CORPORATE PROFILE
Canon Tokki develops, manufactures, sells and supports advanced manufacturing equipment that uses vacuum technology to produce cutting-edge OLED displays and electronic devices. Our products support *monozukuri* in the IoT (Internet of Things) era, which achieves a more prosperous society.

OLED displays are being adopted in smartphones and televisions. Canon Tokki was the first company to produce OLED panel manufacturing equipment for research and development systems in the world after noticing its future potential. And we continuously improve and innovate on our equipment to establish it for mass production systems. Over the many years, we contribute towards the release and commercial production of our clients’ next-generation products equipped with cutting-edge OLED displays.

Our mass production equipment, which boasts both high productivity and quality, has received praise for its high level of expertise and unquestionable reliability due to its performance, and has established a dominant position for itself that can be said to be the current industry standard as it takes the lead among such equipment in the world.

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**Bringing cutting-edge technology closer and providing more comfort for a more prosperous society.**

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**Leads the world as the industry standard**

High level of expertise and unquestionable reliability
CEO Message

To contribute to a more abundant society by continually providing special value with superior, cutting-edge proprietary technology

Chairman and CEO
Canon Tokki Corporation
Toshifumi Tsuchiya

The term “tokki” in our company name, Canon Tokki, is short for “special equipment” in Japanese. Since its foundation in 1967, the company has taken on new challenges amid constantly changing times and pursued “special” value for our customers, thus the company name. Now, we are aiming to provide special value in the form of manufacturing systems and related services with sophisticated, cutting-edge proprietary technologies and help our industry succeed, by using our core competence in manufacturing system integration in the equipment manufacturing field based on vacuum process technology. Our corporate social mission is to contribute to a more abundant society through this business.

Above all, we saw a potential in OLED display around 1993, just when the OLED display market was created, and we took on the challenge of inducing technological innovation to create the world’s first OLED display manufacturing equipment. We have made many improvements to the equipment to meet the diverse needs of our clients and surpassed other companies with a high level of expertise and reliability that we have accumulated over the years. Our still-evolving OLED display manufacturing equipment has now become our flagship product that is regarded as the standard in the global market.

There is a growing trend now to use OLED as the next-generation display for smartphones and TVs, and more innovative products are expected to come out for various applications that utilize OLED’s features. We will continue to expand our business in this field and contribute to the success of the OLED market.

We will also focus on the initiatives of using our accumulated expertise and experience for other applications of existing technologies and create new core businesses through research and development of new technologies to achieve sustainable growth with a well-balanced business structure.

As a company operating under the Canon Group’s corporate philosophy of kyosei, Canon Tokki also aims to be the best, most-trusted, most-supported partner for our customers and all our other stakeholders. To this end, we will strive to fulfill our corporate mission, while always acting with high ethical standards, and contribute to the realization of a more abundant society.

Finally, I would like to thank you for your continued support, cooperation, and encouragement.

Corporate Mission
To contribute to a more abundant society by continually providing “special value” with superior, cutting-edge proprietary technology

Our corporate mission is based on the enterprising mindset symbolized in the company name; the “tokki” of Canon Tokki is short for “special equipment” in Japanese. Since its foundation, the company has taken on new challenges amid constantly changing times and pursued special value for our customers. Canon Tokki has aimed to build a more abundant society through industrial development by providing special value in the form of manufacturing systems and related services with sophisticated, cutting-edge proprietary technologies that help raise productivity at manufacturing sites. Canon Tokki will, as a Canon Group company, continue to strive to fulfill our corporate mission, with a priority on compliance and high ethical standards, and contribute to the realization of a more abundant society as well as endeavor to attain lasting growth and prosperity for the company and all our employees.

Vision
A leading company in the manufacturing equipment field
Continuing to be your best, most-trusted, most-supported partner

We aim to be a leading, continuously growing company in the manufacturing equipment field as your best, most-trusted, and most-supported partner for our customers and all our other stakeholders who sustain the company and generate new value with us, by continually providing innovative, high-added-value products that delight customers around the world together with the world’s best technology and quality and our consummate service system.

Values and Guiding Principles

1. Activeness & Enterprise
We actively take on new challenges that come with constantly changing times.
● We, with passion and courage, anticipate and tackle challenges, unforeseen issues and problems brought on by the constantly changing times.
● We also reinvent ourselves in keeping with the times and continue to evolve and expand.

