

〈English〉



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Biltrite Tamura

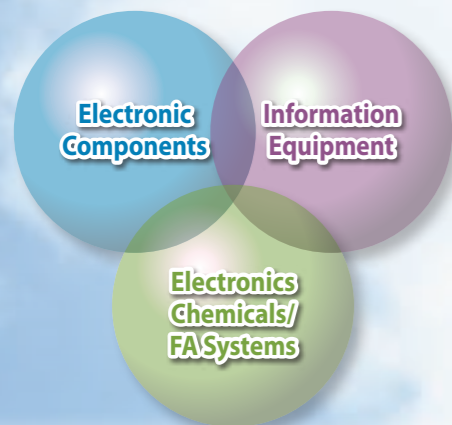
The 12th Mid-term Plan 2019-2021 & 2024

GROWING ANEW

CORPORATE PROFILE / CSR REPORT DIGEST

Creating Value

Tamura Group's business fields



Related social issues

- Realizing a decarbonized society
- Conserving energy and resources
- Promoting diversity
- Promoting workstyle reform
- Preparing for natural disasters
- Responding to a rapidly aging society
- Coexisting with communities

The 12th Mid-term Plan »»P.04

Bilrite Tamura

The 12th Mid-term Plan 2019-2021 & 2024

GROWING ANEW

Corporate Philosophy

MISSION

The Tamura Group supplies an original range of products and services, highly regarded in the global electronics market, to satisfy the evolving needs of customers, employees and shareholders supporting the Group's growth.

VISION

GUIDELINE

Tamura Group Code of Conduct

Basic policy on promotion of SDGs (Tamura Group Code of Conduct)

The Tamura Group recognizes our corporate social responsibility (CSR) of balancing the achievement of a sustainable society and the sustainable growth of the Tamura Group. We recognize the term "SDGs" as shared global language regarding social issues. In addition to understanding the business opportunities presented by SDGs and the responsibility of corporation in achieving SDGs, the Tamura Group will contribute to the solution of social issues through products, services, technology, and business activities.

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD



Creating Tamura Group's Value

The Tamura Group aims to increase corporate value by contributing to society through our business activities and is making continuous efforts to create new values towards solving society's problems.

Tamura's social value

Value creation through business

By providing products, technologies, and services, Tamura shall support

- Popularization of eco-friendly cars as well as safe and comfortable driving
- Next-generation energy-saving societies
- Network societies in the near future

Strategic markets »»P.14

- ◆ Automotive
- ◆ Power electronics
- ◆ IoT/next-generation communications



Efforts to support value creation

Environment



Society



Governance



Realization of a Sustainable Society

Sustainable Growth of Tamura Group

TAMURA CORPORATION REPORT 2019

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Editorial Policy

This report will be published as "TAMURA CORPORATION REPORT 2019" to serve as an introduction to the Tamura Group. It is a compilation of Tamura's "CORPORATE PROFILE," which introduces the group's overview and business activities, and "CSR REPORT DIGEST," a digest of its CSR. A detailed report of CSR is available on the "CSR" page of the Tamura Corporation website. The "Environmental Report Guidelines (FY2018 Edition)" of the Ministry of the Environment of Japan, and the "ISO26000" Guidance Standard were referred to when "CSR" was edited.

Period covered

April 1, 2018 to March 31, 2019
(Includes some activities in or after April 2019)

Publication date

August 2019
(Previous report: August 2018 next report: due in August 2020)

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TOP MESSAGE

A fresh start with a new management system towards the centennial anniversary and further sustainable growth



Naoki Tamura
Chairperson and Representative Director of Tamura Corporation

Masahiro Asada
President and Representative Director of Tamura Corporation

Establishing a business structure that brings steady profits in growing fields

Masahiro Asada, President and Representative Director

Inauguration as new president:

I received the offer from new chairperson Naoki Tamura (former president), who had assumed the responsibilities of top management as president for many years, and took office as president in April 2019. Although I am humbled by the vast responsibilities that await, I am ready to assume various tasks, underpinned by my knowledge of actual workplaces and a sense of balance that I have acquired over the years.

I believe that the primary role of the new management system is to realize the “Company’s ideal future” towards the centennial anniversary in 2024. The scenario includes efforts to establish a solid management system by 2021 (the last year of the 12th Medium-term Management Plan) so that in 2024, the centennial anniversary year, all the endeavors made until that time will be fully rewarded. We have set high targets, namely, to achieve an operating profit ratio of 10% or more and an ROE of 10% or more, both in fiscal year 2024, and will continue to strive toward this goal.

Establishment of New Medium-term Management Plan

As the first step, “Biltrite Tamura GROWING ANEW” has been chosen as the slogan for the 12th Medium-term Management Plan. For this slogan, while inheriting “Biltrite,” a coined word meaning “to manufacture righteously,” as the Company’s tradition and “GROWING” that should result from it, we have added the word “ANEW” to show our resolve “to have a new start” with a “new system” in the new “Reiwa” era.

Specifically, we have identified the electrification of power train systems and AI & IoT-based automated driving technology in the automobile industry that is entering a time of revolution as well as next-generation communications technology as future growth industries. Accordingly, we have determined three fields, i.e., “in-vehicle products,” “power electronics,” and “IoT & next-generation communications,” as the Company’s strategic markets. We will work to establish a business structure that can bring steady profits in these markets for which solid growth can be expected.

As it can be easily imagined, for example, that automated driving technology will never be realized without next-generation communications technology such as 5G, it is predicted that mutual connections among all business fields will eventually increase. In our Company, we will also work on sharing best practices among different business units by removing walls between divisions and reinforcing horizontal connections. While enhancing synergy effects, all members of the Tamura Group will make joint efforts as “One Tamura.”

As a Company that Responds to Society’s Expectations

In order to realize the “Company’s ideal future” in its centennial anniversary year, it is important for us to bring the Company’s growth strategies and the society’s expectations into line. As one of the foundations of our new Medium-term Management Plan, the Company has been utilizing SDGs (Sustainable Development Goals) that were adopted by the United Nations in 2015. Through

The 12th Medium-term Management Plan (2019–2021 & 2024)

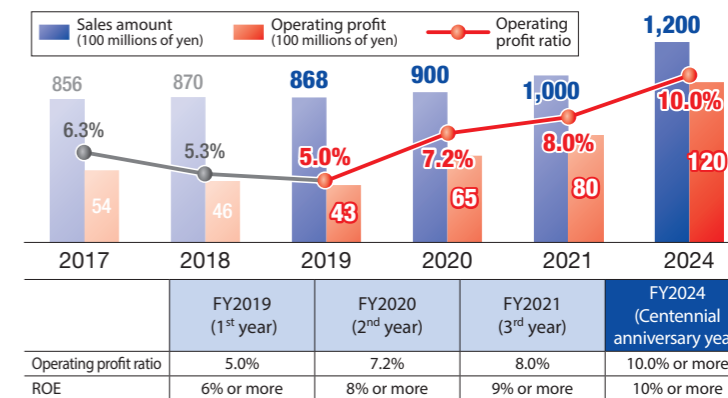
Biltrite Tamura GROWING ANEW

Biltrite = Build up + Right

The 12th Medium-term Management Plan covering the years to FY2021 was launched in April 2019 under the new management system, and looks ahead to sustainable growth in the centennial anniversary (2024) and thereafter as its long-term vision.

Targeted Managerial Indicators

- (1) With an increase in profitability as the primary target, we aim to achieve the group operating profit ratio of 8% or more in FY2021 and 10% or more in the centennial anniversary year.
- (2) As for our objective in capital efficiency, we aim to achieve ROE of 9% or more in FY2021 and 10% or more in the centennial anniversary year. We will work toward improving capital efficiency by promoting the stabilization of business infrastructure through increases in shareholders’ equity.



Pursuing management that integrates business and CSR

Naoki Tamura, Chairperson and Representative Director



the promotion of employment. The Company also has plants in Myanmar, Bangladesh, and other countries, where we are promoting the employment of local engineers and managers in cooperation with universities and other educational institutions. It has always been the Company's management policy to focus on local markets based on the principle of "local development & local consumption (local development & local approval)." In this regard, with the aim of increasing diversity in global management by a further step, we are training highly skilled local staff and gradually shifting responsibilities and authority to them, eventually increasing the number of locally employed staff as members of the board and operating officers.

My Mission

As chief operating officer, I will enforce speedy management toward the realization of the "Company's ideal future in the centennial anniversary year," and aim to achieve a V-shaped recovery in performance that stalled during the third year of the previous Medium-term Management Plan by pursuing efforts to create new strategic products and to continue embracing new challenges.

I believe my mission is to shape this globally operating Tamura Group into "One Tamura" both in name and in substance without going against the intent of the Company's objective. For this purpose, I will do my utmost to realize well-balanced operations by inheriting the good traditions of the Company that has over 90 years of history and by making the best use of experiences gained from many years of overseas assignment. In this regard, I would appreciate your candid opinion, guidance, and support.

widely spreading environmentally friendly products, we will strive to "resolve social issues through use of ecotechnology" in response to people's expectations, thus contributing to the achievement of SDGs.

In the environmental aspect, while expanding our eco-friendly car products in the in-vehicle business as a cornerstone of our growth strategy, we will also focus our energies on current sensors that are used in products related to "energy saving/energy creation/energy storage" and large transformers that are used for the generation of renewable energy, such as wind power and water power.

In the social aspect, as has been set forth in Goal 1 "No poverty" of SDGs, poverty eradication is an urgent social issue, and the largest contribution as a company to its resolution should be

Two-wheel Framework Towards the Centennial Anniversary

On April 1, 2019, a new president was appointed. Formerly president, I have assumed the position of chairperson and representative director and shall take charge of non-financial tasks, such as corporate governance, CSR, SDGs, and management quality, working toward the improvement of corporate value. New president Masahiro Asada shall be in charge of the Company's entire business and its implementation, taking the helm of the Company's future growth strategies. We would like to move forward in this two-wheel framework with company-united efforts towards the centennial anniversary that is approaching in five years.

Review of the 11th Medium-term Management Plan

The last Medium-term Management Plan that was implemented under my leadership as president had shown a successful start in the first and second years of the three-year plan, hitting record-high profits. However, in FY2018, the last year of the plan, the Company was affected by the impact of the US-China trade conflict and China's economic slowdown, which was greater than expected. Furthermore, because of deteriorated business climate where sales of the latest models of smartphones had leveled off because the business cycle had reached its peak and another negative factor of repair cost related to a quality problem, operating profit eventually returned to the level of the year before the three-year plan.

