### **TOYO** Corporation

1-6, Yaesu 1-chome, Chuo-ku, Tokyo 103-8284, Japan

Head Office	tel +81-(0)3-3279-0771 / fax +81-(0)3-3246-0645
Osaka Branch	tel +81-(0)6-6399-9771 / fax +81-(0)6-6399-9781
Nagoya Branch	tel +81-(0)52-253-6271 / fax +81-(0)52-253-6448
Utsunomiya Sales Office	tel +81-(0)28-678-9117 / fax +81-(0)28-638-5380

### www.toyo.co.jp/english/

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# CORPORATE PROFILE 2022



## **TOYO** Corporation

Quest for Precision

The World's Most Advanced Solutions **Our Vision Helps Shape the Future** 

### Overcome any challenge with our technological expertise and experience

We believe measurement technologies fuel the growth of the world's leading companies and industries. As a leader in measurement technologies, TOYO Corporation provides the world's most advanced solutions. The company is comprised of eight diverse business segments. They align with key growth area trends in information technology, communications, networking, automotive, 5G, cyber security, and medical science. Today we take another giant step into the future to seize the moment that awaits us. Will you take this journey with us?

Provide reliable, accurate, and secure operations for communications

#### Mechatronics / Noise & Vibration / Sensors

Support the automobile, railway, and industrial machinery industries



Support the creation of new and renewable energy infrastructure

#### EMC & Antenna Systems

**Physics / Energies** 



Provide solutions for electromagnetic

### **Our 8 Business Segments**



### **Ocean / Defense & Security**

Market solutions to characterize the world's oceans



#### Software Quality & Productivity

Support improvements in software development



### Life Science / Materials

Offer solutions in the life and materials science fields



#### Security & Lab Company

Apply measurement technologies to cybersecurity products and services

For more details, refer to pages 14 to 17



### **MESSAGE FROM CEO**

## Creating the Future with "Measurement Technologies" **Cutting-edge Measurement Solutions Support Technology Innovations**

As a leading provider of "measurement" solutions, TOYO Corporation has been contributing to technology innovations in diverse industries. Through our variety of business segments - ICT (Information and Communication Technologies), Automobiles, Environment and Energy, EMC (Electromagnetic Compatibility), Ocean Defense and Security, Software Development, Life Science, and Information Security, we provide solutions in Japan and international markets.

Moving onto the next stage, we are on a mission to promote growth strategies by developing high-value-added original products and solutions, focusing on high potential markets in both domestic and overseas, and making strategic investments.

As TOYO's diverse business segments directly contribute to achieving SDGs and making the sustainable society, we remain committed to solve social challenges and enhance corporate value.

Toshiya Kohno President & CEO

### Creating the Future with Measurement Technologies

As a leading company in measurement technologies, contribute to enriching society, and realizing human and earth friendly environments.

Accelerate and support technology innovation by providing the most advanced measurement solutions to the global industrial arena.

Ensure the success and well-being of employees and stakeholders by continuously creating measurement systems, products, and services.

#### Medium-Term Management Plan "TY2024"

TOYO formulated new growth strategies based on three pillars, "business strategy", "financial and capital strategy" and "strengthening our management foundation". As a leading provider of measurement solutions contributing to creating a sustainable society, we enhance corporate value and shareholder returns.

https://www.toyo.co.jp/TY2024 EN



### Corporate Philosophy

### Technology Interface

### **Enhance Corporate Value**

### Action Guidelines

### Be Professional

Take on tasks with integrity and maintain a high degree of dignity and capabilities.

### Be Innovative

Venture into new businesses and technologies with a flexible mindset.





## **Our Approach to Sustainability**

TOYO Corporation practices its Corporate Philosophy in creating a sustainable future, and strives to continuously enhance corporate value.