2. Originality & Innovation
We improve the quality of our work by continually generating new ideas with a pioneering and innovative mentality.
● We persevere in our effort to refine our techniques and skills used in our roles with the intention of pursuing the ultimate technologies.
● Through pioneering and innovative approaches, we are continually improving the quality of our work with new ideas and concepts.

3. Integrity & Determination
We continually hold ourselves to high ethical standards, perform our work with integrity, and devote ourselves to self-development.
● We stress corporate dignity, continually maintain high ethical standards and decency, and behave with fairness and probity.
● We work with integrity and build relationships of trust with all people related to the company.
● Moreover, we are devoted to raising our personal qualities and work capabilities through self-development and strive to grow as individuals.

4. Cooperation & Prosperity
We, working from the wa no kokoro concept, always pool our wisdom to enable the company’s unbounded growth and to build abundant lives.
● With a spirit of respect for humanity, we pay regard to the dignity and different values of individuals.
● Starting from the concept of wa no kokoro,* we pool our collective wisdom and strengths through teamwork.
● We strive to make the company’s business boundlessly prosperous, and to build affluent livelihoods and fulfilling lives, both spiritually and materially.

* Wa no kokoro means the spirit of fellowship and harmony that enables people to cooperate through mutual respect.
**OLED Display Manufacturing Equipment**

When OLED displays are manufactured, deposition occurs in a vacuum to prevent the degradation of organic layers, and bonding and encapsulation must occur without any contact with the air. Key process atmosphere parameters are controlled in a unified fashion, and all processes are completely automated, resulting in stable production.

- **Mass Production System** System-ELVESS

  This system was developed for mass production. This fully automated mass production system fuses all of the technologies our company has accumulated since the foundation in a single system and holds the world's top market share. These technologies include organic material and cathode metal material deposition expertise, fully automated encapsulation system based on precision robotics technologies, and high-precision alignment mechanisms and control technology indispensable for full-color pixel fabrication.

- **Small to Medium Volume Production System** Small-ELVESS

  This equipment is ideal for basic R&D and small-volume production of OLED displays. All processes, from O2 plasma cleaning to deposition and encapsulation, are performed in a single system. It is possible to create high-performance OLED devices because there is no contact with the atmosphere. Highly reproducible processing makes efficient device process development possible, all the way up to the transition to mass production.

- **Research & Development System** Try-ELVESS

  This equipment is ideal for R&D of OLED and material development. This compact system integrates the O2 plasma cleaning chamber, organic emitting layer deposition chamber, metal electrode deposition chamber, and encapsulation chamber. Possible to create OLED device prototypes because there is no contact with the air from vapor deposition to encapsulation processes. Basic research on OLED devices can be conducted more efficiently.

**Thin-Film Photovoltaic Cell Manufacturing Equipment**

This equipment processes large glass substrates with continuous in-line processing, including deposition processing of electrodes and light-absorbing layers. Our proprietary carrier delivery method is used to enable stable mass production operation. We have a wide variety of product lines, including cluster-type mass production equipment and R&D equipment.

- **Vacuum Process Equipment**

  Canon Tokki's vacuum evaporation equipment pursues ease-of-use, including easy regular maintenance and substrate swapping at the production site, and easily modified deposition parameters in the research lab.

- **CVD Equipment**

  This CVD equipment was developed to deposit protection layer like silicon nitride film over large glass substrates at a low temperature. This equipment supports various applications, including LCD TFTs, semiconductors, photovoltaic cell manufacturing, and others.

- **Sputtering Equipment**

  This sputtering system is ideal for the mass production of compact electronic parts, such as crystal devices and chip resistors.

- **Thermal Processing Equipment**

  This thermal processing equipment, which is used in the production of crystal devices and various electronic devices, offers a clean vacuum exhaust system, stable temperatures, and excellent temperature distribution.
OLED panel, using the vacuum deposition method. The right figure is an example of the process of manufacturing a flexible display panels.

Manufacturing Process of OLED

The right figure is an example of the process of manufacturing a flexible OLED panel, using the vacuum deposition method.

The mass production process is divided into three steps: "pre-process" that primarily makes TFT circuits, "vapor deposition process" that mainly deposits organic material, and "post-process" that consists of sealing, cutting, and wiring connections.

