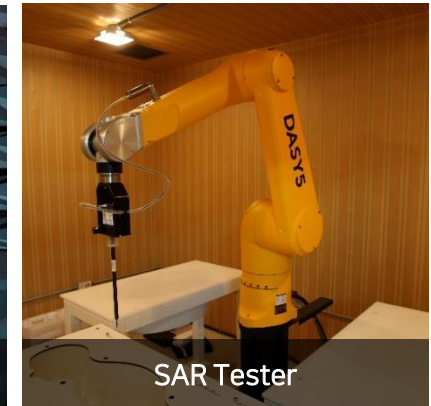
Testing Scope : all test device less 40GHz

RF Conducted Testing Room (x3)

Type:
Spectrum Analyzer, Modulation Analyzer,
Audio Analyzer, Vector signal Generator,
Power Meter, Mobile Simulator, RF Accessories, CATR

Spec:
Max. 325GHz

Testing Scope : all test device less 325GHz



Our Service

IoT & Interface Certification

As the world's first official OCF Testing laboratory, We provide the Interface certification service such as OCF, HDMI, MHL, HDCP, Bluetooth SIC, Mirrorlink.

Service

Supports official certificate testing and Pre-test

- Support for all OCF certification about server/client devices
- Consulting/debugging services on issues during certification testing



IoT Open Lab

The Research Facility supports the development of IoT new devices and service by providing the ecosystem for interoperability and interconnection test with a variety of technical standards and platforms on the Internet of Things (IoT)



Our Service

Global Marketing Access

Global certification support services through a global network with more than 100 organizations in 200 countries.



KOREA	U.S.A	ARGENTINA
EUROPE	CANADA	BOLIVIA
CHINA	ALGERIA	BRAZIL
TAIWAN	BENIN	CHILE
PHILIPPINE	BRUKINA FASO	COLOMBIA
JAPAN	BURUNDI	COSTA RICA
PAKISTAN	CAMEROON	ECUADOR
SINGAPORE	CAPE VERDE	DOMINICA
INDONESIA	CHAD	HONDURAS
MALAYSIA	DKIBOUTI	MEXICO
BRUNEI	GHANA	AUSTRALIA
VIETNAM	GUINEA BISSAU	BAHRAIN
THAILAND	IVORY COAST	JORDAN
CAMBODIA	MOROCCO	KUWAIT
INDIA	NIGERIA	IRAQ
AZERBAIJAN	SOUTH AFRICA	LEBANON
BELARUS	TOGO	OMAN
KAZAKHSTAN	TUNISIA	SAUDI ARABIA
RUSSIA	ZAMBIA	ARAB
UKRAINE		QATAR
SERBIA		

Our Service

Medical Device

More strict international standards are being applied to products since it is directly linked to person's life.

First private medical device testing laboratory by MFDS(The Ministry of Food and Drug Safety)



Standard	
Qualified Specification	KOLAS, IECEE/CB Scheme and MFDS (Korea)
Service Scope	CE, CB, UL (USA), CSA (Canada), MFDS (Korea)
Test Scope	IEC/EN 60601-1, 2, 3, 6, 8, 9, 10, 11, IEC/EN 60601-2-2, 4, 5, 6, 7, 10, 18, 22, 24, 25, 27, 28, 30, 32, 34, 37, 43, 44, 49, 54, IEC/EN 80601-2-60, 62, 63, 65, 66, IEC/EN 61010-1, IEC/EN 61010-1-010, IEC/EN 61010-2-040, IEC/EN 61010-2-101, IEC/EN 62366, ISO 80601-2-12, 55, 56, 61, IEC 60601-1-4
MFDS Scope	General device for medical examination, Surgical device Life support device, Diagnostic device, Medical stimulus generation machine appliance, In vitro diagnostic (IVD) Medical device, U-Healthcare medical device, Hearing aid, Biomedical measuring device, Surgical instrument

Our Service

Automotive EMC

Provide comprehensive total testing service for the automotive according to the fast-paced with advanced Telematics.