### **Five Materiality Themes**

	Materiality	Activity Targets	Our Vision
Solving Socia	Contribute to Innovation and Industrial Growth	<ul> <li>Assist Development for Next-Generation Mobility and Telecommunication</li> <li>Accelerate Open Innovation</li> <li>Encourage Leading-edge Technology</li> <li>Reinforce High-quality and High-performance Organization</li> </ul>	In order to realize the society where people live more comfortable life and all social stated in "Society 5.0", technology innovation and industry development are esset technical fields and industries, we continue to support global technology inno development by providing companies and research institutions with complete "measurement" technologies. In addition, through collaborative work with various contribute to innovation by generating unconventional ideas.
Solving Social Issues Through Our Business	D2 Promote Environmental Conservation	•Pursue a Carbon-free Society     •Achieve a Recycle-oriented Society     •Restore Ocean Health	Environmental problems such as climate change and ocean pollution are global sustainably develop our society and businesses, we must preserve our planet's e contribute to promoting environmental conservation by providing solutions such energy development to reduce environmental impact and carefully reducing environment caused by our business activities.
Our Business	Actualize Safe, Secure, and Fulfilling Lives	<ul> <li>Enable Safe and Secure Telecommunication Environment</li> <li>Promote Disaster Management</li> <li>Establish a Safe Mobile Society</li> <li>Contribute to Health Improvement</li> </ul>	Safety and security are essential for us to live in a prosperous society. To achieve the and advanced infrastructure, and the technologies to support it. The solutions of generation mobility development, disaster preparedness, telecommunication infrast medical care, contribute to a safe, secure, and fulfilling lives.
Manager	Foster Diverse and Competitive Talents	Pursue Diversity and Human Rights     Pursue Sustainable Skill Development     Enhance Comfortable Working Environment	As a company committed to technology innovation, securing and developing human professional expertise and flexible perspectives are fundamental to its sustainable Responding to the changes flexibly in human resource environment and enhancing t will support workers with various backgrounds, experiences, and skills, and will creat all workers can exercise their full potential in jobs suited to their abilities.
Management Base	DS Establish a Strong and Sound Management Base	<ul> <li>Maintain and Enhance a Strong and Sound Corporate Governance Structure</li> <li>Develop and Reinforce Risk Management System</li> <li>Ensure Compliance</li> </ul>	For a company to enhance its corporate value in a mid-long-term context, and to needs to establish a strong and sound management base. Our company, in a corporate philosophy and action guidelines, in the long run, will maintain and s successful relationship with various stakeholders, and will construct a strong and system that incorporates appropriate monitoring and supervisory functions.

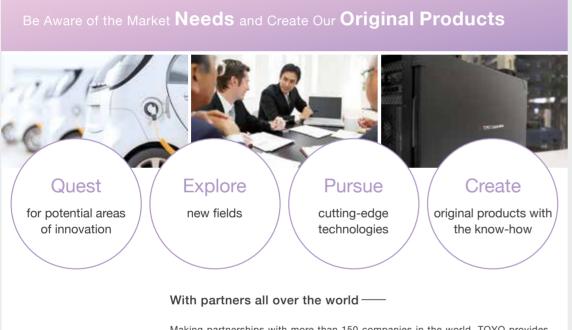


For more information, visit Sustainability page on our website



## **Measurement Solutions Provider**

and know-how of the technologies, we cooperate with partners all over the world and develop original in-house products actively.



Making partnerships with more than 150 companies in the world, TOYO provides cutting-edge measurement technologies. In the changing markets, we keep questing for new technologies in emerging fields and developing our original in-house products. Utilizing our 70 years' experience and skills, we provide new solutions created with our partners.

Solve the Challenges with Our Total Solutions



#### With customers whenever necessary —

We have committed to providing training and consulting supports and highly qualified repair and calibration services, along with delivering products that meet customers' needs. TOYO continues to support our customers as a value-adding partner and solve challenges together.

Facilities that support TOYO's solutions



Technical Research Laboratory Adopt new technologies and develop original products



Keio-TOYO Nano Imaging Center Office for Industry-Academia Collaboration between TOYO and Keio University Central Service Facilities for Research



Operate as a logistics, incoming system inspection, and calibration facility



Calibration Laboratory Provide calibration services as an accredited ISO/IEC 17025 facility





### Support

with technical service



## Provide

best solutions

to meet customers' expectations partner

## **In-house Development** to Create Measurement Solutions

TOYO develops original or customized products to create optimal solutions that would fit customers' needs. "One Technologies Company", an in-house company, actively works on development of highly valued and qualified original products, cooperating with partners and utilizing our technology seeds.

### **Highly Valued and Qualified In-house Products**

We develop original products and integrated system that incorporates several measurement equipment for various fields, leveraging our advanced technologies and many years of experience.