While we were successfully pursuing the improvement of profitability in those three years and in the process of establishing a business model to concentrate capital for high-value-added products, we failed to actually create strategic products that were less susceptible to the economic climate. This is a matter of regret with regard to the previous Medium-term Management Plan.

On the other hand, because our compensation claim for patent right infringement was finally accepted and we were able to post the settlement as a profit, the final profit for FY2018 was 6.3 billion Japanese yen, the highest ever. ROE also increased to a two-digit percentage, reaching 14.3%, and the Company could pay a dividend of 10 Japanese yen per share, realizing its long-cherished objective.

Concentration of Operating Capital on Growing Fields and Efforts to Overcome Weakness

For the past three years, we have concentrated on the in-vehicle business as a priority market. Under the circumstances where the trend has been shifting toward eco-cars, the Company's boosting reactors for environmentally friendly vehicles have been gaining a high reputation in the market because of their performance and quality, and the business has recorded a substantial growth. However, due to the long development period required, the in-vehicle components were not yet strong enough to push up sales in the previous Medium-term Management Plan. Nevertheless,

we were finally able to have a good prospect of high-volume production as mentioned in the 12th Medium-term Management Plan and have decided to make an investment to expand/reinforce plant facilities in two domestic plants and in China.

With regard to overseas strategies in the electro-chemistry business, it was unfortunate that the Company did not have its own production plants in the ASEAN and European regions. To address this, the Company has acquired plants from an OEM partner company in Thailand and a local company in Germany through M&A and built a self-manufacturing system.

Promoting Business and Social Contribution in an Integrated Manner Based on SDGs

Even before the concept of CSR became substantially rooted in Japan, the Company upheld "social contribution through business" as its management philosophy. We were among the earliest in this industry to sign the United Nations Global Compact. Further, under the new Medium-term Management Plan, the Company has been promoting management by integrating business and CSR, utilizing SDGs as its basic concept. To my understanding, all 17 goals of SDGs are related to the Company's activities in one way or another. Therefore, by actively reporting information about "Tamura is carrying out such an activity" and "Such an activity can contribute to SDGs" in reference to each goal, we have been making efforts so that every employee would become familiar with SDGs. For example, as part of workstyle reform, the Company has also introduced a telework system. Today, some employees are performing simulation analysis work remotely because of family reasons. This is an example case that can contribute to the achievement of SDGs' Goal 8 "Decent Work and Economic Growth."

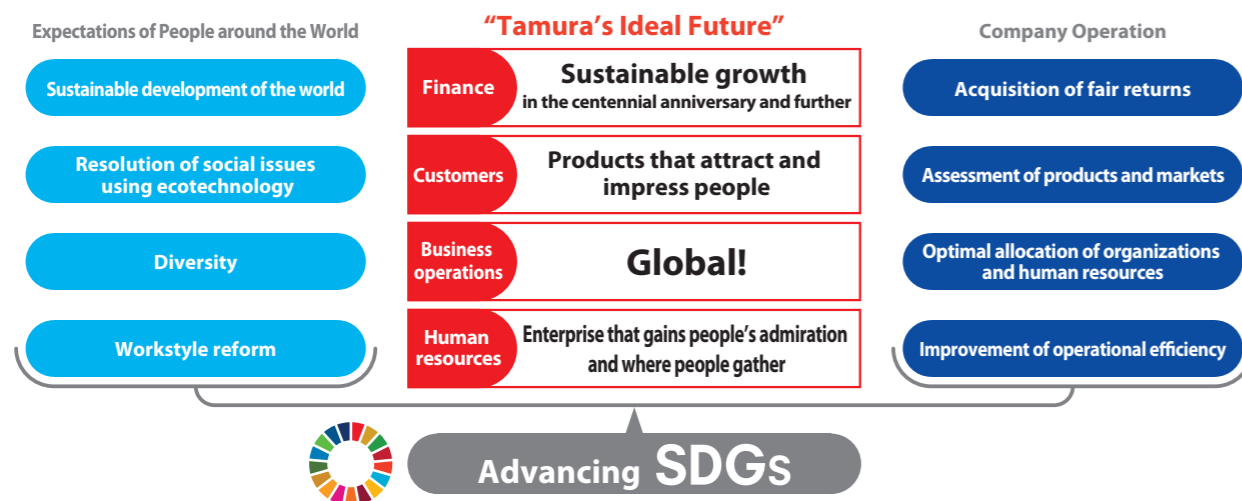
Our aim is to combine the realization of a sustainable society and sustainable growth of the Company by promoting business and social contribution in an integrated manner based on SDGs. In FY2018, with the aim of increasing SDG awareness among employees, SDG badges were distributed. Our challenges, however, have just begun and we shall continue to work on raising awareness among employees.

Your continued support is very much appreciated.



Company's Ideal Future in the Centennial Anniversary Year

Based on this Medium-term Management Plan and various challenges towards the achievement of SDGs (Sustainable Development Goals), the Company aims to grow in a healthy manner while responding to the expectations of people around the world as an entity needed by all its stakeholders, including its shareholders, business partners, employees, and local communities.



Genealogy of Product Development

Time-honored technological capabilities that continue to excel

since 1924

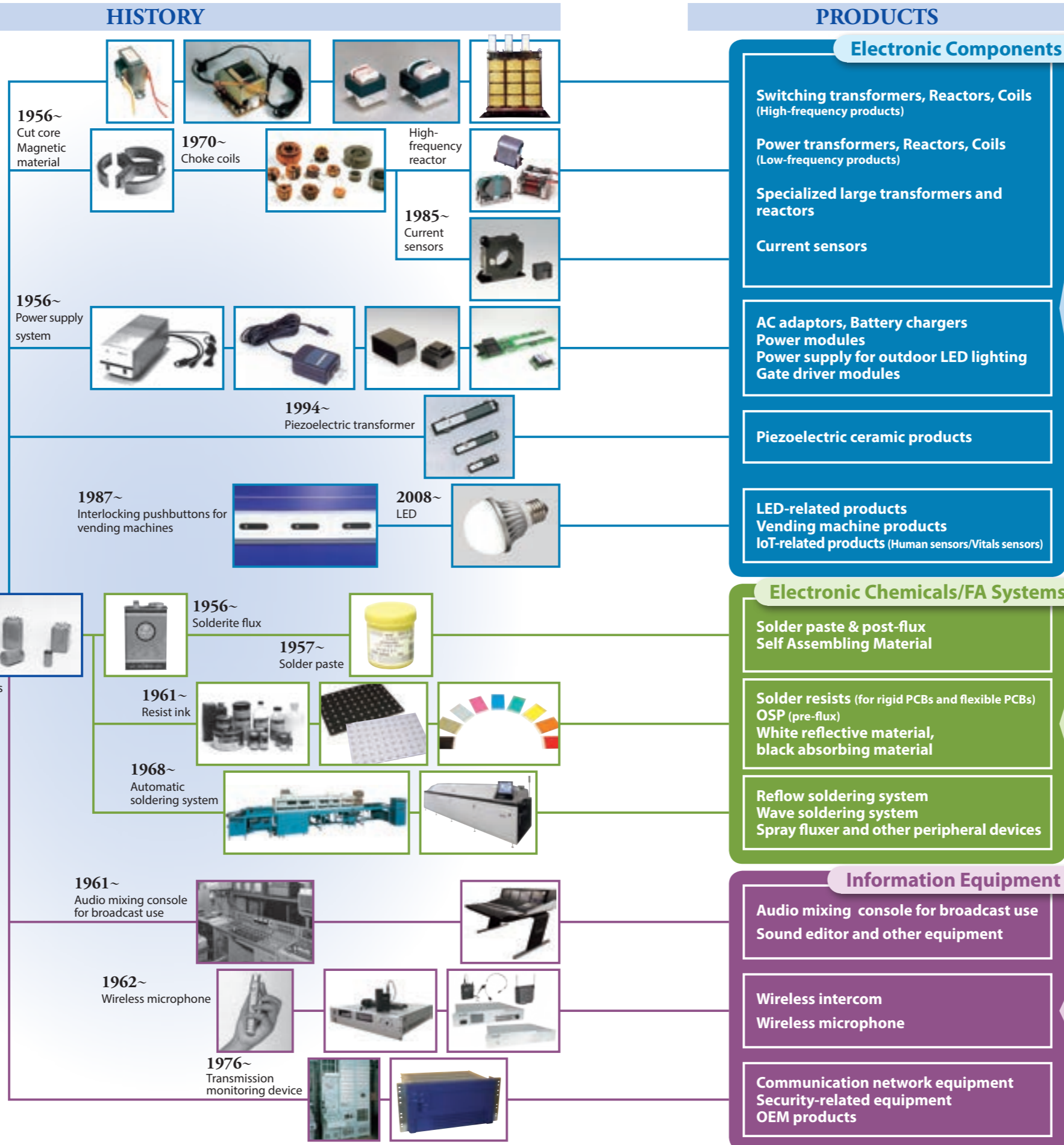


Manufacture and sale of radio and gramophone

1930~ In-house production of Bilrite series transformer

Its reputation as the "Tamura of transformers" created a foundation on which to expand its businesses, including various electronic components related to transformers; flux and soldering materials that were born out of the pursuit of quality joining materials for the manufacture of transformers; soldering systems; and even broadcast audio equipment and communication systems, based on achievements in the manufacture of transformers for broadcasting and communication.

Currently, Tamura Corporation conducts business operations in three areas: electronic components, electronic chemical mounting, and information equipment, to develop and supply products that meet the needs of new markets, such as the environment and energy markets.