Test Scope

CISPR	25
E-Mark	ECE R-10, ECE R-97
ISO Series	ISO 11452-2, 4, 8, 9, ISO 7637-2, 3, ISO 10605, ISO 16750-2
SAE Series	SAE J1113-4, 11, 12, 13, 21, 22, 41, 42
HYUNDAI-KIA	ES96200-00, ES96202-01, ES96100-02, ES95400-10
SSANGYONG	SES E 922
RENAULT	36-00-808/--N
NISSAN	28401NDS02
GENERAL MOTORS	GMW3097
FORD	FMC1278
CHRYSLER	CS-11979
PSA PEUGEOT	B21 7110
VOLVO	REQ-043878
VOLKSWAGEN	TL 81000
BMW	GS 95002-2
Daimler AG	MBN 10284-2
TESLA	TS-0000048-06



BCI (Shield room)



EMS Chamber



EMI Chamber

Our Service

Chemical & Failure Analysis

With our professional and qualified analysis equipment, we offer a variety of solutions and directions for improvement when you face failures.



Scanning Electronic Microscope



X-ray Detector



Auto Cross-section Polisher



Bond & Share Tester



Optical Microscope



Digital Microscope

Test Scope

Semiconductor	V-I Curve Analysis (Open Short Analysis), De-Capsulation Analysis (EOS, ESD, Wire Bond Open etc.), C-SAM Analysis (EMC Delamination Analysis), Cross Section Analysis (Wafer, Wire Bonding, EMC Compound etc.)
PCB	Via Hole Crack Analysis, Pattern Short & Inner Pattern Delamination Analysis, Dendrite Short & Pattern Bunt Analysis, Pattern Defect (De-wetting, Delamination, Black Pad etc.)
Solder-ability	ES 90000-04, MS 184-01 Analysis (Whiskr & Migration etc.), Intermetallic Compound Analysis, Solder Crack & Delamination Analysis, IPC-A610 Solder Defect (Solder Short, De-Wetting, Pin Hole etc.)
Material	Fracture Analysis (Ductile Fracture, Brittle Fracture etc.), Material Analysis (SUS Structure, Aluminum Structure etc.), Grin Boundary Analysis (Iron Carbide, Body Centered Tetragonal Iron etc.)
Automotive Parts	ES 90000-01 Soldering Acceptability Requirements of Electronic Assemblies, ES 90000-02 Specification for delamination criteria of automotive semiconductors, ES 90000-03 PCB Environmental Reliability Specification, ES 90000-04 Environmental Reliability Test Spec. of Lead Free Soldering For Vehicles, ES 900000-05, 06 HALT, HAST Accelerated Stress Test Specification for Automotive Electric/Electronic Units, ES 91500-00,02,03 The Reliability Specification for PCB Connector of Automotive Electronic Device, ES 95400-10 The Reliability Specification for Electronic Assemblies of Automotive Electronic Device, MS Spec Analysis : Solder Paste Material Analysis, Plastic, CCL, VOC Analysis GMW 3172 Solder Intermetallic & Solder-ability Analysis
LED Reliability	AEC Q102, SLES, USCAR 33, PLT(Pulsed Operating Life Test)

Our Service

Reliability – Automotive and MIL-STD, Vessel, Nuclear power and so on.

Testing services are to ensure the Performance in extreme Environments.