Emission layers are adhered on to glass substrates in the vapor deposition process, but various techniques are required to produce high definition and high-quality panels. The main required techniques are (1) technique of producing a vacuum vessel with a clean and high vacuum environment inside, (2) FA (factory automation) technology for moving glass substrates at high speed and precision, and (3) deposition and alignment technologies with high precision controlling of the position where emission layers are coated on glass substrates. For all of these techniques, we have the technical expertise accumulated over the years through development of various devices. And we also have abundant experience in successfully providing equipment for mass-producing displays.

Deposition Technology

Inside the chamber is kept to a high vacuum condition of about 10-5 Pa, and organic material is poured into the evaporation source and heated to about 300 degrees Celsius until it evaporates. The evaporated particles ejected from the evaporation source maintain their linearly and adhere to the glass substrate without colliding with other particles. The speed of evaporated particles (evaporation rate) is measured with a quartz crystal monitor and controlled to make sure it is constant, and the deposition is finished when the coating reaches a prescribed thickness.

To obtain the RGB emission color, the host material is doped (added) with a slight amount of dye material of about several percent. In this step, two types of organic materials are deposited simultaneously to form a mixed deposition. This is called codoposition.

And in the final step, metal electrode film is formed. Silver and aluminum are used in this step, and the evaporation temperature is as high as 1,000 degrees Celsius or more, unlike with organic material.

Alignment Technology

The OLED deposition process is characterized by the procedure of performing deposition and RGB patterning at the same time. With organic material, patterns cannot be etched after the deposition is completed. Therefore, deposition masks are used during deposition in the patterning process. This step requires using the alignment technology for aligning the deposition masks with glass substrates with high precision. Alignment is performed by using cameras to capture the deposition mask and glass substrate positions and then precisely controlling the positional relationship between these two.

In recent years, smartphones and TVs are using higher definitions for their screens. We are using our alignment technology to support the evolution of image quality to 4K and 8K.

Quality Control System

Manufacturing reliable products

We actively improve our techniques and skills to manufacture extremely reliable products for our customers, constantly pursuing the best technologies.

Continuously seeking and providing levels of quality that ensures "customer delight"

We continuously pursue and provide high-quality and high performance products with solid support systems that ensure customer delight through optimization of product implementation processes, including those of third-party vendors. Our equipment will operate for a long time after delivery. Therefore, we have spare parts available in Japan and overseas for our engineers to perform regular inspections and repair/replace consumable parts.

Always seeking to improve quality

We seek to improve the quality of our products. Therefore, we accept requests to upgrade our equipment even after delivery. Advances in technology may allow us, in some cases, to provide features that were not possible when the products were initially delivered. Our sales and service departments will work together to understand our customers’ needs and propose the best solutions available at the time, so that our clients can enhance the quality of their equipment.

Strict quality management system

We were awarded the ISO 9001 international certification for our quality management system in 2004. The production workers and engineers in our factories perform strict quality control, in accordance with the ISO standards.

Service

Research and Development Policy

Canon Tokki’s research and development policy is to provide innovative, value-added products that satisfy customers together with world-leading technology and quality, and outstanding service. In the rapidly-changing electronics industry, we research and develop products and technologies that satisfy customers.

Support Systems

In order to maintain a high level of quality after equipment is delivered, Canon Tokki has opened sales offices and support centers in each region of the nation, building an excellent support system. In addition to rapid responses to problems by professional staff members, Canon Tokki provides thorough support when regular inspections or repairs are required.
Benefit Programs

We offer various employee benefit programs for a pleasant work environment and to enhance the private lives.

- **Paid time off**
  - Canon Tokki provides paid time off in the form of:
    - Vacation
    - Holidays
    - Personal days
    - Sick days

- **Marriages and births**
  - All female employees take maternity and childcare leave.
  - We also make arrangements to ensure they can balance childcare and their job through such means as shorter work hours after their return to work.

- **Recreational facilities**
  - Company employees and their family can use the Canon Group recreational facilities.

- **Asset formation**
  - Corporate pension plan (defined contribution pension), voluntary employee stock ownership plan (Canon Inc. stock purchase), saving plan.

Workplace environment

Clean and advanced company office building fully equipped with areas such as staff canteens and break rooms.

**CSR Activities**

Canon Tokki is actively involved in CSR activities to grow together with society.

- **Plant tour**
  - We open our plants to visitors from time to time for tours. Non-disclosure agreements with panel manufacturers do not allow us to show the details, but these tours are opportunities for us to raise awareness of Canon Tokki’s business.