CORE TECHNOLOGY

- Power solutions**
- Dust core material development and mass-production technology
 - Electromagnetic field, heat, structural analysis (simulation) technology
 - High-efficiency, low-noise power supply technology
 - Large current transformer coil winding technology
 - Environmental technology
 - Adaptive technology for highly reliable standards (JAXA and MIL standards, etc.)
 - Mass production technology for large products
 - Design technology for special specifications (water cooling, waterproof, high pressure)
- Piezoelectric ceramics**
- Material development and process technology
 - Element design technology and analysis technology
 - Technology for controlling piezoelectric elements
- LED/LD application and IoT solutions and semiconductor devices**
- LED packaging technology
 - Waterproofing technology
 - Thermal design and analysis technology
 - Optical design and analysis technology
 - High-efficiency reflection processing technology
 - Sensing technology
 - Data processing technology
 - Growth technology of single crystal substrates
 - High-quality epitaxial growth technology
 - High efficiency High-power LED manufacturing
 - Lighting design technology
 - Optical single-crystal technology
 - Wireless technology

- Mounting process, PCB material and semiconductor mounting material**
- Unified, collaborative product development for both material and equipment
 - Resin design and synthesis technology (photosensitive resin, thermosetting resin, thermoplastic resin)
 - Metal powder production technology
 - Soldering technology
 - Thermosetting technology
 - Environmental technology (technologies compliant with Pb-free, halogen-free requirements)
 - Simulation technology (CAE analysis)
 - Analytical technology contributing to materials design
 - Reliability evaluation technology for product quality
 - Reflow heating technology
 - Wave soldering technology
 - (Nitrogen) Atmosphere control technology
 - Photosetting technology
 - Soldering technology
 - Heat control technology

- Information equipment**
- Audio processing technology
 - Digital signal processing technology
 - Acoustic technology
 - High-frequency technology
 - Radio technology
 - High-density mounting technology
 - Surround-sound technology

Electronic Components

“High-reliability” and “high-efficiency” power technology contributes to the future of power electronics, realizing safer and more secure lives as well as a decarbonized society.



Social value of business

- We are directing efforts into the development of high-reliability and high-efficiency products required for power systems that deal with high current, such as those for eco-friendly cars, renewable energy, and industrial equipment. Our boosting reactors for eco-friendly cars, which necessitate high-safety designs, are highly regarded in terms of performance and quality, so we will enhance production capacity in response to increases in demand, supporting the widespread use of eco-friendly cars.
- The LED-related products that we have developed include high-brightness power LEDs that are extremely power efficient and human sensors to which sensing and communication technologies are applied. These products help monitor people’s activities in nursing-care facilities and the like, enhancing safety.
- Our transformers, reactors, LEDs, power supplies, and piezoelectric ceramics products contribute to saving energy and resources in devices that incorporate these products. We provide these products globally in a broad range of areas, effectively offering eco-technological solutions to social problems.



● Products



Reactors and coils

Reactors are core components for voltage control and noise removal for power conditioners, air conditioners, and the like. They contribute to energy saving and clean energy.



High-frequency transformers

High-frequency transformers are necessary to miniaturize electronic devices or increase efficiency. Our products are compatible with various types of circuits and enable higher-frequency power conversion, contributing to energy saving.



Automotive reactors

The reactors are key components for optimal voltage control in hybrid and electric cars. Our reactors ensure not only eco-friendly but also highly reliable and safe driving.



Large transformers and reactors

In large-scale wind or solar power generation systems and the like, large transformers and reactors are the core components—the former are used for voltage conversion and the latter are for voltage control and noise removal. They contribute to the spread of renewable energy.



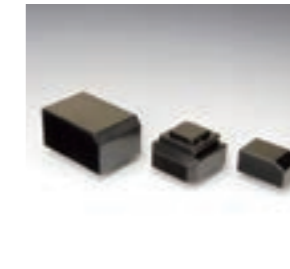
Transformers and reactors for aerospace use

As the only domestic manufacturer that has obtained certification from Japan Aerospace Exploration Agency (JAXA) for the standards of transformers and reactors for power systems, we develop, produce, and supply transformer and coil products for onboard use on satellites and their launching vehicles.



Current sensors

In order to make effective use of natural energy, it is necessary to monitor electrical current in equipment with a high degree of accuracy. Our product line, which is broad in terms of current range and accuracy range, contributes to creation, storage, and saving of energy.



Power modules

High-efficiency DC converter functions are packaged. e modules allow you to easily design high-performance power supply (high-efficiency, low-standby-power, quiet, and small) best suited for your product.



Gate driver module

The product for driving high-power switching semiconductors used in inverters, etc. Suitable for both IGBT and SiC-MOSFET because of its low noise characteristics. This product can contribute to drastic simplification of equipment design.



Power supply for outdoor LED lighting

LED power supply for outdoor use such as facility illumination and road illumination. Designed to achieve high efficiency and high power factor and equipped with multi-stage optical modulation function, the product can realize the industry’s top level of energy saving illumination.



AC adaptors

Our AC adaptors supply stable power to optical network units (ONU). Their high resistance to exogenous noise due to thunder and other causes provide support for communication lifelines such as the Internet and telephones.



Piezoelectric transformers

The use of the resonance phenomenon of piezoelectric ceramics allows efficient generation of high voltage. Our products are used for high-voltage power supply for laser printers, copiers, ion generators, etc.



Vending machine related products

We have developed major components such as the item selection button, which holds over 90% of the market share according to our investigation, the price display unit, and LED lighting. Buttons with a built-in price display have already become the trend for vending machines.



LED lighting for special applications

LED lighting for special applications, such as inside lighting type signboards and refrigeration showcases that utilize optical engineering design technology. This product has been adopted for use in showcases manufactured overseas, mainly Asia.



Power LED

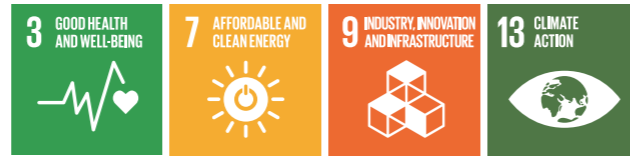
A super luminosity LED with brightness equivalent to a 1 kW halogen lamp. This product has been realized thanks to the Company’s original electronics-packaging technology and heat radiation design. A verification test at a lighthouse has begun.

Changes in net sales



Electronic Chemicals/FA Systems

Well-refined soldering technology for “highly reliable” and “high-density mounting”, with eco-friendly materials and equipment, contributes to the development of a sustainable electronics industry.



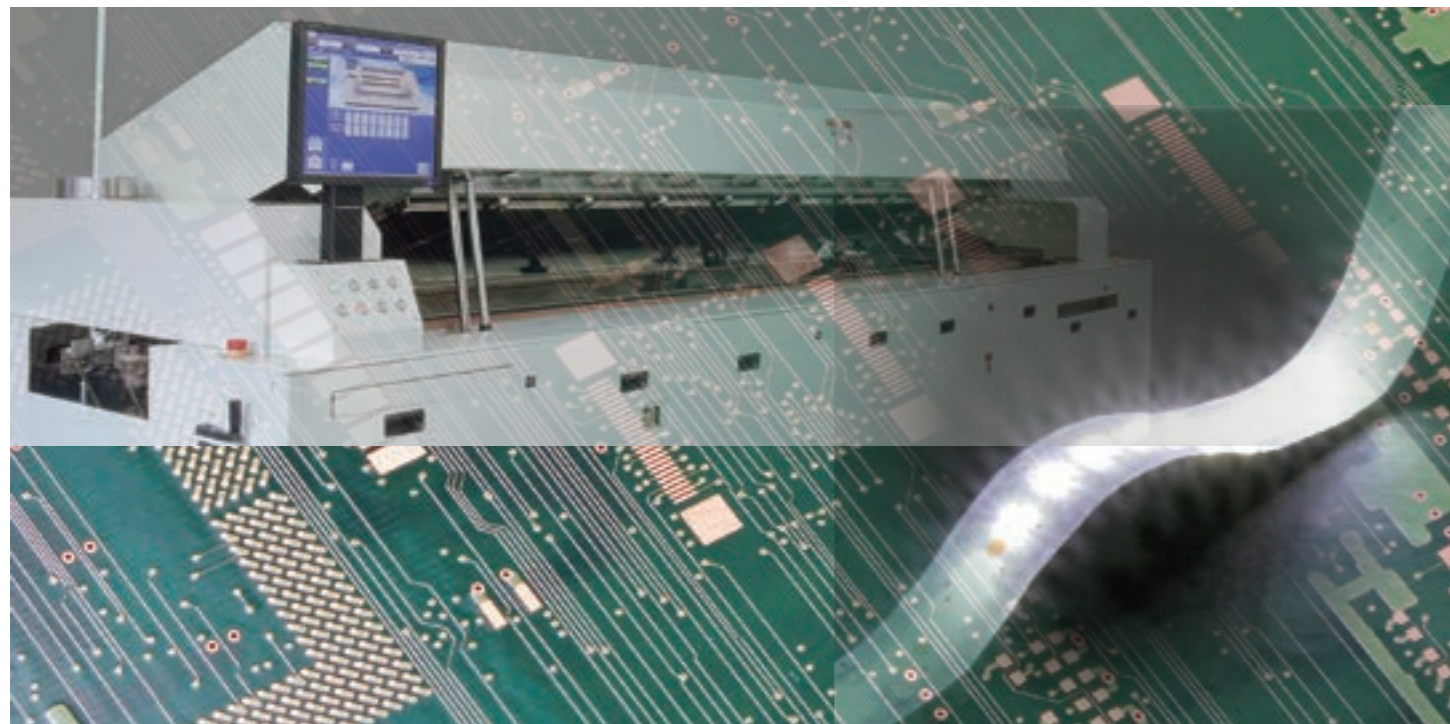
Social value of business

Electronic Chemicals

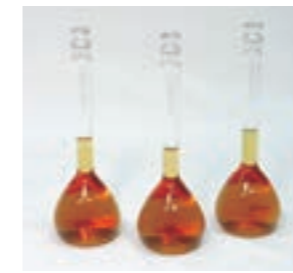
As cars are becoming more fuel-efficient and highly functional, automotive components are becoming more electronically controlled, lightweight, and miniaturized. Under these circumstances, we offer superior materials that meet reliability requirements that are becoming stricter each year. Our materials have high reliability and show good performance, including crack resistance, heat resistance, and humidity resistance, even in a harsh engine room environment. In addition, as smartphones and wearable devices are becoming more multi-functional, lightweight, and miniaturized, there is a demand for further high-density mounting and various joining methods. We provide materials that meet such demand, supporting high-speed and high-capacity communication in 5th generation (5G) mobile network systems.

FA Systems

We provide high-performance soldering systems compatible with other assembly equipment. Such systems are needed due to an increase in demand for in-vehicle PCBs associated with advances in automotive electronics or to development in smart factories typified by Industry 4.0. Our systems show good environmental performance that helps save power and resources. Using this advantage, our systems streamline mounting lines and support manufacturing in evolving factories around the world.