Emissions Measurements & Analysis

3-D Impedance Analysis Software

Automatic EMI Measurement System

Automatic Immunity Measurement System

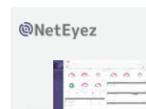
Emissions Measurements and Analysis Software

DDoS Mitigation System

Automatic Motor Torque Measurement System

Software (EPX/RE & EPX/CE)





High Frequency Impedance Measurement System

#### Products Developed/Customized by TOYO

- High Frequency Impedance Measurement System
- LC Material Characteristics Measurement System
- Hall Effect Measurement System
- Ferroelectric Substance Evaluation System
- Fuel Cell Test System
- Multi-Channel Self Discharge Measurement System



Packet Capture/Analysis System

Network Monitoring System (NetEvez)

- EMI Mitigation Assistance Software
- Packet Capture/Analysis System
- Network Monitoring System
- Autonomous Vehicle Testing Ecosystem

### "One Technologies Company" with an Eye on the World

One Technologies Company is an in-house company that develops and commercializes products built on TOYO's Intellectual Property. The company develops unique, innovative, high-value, and high-quality proprietary products.

As a technology innovator in the measurement technologies space, we aim to provide products and solutions that are "Only One" and "Number One" in the world.

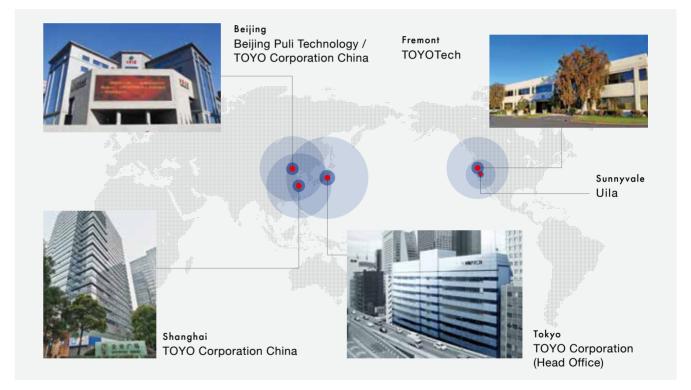


## **Advanced Measurement Solutions** for the Global Market

TOYO exports its original products to large markets in the world, aiming to expand its sales network. Operating subsidiaries in the US and China, we expand our sales areas to Asia and Europe. We focus on developing products and services especially for emerging fields and exporting them to the world.

### **Business Operations Extending Around the World**

We operate business locations in the US, where R&D on autonomous driving is in progress, and in China, where R&D investments are expanding.



### Aggressive Entry into New and Emerging **Technology Fields**

TOYO focuses on new and emerging measurement technologies such as 5G (5G mobile communications system) and CASE (connected, autonomous driving, sharing, and electrification), and develops solutions sought out by customers.



## **TOYO's Connection with Society**

TOYO's solutions contribute to creating a better society. Although you may not see them or sense us, they are there; we are there. Here are just a few examples.



Environment



SOCIE

For more information, visit "TOYO in SOCIETY" page on our website Education

Supporting the development of teaching materials for engaging science classes

- Innovation in school with IoT (Internet of Things) teaching materials



Imaging technologies supporting diagnostic imaging at medical sites

cancer diagnosis



"KG-walk" measures walking movements to prevent pre-symptomatic state

Supporting "Karuizawa Health Checkup aiming to extend healthy life expectar

5003



TOYO's ocean measurement technology contributed to the Relics excavations

- Ertuğrul, the cornerstone of the bonds between Japan and Turkey



Participation in the 61st Japanese Antarctic **Research Expedition** 

- Contributing to the seafloor topographic survey by SHIRASE

### Science



Supporting preliminary stone material analysis of the "Hayabusa2"

- Analyzing the sample of Asteroid Ryugu

### Disaster Prevention & Recovery

Disaster prediction by observing radio waves from space

- Observing the Earth with radio telescopes



- Advanced measurement technology behind the prize

**Culture & Sports** 

"KG-wear" analyzes human movements

- KG-wear improves personal health

Disaster Prevention & Recovery

Recovery efforts in the areas affected by the Great East Japan Earthquake

- What could we do then?



Provide reliable, accurate. and secure operations for communications

Information and communication technology (ICT) is used not only for communication between people and organizations, but also for social infrastructure support and connected cars, among many other things. To ensure high quality, reliable, and secure communications, we provide a wide range of advanced solutions that meet the latest technological standards, including test systems and analysis/ monitoring systems.