- **Sponsoring the Mitsuoka Imamachi**
  - Nagaoka Nakanoshima big kite battle
  - We sponsor this traditional event, which has a history of over 360 years and is performed above the Kariyata River embankment every June. The big kites, which depict traditional Japanese people like warriors and women, are about 8 tatami in size. These kites are produced each year and usually adorn the entrance to our office building but later on dance in the sky above during the battle to liven up the local festival.

- **Local cleaning activities**
  - We participate in local cleaning activities organized by Mitsuoka City. In these activities, we clean the areas around our head office/Mitsuoka Plant with local residents. These are activities that we will continue to participate on a regular basis.

**Canon Tokki Operations**

- **Offices in Japan**
  - **Head Office, Mitsuoka Plant**
    - 10-1 Shinko-cho, Mitsu-ku, Nigata 954-0076 Japan
    - TEL: +81-25861-5050
  - **Kawasaki Office**
    - 7-5-27 Kamikodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0033 Japan
    - TEL: +81-44-738-3650
  - **Mitaruoka Plant**
    - 3072 Okami, Himatsu-ku, Nagano 254-0012 Japan
    - TEL: +81-26-346-8880
  - **Kansai Service Station**
    - Osaka-Tamazakibashi, 3F, 1-14-30 Minami-Kanda, Suita-shi, Osaka 564-0044 Japan
    - TEL: +81-6-6310-0021

- **Offices outside of Japan**
  - **South Korea**
    - Canon Semiconductor Engineering Korea Inc.
    - Canon 85 Tower 1F, 607, Teheran-ro, Gangnam-gu, Seoul, 06173, Korea
    - TEL: +82-3-4445-0013
  - **China**
    - Canon Optical Industrial Equipment (Shanghai) Inc.
    - 18F, Urban City Center, No.45 Nanchang Road, Shanghai, 200020, PRC
    - TEL: +86-21-2316-3200
  - **Taiwan**
    - Canon Semiconductor Equipment Taiwan Inc.
    - 3F1, No. 25, Puding Rd, East Dist, Hsinchu City, 30072, Taiwan
    - TEL: +886-3-579-7780

**Corporate Profile**

[Corporate Profile]

- **Company name**
  - Canon Tokki Corporation
- **Founded**
  - July 29th, 1967
- **Parent Company**
  - Canon Inc.
- **Stock Capitalization (Start-up Cost)**
  - $6,572 million
- **Accounting Term**
  - December
- **Number of Employees**
  - 689 (As of Dec. 31, 2019)

[Historical Highlights]

- **July 1967**
  - Tsugami Speciality Machine Co., Ltd. was established by Kenichi Tsugami in Shinbashi, Minato-ku, Tokyo, with capitalization of $1.1 million, and began selling machine tools and automation systems.
- **July 1972**
  - Nagaoka Precision Co., Ltd. was established in Nagaoka City, Niigata Prefecture, and began designing and producing PA systems, peripheral equipment, and production tools.
- **April 1982**
  - Tsugami Robotics Co., Ltd. was established in Yokohama City, Kanagawa Prefecture, becoming Japan's first authorized robot engineering company.
- **July 1983**
  - Tsugami Speciality Machine acquired an equity stake in LPR Co., Ltd., a vacuum process equipment manufacturer, thereby entering the new field of vacuum thin-film deposition system.

**[List of Board Members]**

- **Chairman and CEO**
  - Teruhisa Tsugami
- **President and COO**
  - Shigiyuki Utsunomiya
- **Director**
  - Mitsuhide Ogawa
- **Auditor**
  - Kazuo Nakamura
- **Auditor**
  - Hiroshi Goto
- **Auditor**
  - Akiko Yokoyama
- **Auditor**
  - Koharu Iida

- **January 1986**
  - Tsugami Speciality Machine, Nagaoka Precision, Tsugami Robotics, and LPR merged to form the new company Tokki Corporation, Ltd., with the aim of expanding business in FA systems and vacuum thin film deposition equipment.
- **April 2003**
  - Tokki completed the Mitsuoka Factory in the Nigata Chubu Industrial Park in Mitsuoka City, Niigata Prefecture.
- **December 2007**
  - The capital and business alliance with Canon Inc. was completed, making Tokki a member of the Canon Group.
- **October 2010**
  - Tokki became a wholly-owned subsidiary of Canon Inc. by corporate equity swap.
- **January 2012**
  - Tokki changed its company name to Canon Tokki Corporation.