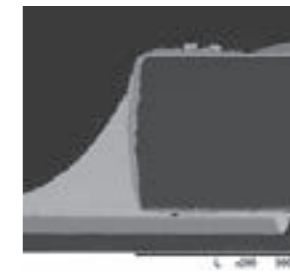
Products



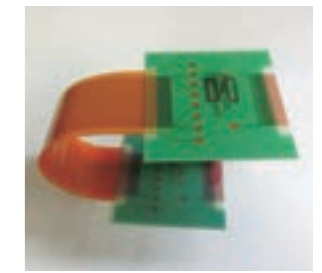
Flux
Flux is the keystone of Tamura's materials development. By chemically removing oxide film from the metal surface to be soldered, flux ensures superior wettability and spreadability for solderable metals.



Solder paste
Used as joining material for surface mounting, solder paste is prepared by mixing solder powder and a flux. Tamura's extensive metal composition lineup provides compatibility with various applications, such as fine mounting, in-car use, and micro bump formation.



High heat resistance solder
In-car electronic devices should have high resistance to harsh temperature environments due to miniaturization and mechatronic integration. Our solder products prevent solder joints from cracking, contributing to reliability improvement of electronic devices.



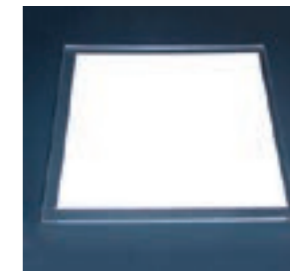
Self-assembling materials
Self-assembling materials join flexible and rigid PCBs through a thermocompression bonding process at a low temperature and in a short time. These materials reduce the joining area of connections on circuit boards and allow low-temperature joining, thereby contributing to reducing CO₂ emissions.



Solder resist
The solder resist plays an important role in maintaining insulation performance by protecting printed circuit boards (PCBs) from oxidation. Mindful that it serves as the face of PCBs, Tamura is as attentive to the external appearance as the reliability.



Solder resists for flexible PCBs
Halogen-free solder resists for flexible PCBs are available in rich color variations.



White reflective material
White reflective materials are applied to the back surface of a LED PCB or a solar power panel to increase reflectivity. They are highly functional halogen-free materials with high reflectivity and discoloration resistance.



Black absorbing material
These materials are applied to a surface of a printed circuit board or a film to accentuate LED light. They can meet design requirements such as covering and hiding wiring.



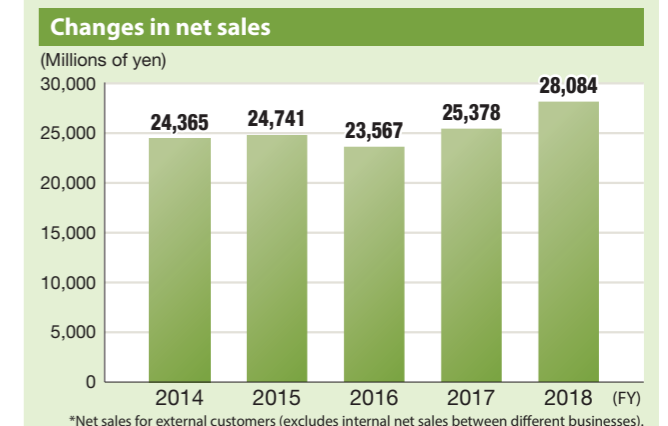
Reflow soldering systems
Reflow soldering systems heat PCB-mounted electronic components to melt solder and join the components and circuits on the board. Our new systems are equipped with convection control technology that efficiently circulates gas within the systems, making it possible to suppress flux adhesion to the inner surface of the furnace as well as reduce nitrogen consumption.



Selective soldering material
Solder paste for use in partial solder supply by dispensing and rapid-heating soldering with a laser. Because it can automatize conventional manual soldering while contributing to achieving high quality, it is drawing attention in the areas of camera modules and in-car components. The development of jet-dispensing products capable of high-speed three-dimensional soldering is also underway.



Selective soldering systems
Selective soldering systems mount components to be inserted on a PCB that has gone through a reflow soldering process, and perform soldering, in a solder bath, only on parts of the PCB where the components are inserted. Labor-saving on production lines is achieved by transforming the entire soldering process into a fully automated integrated line.



Information Equipment

Improve “safety and security” of social infrastructure through “sound” to deliver “value” and “excitement” to customers.



Social value of business

- We have accumulated sound and communication technologies in the areas of broadcasting and telecommunication. Using these technologies, we provide customers, particularly broadcast stations, with wireless intercoms and microphones as well as audio mixing consoles compatible with high-resolution 4K/8K TV broadcasting, thereby delivering new experiences to the audience and contributing to comfortable living.
- We have applied our original wireless technology to various systems that watch over for human safety life.



Products



NT series—audio mixing consoles for broadcasting

Sound adjusting equipment used in TV and radio broadcast stations, etc. It features a digital sound signal processing system that efficiently adjusts multiple sounds. All models have an audio network function that facilitates IP networking to streamline broadcast facilities.



Wireless devices

Our wireless devices are used in the production of TV and radio programs. Employing a high-compression audio codec to ensure high sound quality, the DECT intercom offers high functionality including two-group simultaneous listening despite its compact size and light weight. The OFDM digital wireless microphone is a high-quality professional-use wireless microphone that features good radio propagation properties that are unaffected by noise.

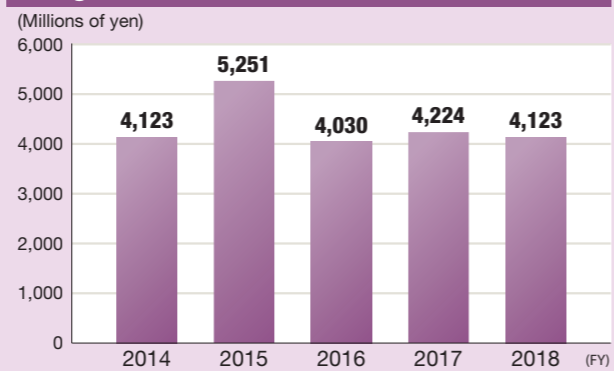
Identifying visitors' locations in a stadium



TS-LINK®

TS-LINK is Tamura's original wireless technology for the IoT area. It uses the time-division multiple access (TDMA) system to avoid wireless communication interference while allowing a large number of mobile terminals to be networked densely and be moved freely. We are promoting its use in the management of visitors' entry to and exit from a large event venue, the identification of their locations at the venue, etc.

Changes in net sales



“One Tamura” strategy

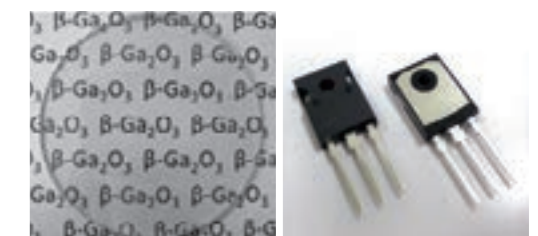
Tamura has outstanding products and technologies in each business sector. The Tamura Group will share best practices in each business sector to work as one on automotive applications, power electronics, and IoT/next-generation communication—markets that are expected to grow significantly in the future. With One Tamura power, we will create new social value and contribute to building a sustainable society by providing attractive and impressive products.

Automotive	Power electronics	IoT/next-generation communication
<p><i>Support for popularization of eco-friendly cars as well as safe and comfortable driving</i></p> <p>There is an increasing global demand for eco-friendly cars, such as electric vehicles and hybrid/plug-in hybrid vehicles and eco-friendly cars are gradually becoming the mainstream. Tamura provides a wide range of automotive-related products necessary to improve not only fuel consumption and environmental performance of eco-friendly cars but also driving and acceleration performance. While making efforts to further improve such products, we will enhance the production structure as well. We will help improve the performance of eco-friendly cars and promote their widespread use by using Tamura's outstanding technological capabilities.</p>	<p><i>Support for next-generation energy-saving societies</i></p> <p>Spreading renewable energy and improving energy efficiency are becoming global issues. Aiming to establish itself in the renewable energy market, Tamura offers on a global scale large transformers and reactors used in wind power generation or power transmission and distribution. Tamura will also promote power electronics by providing products that help improve energy efficiency for factories, home appliances, and traffic control.</p>	<p><i>Support for network societies in the near future</i></p> <p>The market for IoT and next-generation communication is expected to grow dramatically in the future. We are offering the most advanced products and technologies for IoT and next-generation communication, including electrochemical materials for electronic devices that have become increasingly multifunctional, such as 5G (5th generation mobile networks) smartphones and wearable devices; audio communication technology compatible with ultra-high-definition 4K/8K videos; new near-field wireless communication technology capable of high-speed and high-capacity communication; and overwatch sensing technology to support an aging society.</p>
<p>[Electronic components]</p> <ul style="list-style-type: none"> ● Boosting reactors/coils ● Reactors for battery chargers ● Current sensors <p>[Electrochemical materials]</p> <ul style="list-style-type: none"> ● Solder paste for automotive applications ● Solder resist for automotive applications <p>[FA systems]</p> <ul style="list-style-type: none"> ● Reflow soldering systems for automotive applications 	<p>[Electronic components]</p> <ul style="list-style-type: none"> ● Large transformers/reactors ● Gate drivers ● Gallium oxide power devices (For details, see bottom of this page.) <p>[Electrochemical materials]</p> <ul style="list-style-type: none"> ● Residue-free paste for power devices 	<p>[Electronic components]</p> <ul style="list-style-type: none"> ● Price display units for vending machines ● Human sensors (overwatch) <p>[Electrochemical materials]</p> <ul style="list-style-type: none"> ● Solder resist for flexible PCBs ● Laser soldering paste ● Reversibly stretchable joining material ● Solder paste for semiconductors ● Self-assembling materials <p>[FA systems]</p> <ul style="list-style-type: none"> ● FA systems compatible with smart factories <p>[FA systems]</p> <ul style="list-style-type: none"> ● 4K/8K audio consoles ● Networking of audio systems

Gallium oxide power devices

Tamura Corporation, in cooperation with Novel Crystal Technology, Inc.*, is working on the R&D of gallium oxide, a promising candidate for semiconductor material in next-generation power devices. Gallium oxide power devices with medium to high withstand voltage are expected to contribute to energy saving.

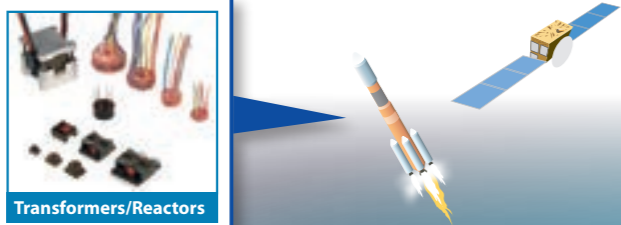
* Novel Crystal Technology is a carve-out venture from Tamura and a technology transfer venture from the National Institute of Information and Communications Technology (NICT).