"KnowBe4

Security Awareness Training and

Phishing Simulati



"Spirent TestCenter Next-Generation Network Performance Teste



■ Ultra High Speed IP Network Performance Test Solution (400G/200G/100G) | High Speed Packet Capture & Analysis Systems (100G/40G/25G/10G/1G)

Mobile Network/Wireless Performance Test & Analysis Solution | = 5G/Local 5G Solution (Survey, Design Simulation, Network Test Emulation, Time Synchronization) Precision Time Synchronization Solution | Virtual Environment Monitoring & Visualization & Performance Test Solution

Security Diagnosis & Testing & Education & Solution (Security Performance & Diagnostic service, Security awareness Training, Penetration Testing, Vulnerability Management, Fuzzing) Autonomous Driving Measurement Solution (In-Vehicle Ethernet, V2X, OTA, Security)



**Mechatronics / Noise** & Vibration / Sensors

Support automobiles, railways, and industrial machinery

We provide equipment and solutions used in R&D work in the areas of "performance (operability, ride comfort, etc.)," "noise and vibration," and "safety and durability" for the transportation and industrial machinery sectors. The equipment and solutions support the measurement, analysis, and management of experimental data required for the development of automobiles, railways, and industrial machinery. We also offer a variety of R&D solutions to support autonomous and electric vehicle development.







Torque Measurement System

Noise and Vibration Analysis System

Sensors for Acceleration Acoustics, Force, Load and Pressure

SVNESIS High Speed Packet Capture/

Analysis System

Accelerometers/Impact Hammers | Microphones/Particle Velocity Sensors | Magnetostrictive Linear Position Sensors | Torque Meters/Brake Systems

- Evaluation Tools for AD/ADAS Development | Real Video Drive Player | Intelligent DAQ for CAN bus and analog signal
- Noise and Vibration/Displacement/Temperature/Speaker Measurement & Analysis Tools | Design/Simulation/Measurement Data Analysis Software

Resource/Data Management Software

**Physics / Energies** 

Support the creation of new and renewable energy infrastructure

The measurement technologies of TOYO are used in energy infrastructure. The energy vertical is experiencing dramatic changes with considerable efforts made in the fields of renewable energy and electric vehicles. TOYO provides high-precision measurement and evaluation systems to enable basic research on materials and devices like power semiconductors and organic electronics. Our technologies also support the development of batteries and power inverters.



"SP-300" Electrochemical Measurement Syster

Products

 Secondary Battery Evaluation Systems = Electrochemical Measurement Systems = Fuel Cell Evaluation Systems = Semiconductor Material Evaluation Systems Ultra Low Temperature Sensors And Measurement Systems | Magnetic Material/Magnetic Field Measurement Systems | Ferroelectric Material Evaluation Systems Charging Analyzers/Simulators for Electric Vehicles | 
General-purpose Measurement Instruments/Power Supplies | 
Liquid Crystal Characteristic Measurement Systems

Provide solutions for electromagnetic environments

((•#

**EMC & Antenna Systems** 

TOYO has been supporting EMC (Electromagnetic Compatibility) compliance testing for more than 40 years and offers a variety of solutions that involve electromagnetic waves. Our measurement systems and test equipment have supported the development of electronic equipment such as automobiles, information and communication equipment, and medical equipment. We provide OTA (Over the Air) measurement systems for 5G and connected vehicles. We install, support, and maintain large parabolic antenna ground systems and have been doing so for more than 30 years.



EMI Measurement System developed by TOYO

Products

 EMC Measurement Systems | RF Power Amplifiers | EMI Test Receivers | EMC Measurement Software | Antenna/OTA Measurement Systems Automotive Radar Target Simulator (ARTS) = 5G Mobile Compact Antenna Test Range Antenna Systems for Ground Stations Radomes = Hydrogen Masers

Products





"ResiTest8400 Hall Measurement System



"EVCA series EV Charging Analyzer/Simulator







Wireless Communication Performance Measurement System for Connected Vehicles



Large Parabolic Antenna Systems for Ground Stations



Propose solutions to characterize the world's oceans from the surface to the bottom

"Measure the Ocean" to us means that we enable mapping engineers to survey the ocean from top to bottom. We accomplish this by delivering sea surface/undersea/seafloor observation equipment, underwater drones, and underwater data communication instruments. These technologies support the fishery, defense, and offshore wind power industries in Japan - an island nation.