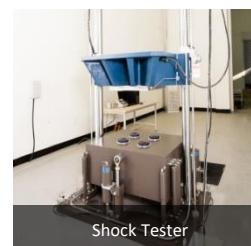
Test Scope	
Environmental Test (MIL-STD-810 & 202 Series)	<div><div>·High/Low Temperature Test</div><div>·Humidity Test</div><div>·Thermal Shock Test</div><div>·Rainfall Test</div><div>·Solar Radiation (Sunshine)</div></div> <div><div>·Altitude Test</div><div>·Salt Spray Test</div><div>·IP (dustproof/waterproof) Test</div><div>·Combined corrosion Test</div></div>
Mechanical Test (MIL-STD-810 & 202 Series)	<div><div>·Vibration Test (Sine, Random, SOR, ROR)</div><div>·Impact Test (Halfsine, Sawtooth)</div><div>·Acceleration Test</div></div> <div><div>·Drop Test</div><div>·Seismic Test</div></div>
Reliability Prediction (MTBF)	It is the test that carried out to achieve reliability in the design and development phase as taking into account the operation conditions and requirements of the product, and to predict and appraise the reliability of hardware (Telecodia SR-332/MIL-STD-217F) such as parts and assemblies.
Accelerated Test	It is the method to evaluate the lifetime of the product in order to secure reliability of development products such as failure rate and degradation pattern analysis as the development cycle is getting shorter compared to the demand for longer lifetime is increasing.
Other Test	<div>·Sand and Dust (Fungus Resistance)</div> <div>·Explosive atmosphere (Explosion Proofness)</div> <div>·Icing·Fluid Susceptibility (Contamination by Fluids)</div> <div>·Performance Test</div>



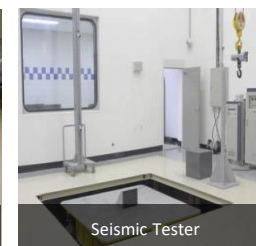
Large Vibration Tester



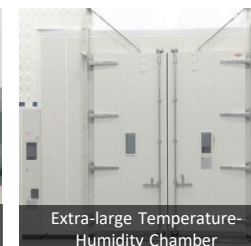
Acceleration Tester



Shock Tester



Seismic Tester



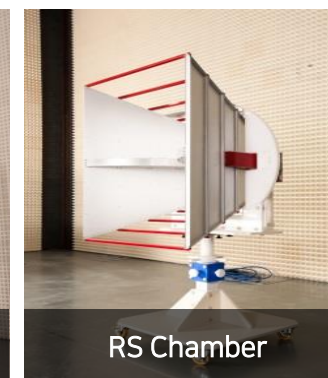
Extra-large Temperature-Humidity Chamber

Our Service

Basic Industry EMC

Nuclear power, Defense, Aerospace, Railway, Vessel, etc.

Facilities	Specification	Size
EMI Chamber#1~4	30Hz ~ 40GHz	8.0*7.0*5.3(L*W*H)
RS Chamber	10kHz ~ 18GHz	8.0*7.0*5.3(L*W*H)
Shield Room	-	6.5*8.0*5.3(L*W*H)



Test Scope	
Defense, Aviation	MIL-STD-461D, MIL-STD-461E, MIL-STD-461F, MIL-STD-461G, MIL-STD-704F, RTCA DO-160G
Nuclear Power	Regulatory Guide 1.180, IEC 61000-4-2
Railway	EN 50121-3-1, EN 50121-3-2, EN 50121-5, IEC62236-3-2, IEC 62236-5
Vessle	IEC 60945, DNV, KR, IEC60533, LR, RS



Our Service

Nuclear Power

Dt&C is the first nuclear equipment qualification laboratory of the Korea Foundation of Nuclear Safety and follows the Nuclear Quality Assurance Program and provide the service with the latest test equipment and professional staff.

Test Scope

CGID, Commercial Grade Item Dedication

CGI Dedication for products to be delivered is performed as a quality class improvement procedure that is performed for the compatibility as a safety related product of nuclear power plant.

EMC Qualification

Environmental Qualification

Performance verification of safety-critical (Class 1E) devices for environmental conditions such as relative humidity, temperature, pressure, and radiation.

- Aging Analysis
- Thermal Aging Test
- Environmental Stress Test
- Thermal Cycling Test

Seismic Qualification

Seismic Qualification verifies whether safety related performance and structural soundness are maintained for the applicable structure in safety related equipment, part and installation position, and vibration and seismic load.

- Seismic Test
- Seismic Analysis
- BSLS (Building Structure Load Summary)





Contact us

42, Yurim-ro 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 17042

www.dtnc.co.kr