Tamura's Technologies Supporting Society, Industry, and Daily Life


Electronic Components
Electronic Chemicals / FA Systems
Information Equipment

In Aerospace
Contributing to society by providing ultimate environmental resistance in the form of airplanes, rockets, and satellites



Transformers/Reactors

At Lighthouse
Achieving energy-saving, extended service life, and improved maintainability for the luminous source of the lighthouse, which requires ultra-high brightness and high straightness



Power LED

At Train Stations
Supporting railway operation in the audio-visual realm by conveying such information as arrival/departure times



LED electric bulletin board
Wireless microphone systems

In convenience stores and shops
LED light source contributes to energy savings for shop sign lighting and showcases.



Advertisement LED Lighting
LED lighting for showcases

In Automatic Vending Machines on the Street
Realizing leading-edge functions for display, item selection, interface with a smartphone, etc.



Price display unit
Product selection buttons

In Broadcast Stations
Used in equipment for adjusting sound delivered to audiences, and wireless systems for in-house communication



Audio mixing console
DECT-based Intercom
OFDM Digital wireless microphone

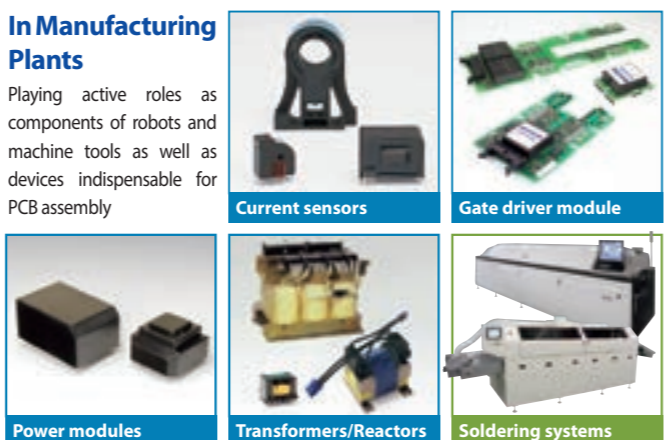
In Wind and Solar Power Generation, by infrastructure
Offering parts and materials that contribute to efficiency improvement in renewable energy generation and DC transmission



Large transformers and reactors

Current sensors
Gate driver module
Power modules
Self assembling material
White reflective material
Flux

In Manufacturing Plants
Playing active roles as components of robots and machine tools as well as devices indispensable for PCB assembly




Current sensors
Gate driver module
Power modules
Transformers/Reactors
Soldering systems

In Eco-Friendly Cars
Supporting safe, secure, and eco-friendly driving with highly reliable and efficient parts and materials



Automotive reactors/Coils
Solder resist
Solder paste

At Home
Components that contribute to the energy-saving in air conditioners and power conditioners, and sensors that monitor people's activities in combination with air conditioners



Current sensors
Power modules
Reactors
Human sensors

In Smartphones and Tablet PCs
Employed as materials that support device evolution to realize multi-functionalization and miniaturization



Solder resists for flexible PCBs
Self assembling material
Black absorbing material

CSR goals and results



The Tamura Group is promoting CSR in such areas as "environment," "human rights/labor," "quality," "social contribution," "compliance/corporate ethics," "risk management," and "information management," in relation to the environment, society, and governance.

Self-assessment criteria

100% or higher achievement 80-100% achievement Less than 80% achievement

Report page

Page number indicates the page on which activities are reported in the Tamura Corporation Report 2019.
 Web: <https://www.tamuracorp.com/csr/>
 All activities, with some exemptions, are reported.

Area of Activity	Task	FY2018 Goals	FY2018 Main Activity Results	Self-assessment	Report page	FY2019 Goals	
Environment	<p>[Environment]</p> <ul style="list-style-type: none"> Offering eco-design products Reduction in use of substances of concern Promotion of energy and resource savings Promotion of group-wide integrated ISO 14001 certification 	<ul style="list-style-type: none"> Ratio of eco-design product sales to total sales Premier eco-design products: 12% Reduction in amount of substances of concern: 60% reduction in basic unit compared with FY2005 Reduction of CO₂ emissions: 13% reduction compared with FY2005 Compliance with environmental laws and regulations 	<ul style="list-style-type: none"> Ratio of eco-design product sales to total sales Premier eco-design products: 11% [Target not achieved] 	<ul style="list-style-type: none"> Reduction in amount of substances of concern: 56% reduction [Target not achieved] Reduction in power consumption: 18% reduction [Target achieved] No violations of environmental laws and regulations Completion of shifting to compliance with ISO 14001:2015 Implementation of ISO 14001:2015 education for internal auditors 		<p>Pages 19-20 Web: ◆ Environmental Management ◆ Environmental Targets, Performance, and Evaluation ◆ Eco-design Products ◆ Action on Environmental Protection</p>	<ul style="list-style-type: none"> Ratio of eco-design product sales to total sales Premier eco-design products: 13% Reduction in amount of substances of concern: 60% reduction in basic unit compared with FY2005 Reduction of CO₂ emissions: 14% reduction compared with FY2005 Compliance with environmental laws and regulations
Human rights/Labor	<ul style="list-style-type: none"> Enrichment of internal employee education Establishment of fair and impartial personnel evaluation system Promotion of diversification Stimulation of internal communications Promotion of CSR procurement 	<ul style="list-style-type: none"> Development of global human resources Improvement of appropriate working environment Continuous provision of overseas training Enrichment of healthcare Promotion of safety and sanitation Execution of the action plan to promote active female participation Response to conflict minerals issues 	<ul style="list-style-type: none"> Global expansion of personnel system Overseas training for new employees Implementation of appropriate labor management (for managerial personnel) <ul style="list-style-type: none"> Implementation of labor management training and stress management training Execution of the action plan to promote active female participation <ul style="list-style-type: none"> Introduction of diversity training for managers Introduction of career design training for general employees Promotion of taking paid leave (up 5% YoY) Revision of overtime/days off regulation as an improvement of the 36 Agreement (Article 36 of Labor Standards Act) 	<ul style="list-style-type: none"> Implementation of stress check and periodic stress counseling Workplace inspection for safety and sanitation, and implementation of traffic safety training sessions Extension of the periods of childcare leave and shorter working hours for childcare Introduction of the reemployment system for former employees Promotion of employment of disabled/elderly persons Survey of suppliers on their use of conflict minerals Promotion of conclusion of contracts, etc. in accordance with "Procurement Guidelines" <ul style="list-style-type: none"> Disuse of conflict minerals Elimination of antisocial forces 		<p>Page 21 Web: ◆ Supply Chain Management ◆ Human Rights/Labor</p>	<ul style="list-style-type: none"> Development of global human resources Improvement of appropriate working environment Continuous provision of overseas training Enrichment of healthcare Promotion of safety and sanitation Execution of the action plan to promote active female participation Response to conflict minerals issues
Quality	<p>[Quality]</p> <ul style="list-style-type: none"> Further increase in customer satisfaction Increased green procurement 	<ul style="list-style-type: none"> Quality improvement awareness-building activities during the Quality Month Hosting of the Tamura Group Quality Promotion Conference Update of green procurement standards Strengthening of management of chemical substances in products 	<ul style="list-style-type: none"> Message sent by officers responsible for quality on the first day of Quality Month Hosting of the 12th Tamura Group Quality Promotion Conference Design Review Working Seminar started Implementation of design review working seminar, introduction of design reviewer training, human error prevention training, and job teaching training 	<ul style="list-style-type: none"> Update of green procurement standards Promotion of sharing of information on establishment, revision, and abolishment of laws and regulations for chemical substances in products 		<p>Web: ◆ Quality/Service ◆ Supply Chain Management</p>	<ul style="list-style-type: none"> Establishment/enhancement of quality education system Quality improvement awareness-building activities during the Quality Month Hosting of the Tamura Group Quality Promotion Conference Update of green procurement standards Strengthening of management of chemical substances in products
Social contribution	<ul style="list-style-type: none"> Continuous social contribution activities Coexistence with community and volunteer activities Promotion of cultural, art, and sports activities 	<ul style="list-style-type: none"> Donation activities Hosting of Monozukuri (manufacturing) School Promotion of sports Implementation of internship and job experience programs Coexistence with the community and volunteer activities Promotion of resources recycling activities 	<ul style="list-style-type: none"> Donation activities Hosting of Monozukuri (manufacturing) School Support for the Drop-in Center Project in Bangladesh Support for sports activities <ul style="list-style-type: none"> Sponsorship of women's football team (Chifure AS Elfen Saitama) Sponsorship of 2019 Nerima Kobushi Half-Marathon 	<ul style="list-style-type: none"> Implementation of internship and job experience programs Implementation of volunteer activities Promotion of environment beautification activities near and around individual business sites Participation in the Akaya Project Collection of disposable contact lens cases started Contribution of used books started Promotion of Eco-cap Campaign Promotion of used stamp collection Promotion of supporting UNICEF by collecting foreign coins 		<p>Pages 22 Web: ◆ Social Contribution Activities</p>	<ul style="list-style-type: none"> Donation activities Hosting of Monozukuri (manufacturing) School Promotion of sports Implementation of internship and job experience programs Coexistence with the community and volunteer activities Promotion of resources recycling activities
Compliance/Corporate ethics	<ul style="list-style-type: none"> Dissemination of CSR Promotion of compliance with laws and regulations Enhancement of compliance education 	<ul style="list-style-type: none"> Review of Tamura Group Code of Conduct Dissemination of SDGs Promotion of compliance education 	<ul style="list-style-type: none"> Establishment of SDGs Basic Policy in Tamura Group Code of Conduct Internal dissemination of SDGs through CSR lectures, internal magazines, etc. Group training regarding the Unfair Competition Prevention Act Notice to pay attention to Competition Law 	<ul style="list-style-type: none"> Discussion-based training in small groups using training materials Issuance of an e-mail magazine, in which familiar news, case studies, etc. of compliance violations are explained in an easy-to-understand manner 		<p>Page 21 Web: ◆ CSR at Tamura Group ◆ Compliance</p>	<ul style="list-style-type: none"> Continuous dissemination of SDGs Promotion of compliance education
Risk management	<ul style="list-style-type: none"> Strengthening of risk management 	<ul style="list-style-type: none"> Periodic/occasional review of business continuity plan (BCP) documents Implementation of emergency drills 	<ul style="list-style-type: none"> Global implementation of BCP in individual business segments Implementation of evacuation drills and safety confirmation drills at domestic business sites 	<ul style="list-style-type: none"> Improvement of stockpile at each business site in Japan 		<p>Web: ◆ Risk Management ◆ Human Rights/Labor</p>	<ul style="list-style-type: none"> Periodic/occasional review of BCP documents Implementation of emergency drills
Information management	<ul style="list-style-type: none"> Reinforcement of data protection program More timely and appropriate disclosure of corporate information 	<ul style="list-style-type: none"> Reinforcement of the information protection system Timely and appropriate corporate information disclosure on Website 	<ul style="list-style-type: none"> Enhancement of network security against cyberattack and information leakage 	<ul style="list-style-type: none"> Timely and appropriate corporate information disclosure on Website 		<p>Web: ◆ Risk Management ◆ IR Communication</p>	<ul style="list-style-type: none"> Reinforcement of the information protection system Timely and appropriate corporate information disclosure on Website

Environmental topics



Contribute to achieving SDGs through global integrated certification

The Tamura Group established a globally unified environmental management system in FY2006 and integrated 24 sites at 16 companies by FY2018, the intent of which was for the Group as a whole to improve environmental performance and strengthen environmental governance. In addition, the Group has added the Sustainable Development Goals (SDGs) to its environmental policy to work on reducing environmental impact through continuous improvement activities, and aims to contribute to creating a sustainable society.