"PicoPOD+PicoCAT Portable Unmanned Multibeam Survey Boat



"Vigy Observer EO/IR camera for vessels



"SFS2000 High-resolution Parametric Sub-bottom Profiler

#### Products

- Multibeam Echosounders | Acoustic Video Cameras | Underwater Vehicles (ROV/AUV) | Unmanned Surface Vehicles | Sub-Bottom Profilers
- Acoustic Positioning Systems = Inertially-Aided GPS Positioning and Orientation Systems = Hydrographic Survey and Processing Software
- Optronics Sights Fishfinder/Scientific Echosounder



Support improvements in the quality and productivity of software development

We apply measurement technologies to the software development field. From quality improvements to productivity enhancements, we provide products and services that support the software development lifecycle. We supply the latest security solutions for digital transformation (DX) to support the ongoing DX paradigm shift.



Products

Software Configuration Management Tools | Software Reverse Engineering Tools | Software Static Test Tools | Software Dynamic Test Tools

Application Lifecycle Management Tools | Project Management Tools | Vulnerability Static Analysis Tools for Application

■ Web & Mobile APP Testing Tools ■ Software Modeling Tools



Develop cutting-edge solutions in the life and materials science fields

In the life science field, we provide medical and digital solutions such as interpretation support systems for lung and breast cancer detection to help improve the outcomes of patients afflicted with these types of malignancies. In the material science (material evaluation) field, we help improve quality control efforts in R&D for lithium-ion batteries, semiconductors, and electronic components.



Bone Suppression/Compare Systems for Digital Chest X-ray Images

Products

[Life Science] Bone Suppression/Compare Systems for Digital Chest X-ray Images I Interpretation Support Systems for Chest CT Images X-ray Dose Management System | 
 Orthopedic Digital Planning Tools | 
 Medical Image Enhancing Software | 
 Sterilizer for Infectious Waste

[Material Science] = FIB-SEM (Focused Ion Beam Scanning Electron Microscopes) = Micro-CT Systems Hardness and Young's Modulus Measurement Systems | 
 Cantilevers for Scanning Probe Microscopy | 
 Atomic Force Microscopes



Apply measurement technologies to cyber security products and services

"Security & Lab Company" was established as an in-house company to commercialize cybersecurity services. To that end, we partner with some of the world's leading companies to provide application and engineering services. Leveraging the latest IT technologies (cloud, OSS, machine learning, and big data analytics), TOYO strives to deliver unmatched service offerings and value in this area.





DDoS Mitigation System

Products

 DDoS Mitigation System | 
 DPI & Smart Traffic Management | 
 Network Forensics & Incident Handling | 
 Real-Time Threat Indicator Cyber-Threat Intelligence & Dark Web Monitoring |
 Open Caching |
 Cloud Security Platform/Build-in Compliance |
 Home Gateway Security / Secure DNS Threat Intelligence Platform / Gateway







"AMBER X Xe plasma FIB-SEM



"G200X' Nano Indente





DPI & Smart Traffic Management



Network Forensics & Inciden Handling

### CORPORATE DATA

DOMESTIC OFFICES

Technology Interface Center

Tel: + 81-(0)3-3279-0771

Tel: +81-(0)3-6808-0178

Technical Research Laboratory

Keio University Central Service

Keio University, Yagami Campus

Facilities for Research

8522. Japan

Osaka Branch

103-0021, Japan

Kasai Service Center

Japan

Head Office

Registered Name	TOYO Corporation
Head Office	1-6, Yaesu 1-chome, Chuo-ku,
	Tokyo 103-8284, Japan
Date of Establishment	September 4, 1953
Capital	Paid-in: ¥4,158 million
Number of Employees	528 (consolidated) / 493 (non-consolidated)
	*As of September 30, 2021
Stock Exchange Listings	Tokyo Stock Exchange First Section
	(Code: 8151)
Website	https://www.toyo.co.jp/english/

1-6, Yaesu 1-chome, Chuo-ku, Tokyo 103-8284, Japan

1-2, Hongokucho 1-chome, Nihonbashi, Chuo-ku, Tokyo

Hulic Kasai Rinkai Building, 6-4, Rinkaicho 3-chome,

Keio-TOYO Nano Imaging Center Office for Industry-

11-1, Wakamiya, Morinosato, Atsugi, Kanagawa 243-0124,

Academia Collaboration between TOYO Corporation and

3-14-1 Hiyoshi, Kohoku-ku, Yokohama, Kanagawa 223-

Tel: +81-(0)45-566-1690 Fax: +81-(0)45-566-1691

Edogawa-ku, Tokyo 134-0086, Japan

Tel: +81-(0)3-3279-0771 Fax: +81-(0)3-3246-0645

### **EXECUTIVES**

President & CEO Director, Executive VP, CFO Director, Executive VP Director, Senior VP Director, Senior VP Outside Director Outside Director Outside Director Auditor Auditor Auditor Executive Officer, CTO Executive Officer Executive Officer