Tamura Group Environmental Policy

Environmental Concept

The Tamura Group conducts all its business activities in harmony with the environment by promoting sustainable resource use, climate change mitigation and adaptation, and biodiversity and ecosystem protection. These activities are based on the Group Mission Statement: "The Tamura Group supplies an original range of products and services, highly regarded in the global electronics market, to satisfy the evolving needs of customers, employees, and shareholders supporting the Group's growth."

Main Measures

Fully recognizing the global targets specified in the SDGs (Sustainable Development Goals) and the Paris Agreement and with the aim of achieving continuous business growth, the Tamura Group focuses on the following environmental protection activities in its business operations, including design, development, production, and after-sales service of electronic components, electrochemical materials, soldering equipment, and information equipment, by utilizing its environmental management system, observing pollution prevention practices as well as laws and regulations, and working on their consistent improvement.

1. The supply of eco-friendly products.
2. Control and reduction of environmental burden materials.
3. Promotion of energy conservation and saving resources.



Efforts on premier eco-design products

The Tamura Group carries out product environmental assessment in the development and design phases to minimize environmental impact, and strives to contribute to achieving the SDGs through the development and provision of premier eco-design products.

DECT-based Intercom System

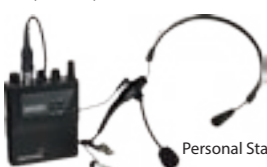
The DECT-based Intercom System offers improved usability and allows development of larger systems than a conventional digital intercom system (PHS standard).

[Features of the system]

- The number of talking groups in a studio of a broadcast station, etc., is generally 3 to 4, necessitating two units of the conventional system, but this has been reduced to one unit of this system (MK-C96).
- The number of networked personal stations per antenna (MK-A96) has been increased from 4 to 10, and communication distance has been tripled; therefore, it is possible to greatly reduce the number of antennas installed.
- For short communication distance, reducing transmission power leads to power saving and decreases interference.



Active Antenna (MK-A96)



Personal Station (MK-B96)



Main Controller (MK-C96)

Ultra-thin signboard LED module Shining Soleil

Shining Soleil is an LED light source for one-sided thin signboards. It can be used for ultra-thin signboards (up to 30 mm) thanks to Koha's original optical design, in the same way as Shining Axis, an LED light source for double-sided signboards. Shining Soleil is a specialized LED light source for ultra-thin signboards. It realizes uniform luminance thanks to the use of an optical lens made by using a fine processing technique to reduce uneven light emission. It weighs approximately 60% less than an existing light source for light guide plates used for thin signboards of approximately 30 mm thickness; therefore, it realizes energy saving and environmental contribution in the process up to delivery and installation.



Product image



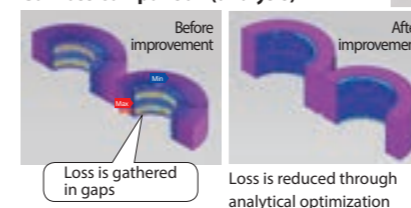
Installation image

High-frequency reactor for resonance L circuits and boundary-current mode, having high efficiency and high performance

A circuit that causes loss in a reactor, such as a resonance circuit or a critical mode, is increasingly used in energy, air conditioning, and various other fields. This product features a low-loss ferrite core and an edgewise coil that minimizes high-frequency loss. In addition, the division of gaps reduces loss due to flux leakage from the gaps. Magnetic-field analysis has been utilized effectively for the optimization of this gap configuration. The structure and configuration of the reactor were examined in this way, and further loss reduction and energy saving were achieved.



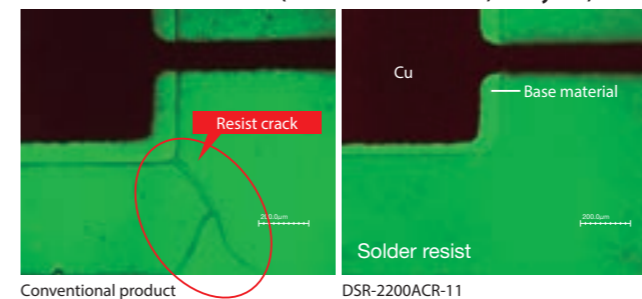
Coil loss comparison (analysis)



High-reliability, crack-resistant solder resist for automotive use, DSR-2200ACR-11

The increasing popularity of eco-friendly cars (hybrid vehicles, electric vehicles, etc.) has ushered in an increase in the number of electronic control units (ECUs) installed in one car. To save space and reduce weight, the installation of ECUs in a harsher, higher-temperature environment is expected. Therefore, solder resist for PCBs used in ECUs needs to exhibit better resistance to a high-temperature environment. This product has higher heat resistance and lower elasticity (flexibility) than conventional products. In a thermal cycle test of $-40^{\circ}\text{C} \leftrightarrow +125^{\circ}\text{C}$ assuming a high temperature environment, cracking in the solder resist was significantly suppressed, achieving a life cycle number of 20 times or more in comparison with conventional products (results of evaluation test in the company). It has high flexibility as well and can be used in PCBs that are bent when assembled (rigid flexible PCBs). It is a halogen-free product that contributes to space saving through the bending assembly.

Crack resistance test results ($-40^{\circ}\text{C} \leftrightarrow 125^{\circ}\text{C}$ after 3,000 cycles)



Conventional product

DSR-2200ACR-11

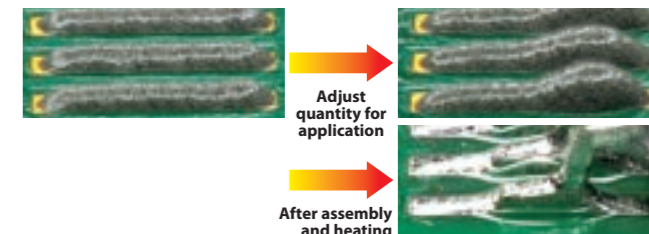
Upgraded version of energy-saving reflow TNV series, TNV-Ver. III

TNV-Ver. III is an upgraded version of the energy-saving reflow TNV series. This product is equipped with convection control technology that efficiently circulates gas in the system, thereby reducing flux adhesion to the inner surface of the furnace and decreasing cleaning frequency and nitrogen consumption. Expanding the cleaning cycle improves customers' productivity, and reductions in nitrogen consumption and cleaning frequency allow for energy saving and resource saving, respectively.

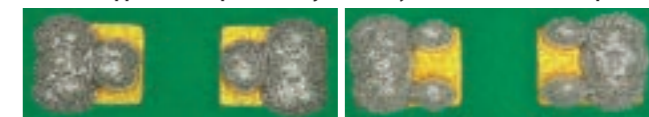


Jet-dispensing Pb-free solder pastes JDS204F-MJ21-HF and JDS204G-MJ21-HF

These products use the solder composition of SAC305, which is Pb-free, and are regarded as halogen-free under the JPCA-ES01 standard. The use of jet dispensing as a contactless solder application process is being considered for solder supply to flexible printed circuit (FPC) boards, which are difficult to position by existing printing processes, and to circuit boards with cavities or three-dimensional circuit boards, which are very difficult to print by using a conventional printer. Currently, the JDS series offers two types of solder paste products according to the application diameter, and provides discharge stability and reduces scattering (satellite) during jet dispensing. Because it is treated in a contactless and maskless manner, no mask cleaning is needed, in contrast to a conventional assembly process. Therefore, it is an environmentally conscious product in terms of both characteristics and processes, helps meet the needs of next-generation customers, and responds to increasing environmental awareness.



The solder application shape can be adjusted freely because of the maskless process.



Social & Governance Topics



Engagement with SDGs

The Tamura Group, based on the understanding that the SDGs (Sustainable Development Goals) adopted by the UN General Assembly in 2015 represent important agenda to be tackled by the society, has been undertaking efforts to integrate the concept of SDGs into its operation.

■ Establishment of basic policy

The "Tamura Group Code of Conduct" was revised to identify the SDGs as the agenda to be worked on by the whole Group, and a basic policy was established (See page 01). We have developed a strategy for sustainability and have been promoting it by incorporating the SDGs into the 12th Medium-term Management Plan that started in April 2019.

Strategy for sustainability

- **Business growth by solving social problems**
We are making efforts to improve the core competence of each business and to develop and supply products and solutions that can contribute to solving social problems.
- **Contribution to the realization of a decarbonized society**
We are making efforts to promote energy saving and to reduce CO₂ emissions in our business activities.
- **Disclosure of non-financial information**
We are making efforts to improve corporate value by appropriately responding to information needs of stakeholders.

■ Company-wide dissemination

With the aim of having all employees of the Group understand and work toward realizing the SDGs as if it were their own, we have been promoting various in-house dissemination measures since FY2018.

◆ SDG lecture meeting

An SDG lecture meeting was held with renowned visiting lecturers who are experts in the theory and practice of corporate value improvement in attendance. The invited lecturers were Mr. Hidemitsu Sasatani (the then adviser of ITO EN, LTD.), who talked about "Integration of SDGs into business management" and Mr. Masao Seki (senior adviser of CSR at Sompo Japan Nipponkoa Insurance Inc.), who talked about "Practicing SDGs in actual business." In the audience were a large number of officers and managers of Tamura Corporation and its affiliates, and they were able to deepen their understanding of the SDGs.



◆ Internal magazine

In an effort to raise awareness of the SDGs, a column dedicated to the SDGs has been serialized since the October 2018 issue. The translated versions of the magazine have been delivered to overseas bases as well.



◆ SDG badges and business cards

With the aim of communicating to outside stakeholders our commitment to business with awareness of the SDGs, our approval of the SDGs, and our proactive efforts, SDG badges are distributed to employees and the SDG logo appears on their business cards.



Efforts in workstyle reform

By balancing efforts to improve job satisfaction with appropriate labor management and by building an organization that values communication, we have been working on establishing a company culture where employees can pleasantly engage in work without much stress. Further, we aim to create a work environment that has a system for responding to diversity and various lifestyles so that everyone, regardless of gender and nationality, can continue to work safely for many years. We have been focusing our efforts on taking more positive action for the "promotion of active social participation by women."

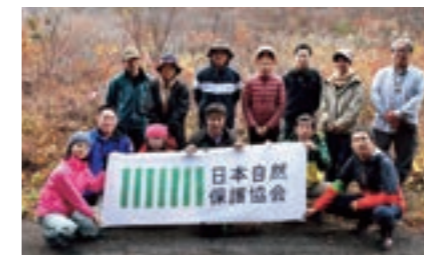
- In FY2018, two new seminars were started, as follows:
- Seminar for managers to learn the way of thinking, behavior, and management for the promotion of diversity in general, including guidelines for active social participation by women
 - Seminar for general staff to learn ways of designing their future careers, making and implementing action plans, and building their foundation so that they may be able to continue working actively in the face of various life events.

In addition to the above, seminars on labor management and stress management were also held, targeting managers in all the business units on a regular basis.

Tamura Corporation will continue its efforts to carry out compliance-based labor management and to fully realize a work environment with minimal stress.

Participation in Akaya Project*

As a corporate member of (public utility foundation) the Nature Conservation Society of Japan, Tamura Corporation has been supporting the "Akaya Project" for biodiversity restoration by offering use of the Company's resort house and training facilities located at the foot of the Akaya Forest where the project's activities are carried out. In November 2018, aiming to restore the area from an artificial forest to a natural one, the employees of Tamura Corporation and group companies participated in improvement cutting on a voluntary basis.



*Akaya Project: A project to promote biodiversity restoration and realize a sustainable regional community through joint cooperation of three core organizations, namely, the "Akaya Project Regional Council" that consists of the region's residents, the Forestry Agency Kanto Regional Forest Office, and the Nature Conservation Society of Japan. This project is taking place in the Akaya Forest, a national forest that measures approx. 10 thousand hectares (10 km x 10 km), extending from the northern area of Minakami Town, Gunma Prefecture to the prefectural border with Niigata Prefecture.

Monozukuri (Manufacturing) School

Since 2008, the *Monozukuri* (manufacturing) School has been held every year to convey the joy of *monozukuri* to the next generation, who will be the builders of the future. At the School, such skills as how to make an AM radio are taught to children by the Company's employees. In FY2018, the School was also held in Tamura Corporation Sakado Factory, Wakayanagi Tamura Corporation, and Aizu Tamura Corporation, which received a favorable response.



① Sakado Factory, Tamura Corporation
② Wakayanagi Tamura Corporation ③ Aizu Tamura Corporation

Winner of the Self-Defense Firefighting Competition

Aiming to minimize damage in the event of a fire, the Tamura Group has established a self-defense fire-fighting unit at each office/factory to which the Fire Defense Law is applicable. At the head office and Tokyo Factory, employees trained in how to handle fire hydrants participate every year in the local self-defense firefighting competition. In 2018, they won the first place in the category of "operation of Type 1 Fire Hydrants."



Sakado Factory Rebuilding Project

As part of efforts to restructure business related to electronic components, the Sakado Factory (located in Saitama Prefecture) as the core base was rebuilt and operation was started in September 2018. This is a highly sustainable office building that aims to reduce environmental load by realizing substantial energy saving, and to establish a comfortable and pleasant work environment based on the concept of "environmental and human friendliness." Equipped with high earthquake resistance and the capability of continuing business operations with less energy in the event of a disaster, the building also contributes to the BCP (Business Continuity Plan).



■ Environmentally-friendly Building Certified as Nearly ZEB

In the FY2017 Net Zero Energy Building (ZEB) Verification Project, the building received Nearly ZEB certification for achieving over 75% energy saving through both reduction of building energy consumption and energy supply by energy generation.

Details of efforts to attain ZEB

- Use of high-performance heat-insulating material and sashes
- Introduction of high-efficiency, business-use, and multi-type air-conditioners, total heat exchangers, and auto-dimming LEDs
- Energy generation with solar panels, whose operation adopts BEMS for energy saving

■ Designated as "Sainokuni Factory" by Saitama Prefecture

Thanks to our acquisition of the Nearly ZEB certification for the new building, the implementation of plant tours, and the *Monozukuri* School, our social contribution activities to the local community were highly regarded and the Sakado Factory was recognized as a technologically and environmentally excellent factory and designated as FY2018 "Sainokuni Factory" by Saitama Prefecture.



VOICE

General Affairs Group, Human Resources & General Administration Div., Sakado Factory

Shunichi Shimizu



We were pleased to have been awarded the Nearly ZEB certification as our efforts in ZEB had been unprecedented in the whole Tamura Group. We have not yet reached our goal and will continue working on energy saving. Our efforts in "environmental & human friendliness" have just started.

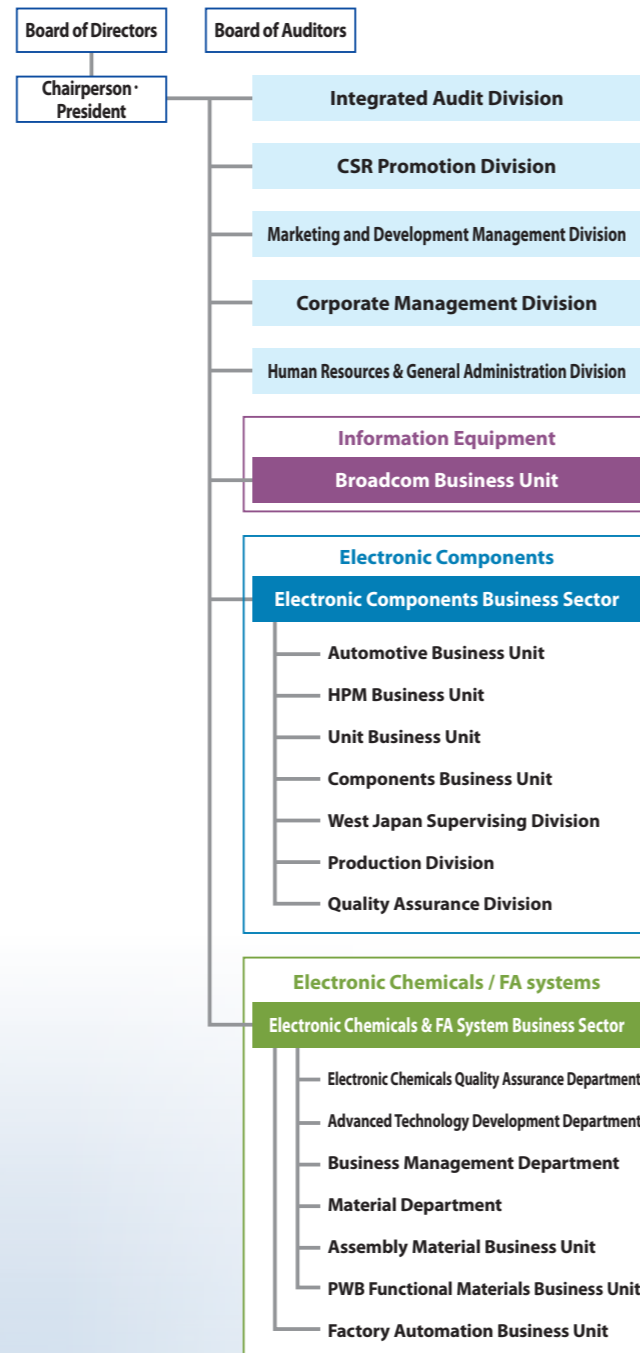
Company Profile

Company name TAMURA CORPORATION
Founded May 11, 1924 (Incorporated in Nov 21, 1939)
Capital ¥11,829 million
Share capital (as of Mar. 31, 2019)
Authorized 252,000,000 shares
Issued and outstanding 82,042,757 shares
 (Not including 728,716 shares of treasury stock)
Closing date March 31, each year.
Number of shareholders 11,774

Directors/
Corporate officers (as of June. 26, 2019)

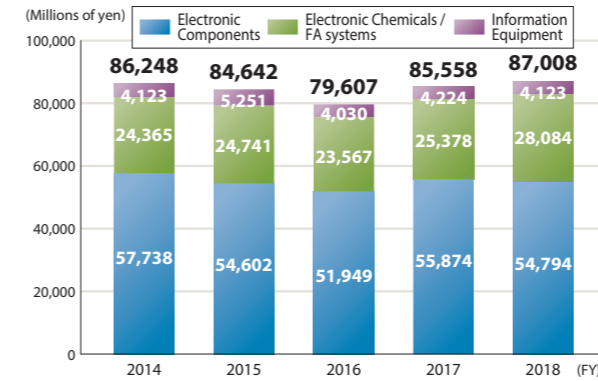
Chairperson and Representative Director Naoki Tamura
President and Representative Director Masahiro Asada
Director/Vice President Yusaku Hashiguchi
Outside Director Takeo Minomiya
 Akira Kubota
 Haruko Shibumura
Director/Senior Executive Officer Norihiko Nanjo
 Shoichi Saito
Standing Auditor Hajime Kubo
Outside Auditor Koichi Moriya
 Atsuji Toda

Organization Map (as of April 1, 2019)



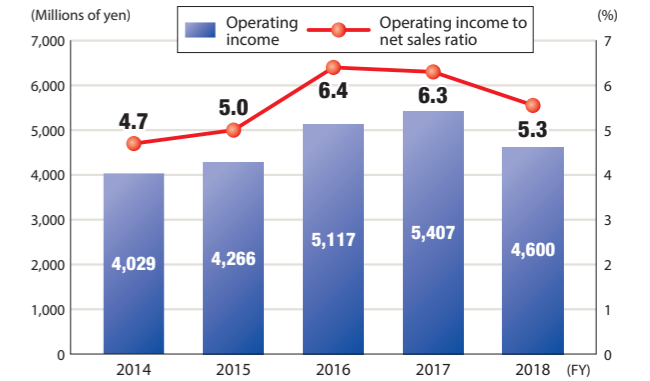
Major financial information (consolidated)

● Net sales

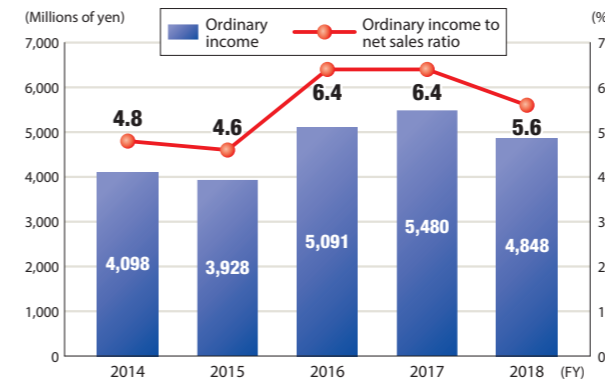


※ Net Sales for external Customers by business segment (excludes internal net sales between different businesses).
 ※ The amount of net sales for each fiscal year includes other operations (transportation, warehousing and others).