### Toshiya Kohno Masataka Kashiwa Mitsuru Onodera Noriyuki Kato Yasushi Kumagawa Nobuyoshi Akiyama Yoshiyuki Imabayashi Miyuki Suka Kazuhiko Nozaki Kiyo Morikawa Shigehisa Horinokita Takeo Kiuchi Yoshimichi Imaizumi Masahiko Kawauchi

### **OVERSEAS SUBSIDIARIES**

- TOYO Corporation China
- [Shanghai]

Room 901, Enterprise Square, No.228 Meiyuan Rd, Jing'an District, Shanghai 200070, China Tel: +86-(0)21-6380-9633 Fax: +86-(0)21-6380-9699

[Beijing]

Room 102, Building C, Yeqing Plaza, No.9 Wangjing North Rd, Chaoyang District, Beijing 100102, China Tel: +86-(0)10-6439-2938

- TOYO Corporation International Ltd.
- TOYOTech LLC Fremont Business Park, 42840 Christy St., Ste. 110, Fremont, CA 94538, USA Tel: +1-510-438-9548 Fax: +1-510-438-9653
- Beijing Puli Technology Co., Ltd Room 102, Building C, Yeqing Plaza, No.9 Wangjing North Rd, Chaoyang District, Beijing 100102, China

### **OVERSEAS AFFILIATE**

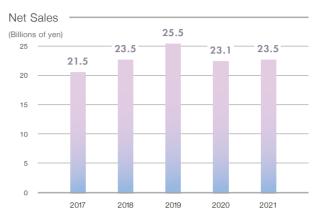
- Shin-Osaka Brick Building, 1-6-1, Miyahara, Yodogawa-ku, Osaka, Osaka 532-0003, Japan Uila, Inc Tel: +81-(0)6-6399-9771 Fax: +81-(0)6-6399-9781 710 Lakeway Drive, Suite #210, Sunnyvale, CA 94085, USA
- Nagoya Branch Nagoya Hirokoji Building, 2-3-1 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan Tel: +81 -(0)52-253-6271 Fax. +81 -(0)52-253-6448

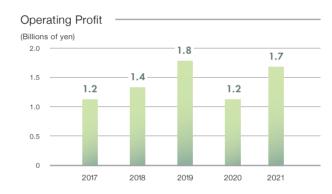
#### Utsunomiya Sales Office

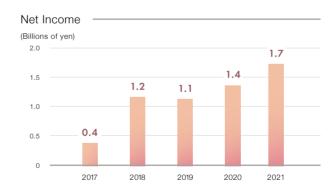
Utsunomiya Otsuka Building, 2-4-3, Higashishukugou Utsunomiya, Tochigi 321-0953, Japan Tel: +81-(0)28-678-9117 Fax: +81-(0)28-638-5380

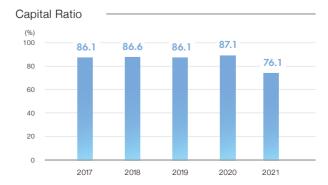
### FINANCIAL HIGHLIGHTS

TOYO Corporation and Consolidated Subsidiaries Years Ended September 30









### **HISTORY**

1953	Established as Kowa Trading Co., Ltd., engaged mainly in import and sales of industrial machinery		
1955	Changed the company name to TOYO Trading Co., Ltd.		
1977	Changed the company name to TOYO Corporation		
1985	Set up Technical Center Listed on the Second Section of the Tokyo Stock Exchange		
1990	Listed on the First Section of the Tokyo Stock Exchange		
2002	Technical Center obtained ISO 9001 certification		
2005	Obtained ISO/IEC 17025 and ISO 14001 certifications		
2007	Set up Calibration Laboratory in Technical Center		
2010	Established TOYO Corporation China in Shanghai		
2014	Set up a branch of TOYO Corporation China in Beijing		
2015	Established TOYOTech LLC in California, USA		
2016	Established Security & Lab Company as an in-house company		
2017	Set up Technical Research Laboratory Established One Technologies Company as an in-house company		
2018	Security & Lab Company obtained ISO/IEC 27001 and ISO/IEC 27017 certifications		
2019	Set up Kasai Service Center		