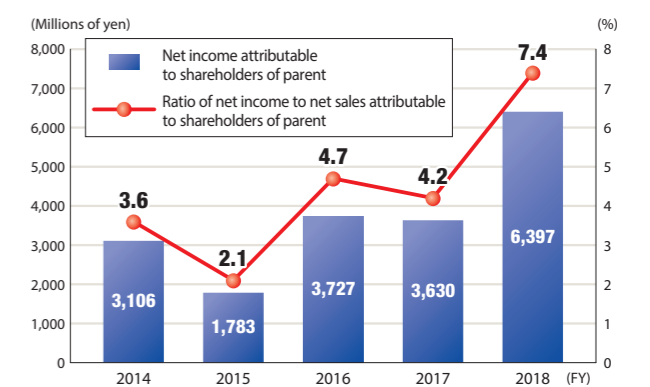
● Operating income/Operating income to net sales ratio



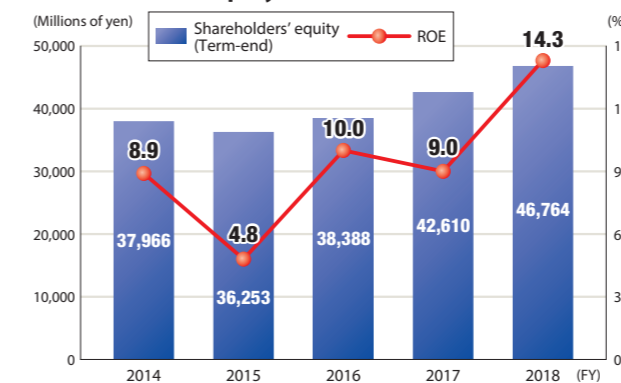
● Ordinary income/Ordinary income to net sales ratio



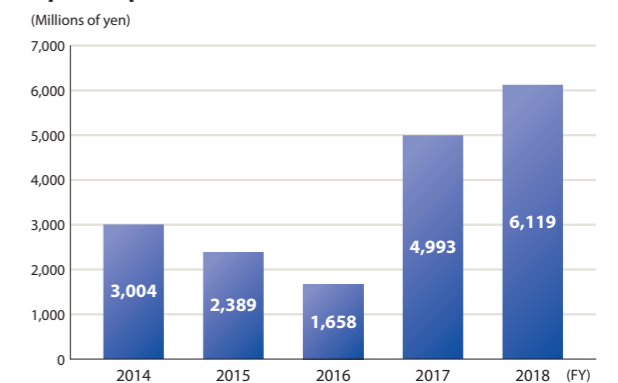
● Net income attributable to shareholders of parent / Ratio of net income to net sales attributable to shareholders of parent



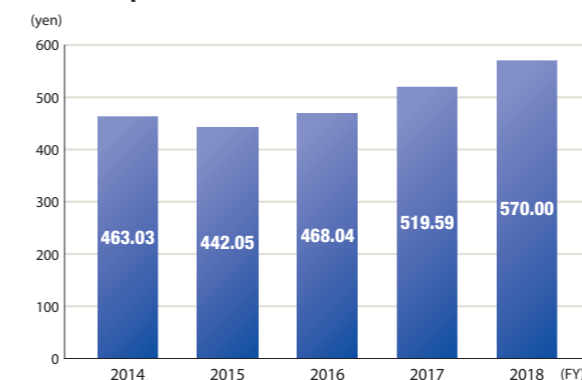
● ROE (Return on Equity)



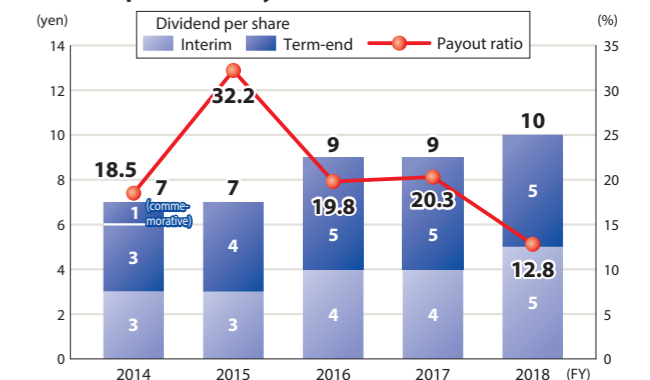
● Capital expenditure



● Net assets per share



● Dividend per share/Payout ratio



EUROPE

- U.K./Czech Tamura Europe Limited
- Germany Tamura Elsold GmbH
- Italy Tamura Magnetic Engineering S.R.L.

ASIA

- Korea Tamura Chemical Korea Co.,Ltd.
- Tamura Corporation of Korea
- Tamura Professional Solution Korea Co.,Ltd.
- China Tamura Corporation of China Limited
- Shanghai Xiangle Tamura Electro Chemical Industry Co.,Ltd.
- Tamura FA System (Suzhou) Co., Ltd.
- Tamura Seiko Electronics (Changshu) Co.,Ltd.
- Tamura Electronic Material (Tianjin) Co.,Ltd.
- Hefei Ecree-Tamura Electric Co.,Ltd.
- Tamura Kaken (Dongguan) Ltd.
- Tamura Electronics (S.Z.) Co.,Ltd.
- Tamura Electronics (Huizhou) Co.,Ltd.
- Hong Kong Tamura Corporation of Hong Kong Limited
- Taiwan Taiwan Tamura Technology Co., Ltd.
- Thailand Tamura Corporation (Thailand) Co.,Ltd.
- ESE Industries (Thai) Co., Ltd.
- Malaysia Tamura Electronics (M) Sdn.Bhd.
- Tamura Kaken (M) Sdn.Bhd.
- Singapore Tamura Corporation Singapore Pte.Ltd.
- Vietnam Tamura Corporation Vietnam Co.,Ltd.
- Bangladesh Op-Seed Co., (BD) Ltd.
- Myanmar Earth Tamura Electronic (Myanmar) Co.,Ltd.
- India Tamura Elcomponics Technologies Pvt.Ltd.

Rebuilding of the Sakado Factory

The Sakado Factory (Sakado City, Saitama Prefecture) was rebuilt and operation of the new building was started in October 2018. At the same time, the manufacture of in-vehicle-related and aviation/space-related products was moved to Wakayanagi Tamura Corporation. Optimum allocation of the electronic component-related business is in progress.

The Sakado Factory opened in 1980 as a core base for production, development, and sales of the electronic components, but the production function was later moved to domestic and overseas Group companies. On the other hand, its role as the core base for product development and marketing has been increased. A layout that best suits the expected future role of the Sakado Factory has been realized in this new and compact building, which has been awarded the Nearly ZEB certification and has already started operation.

(See page 22 for details.)



New Factory Building of Wakayanagi Tamura Corporation

The new factory of Wakayanagi Tamura Corporation (Kurihara City, Miyagi Prefecture) was completed in October 2018 in response to the increasing demand for "boosting reactors for eco-friendly cars" used in hybrid vehicles, plug-in hybrid vehicles, electric cars, etc. High-volume production started in the second half of FY2019 and additional investment for further expansion of production capacity is scheduled as well.

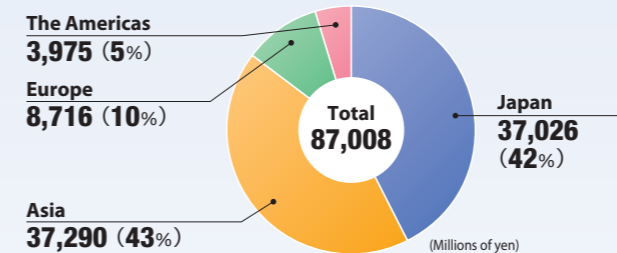
Wakayanagi Tamura Corporation opened in 1966 as a manufacturing factory for small transformers. Having changed its production items from time to time, it now plays an important role as the core factory for the electronic components business. Despite the severe damage caused by the Great East Japan Earthquake in March 2011, the employees have strived hard to achieve recovery and have been able to resume business operation.



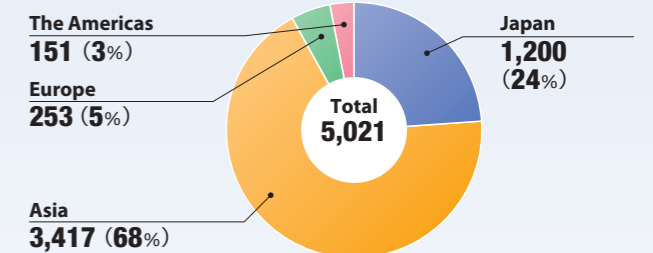
The AMERICAS

- U.S.A Tamura Corporation of America
- Tamura Kaken Corp.,U.S.A
- Mexico Tamura Power Technologies de Mexico, S.A de C.V.
- Brazil Telepart-Tamura Industria e Comercio Ltda.
- Indusul Industria de Transformadores Ltda.
- Industria Sul Brazil de Transformadores Ltda.

Composition of net sales by region (consolidated) (FY2018)



Number of employees by region (consolidated) (as of March 31, 2019)





This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.



Tamura's mascot "Quenu"

TAMURA CORPORATION
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