TDK

TDK Corporation
Nihonbashi Takashimaya Mitsui Building,
2-5-1 Nihonbashi, Chuo-ku, Tokyo 103-6128
http://www.global.tdk.com/corp/en/index.htm

Attracting Tomorrow

TDK



Leveraging the Strength of Our Diversity

ANNUAL REPORT 2018

English Version



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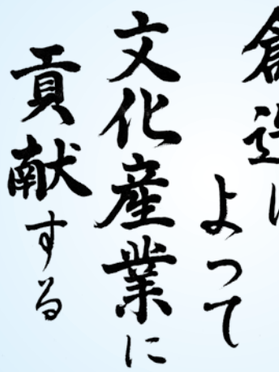
Editorial Policy

Annual Report 2018 provides financial data, including information on business results, business and marketing activities, the Medium-Term Plan, and related topics. In addition, it also contains general information on environmental (E), social (S), and governance (G) topics. For further information on financial topics not covered here, as well as on topics related to corporate social responsibility (CSR), and for product information, please visit the TDK website.

Cautionary Statements with Respect to Forward-Looking Statements

This report contains forward-looking statements, including projections, plans, policies, management strategies, targets, schedules, understandings, and evaluations about TDK and/or its Group companies (“the TDK Group”). These forward-looking statements are based on the current forecasts, estimates, assumptions, plans, beliefs, and evaluations of the TDK Group in light of information currently available to it, and contain known and unknown risks, uncertainties, and other factors. The TDK Group therefore wishes to caution readers that, being subject to risks, uncertainties, and other factors, the TDK Group’s actual results, performance, achievements, or financial positions could be materially different from any future results, performance, achievements, or financial positions expressed or implied by these forward-looking statements, and the TDK Group undertakes no obligation to publicly update or revise any forward-looking statements after the issue of *Annual Report 2018* except as provided for in applicable laws and ordinances.

Constantly Upholding Our
Founding Spirit



Corporate Motto
Contribute to culture and industry through creativity

Addressing future demand on a material level

Today’s TDK was founded in 1935 as Tokyo Denki Kagaku Kogyo K.K., with the goal of industrializing ferrite. Kenzo Saito, the Company’s first president, succeeded in commercializing ferrite, an unknown material at the time. Saito devoted his energy to examining technologies from the perspective of society’s future needs, pursuing the goal of creating value that does not yet exist in the world on a material level. This founding spirit is incorporated in the TDK Corporate Motto, and continues to be faithfully passed down today.

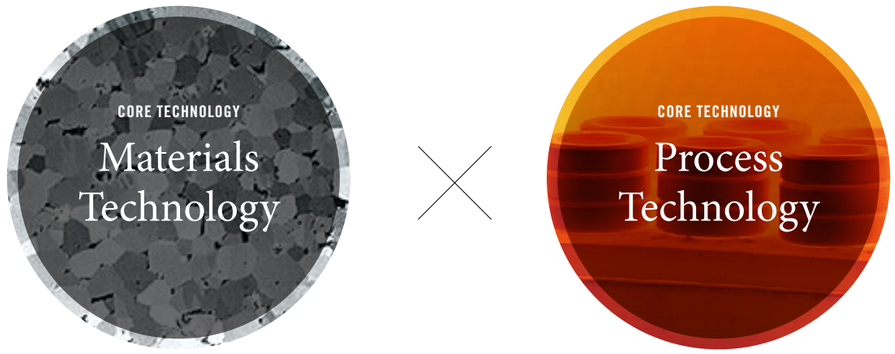


Ferrite in the early years

A Never-Changing TDK, an Ever-Changing TDK

Since the invention of ferrite in 1930, 88 years ago, TDK has put the material to use in a constantly expanding range of ferrite products. Passive components and magnets that utilize TDK's core technologies in ferrite-based materials and process technologies continue to be the foundation of *Monozukuri* (manufacturing excellence), for which TDK is known. We are constantly building upon this foundation and developing new innovations from the perspective of society's future needs.

A Never-Changing TDK



We research the properties of materials at the atomic level and develop original electronic components and devices to meet advanced needs.

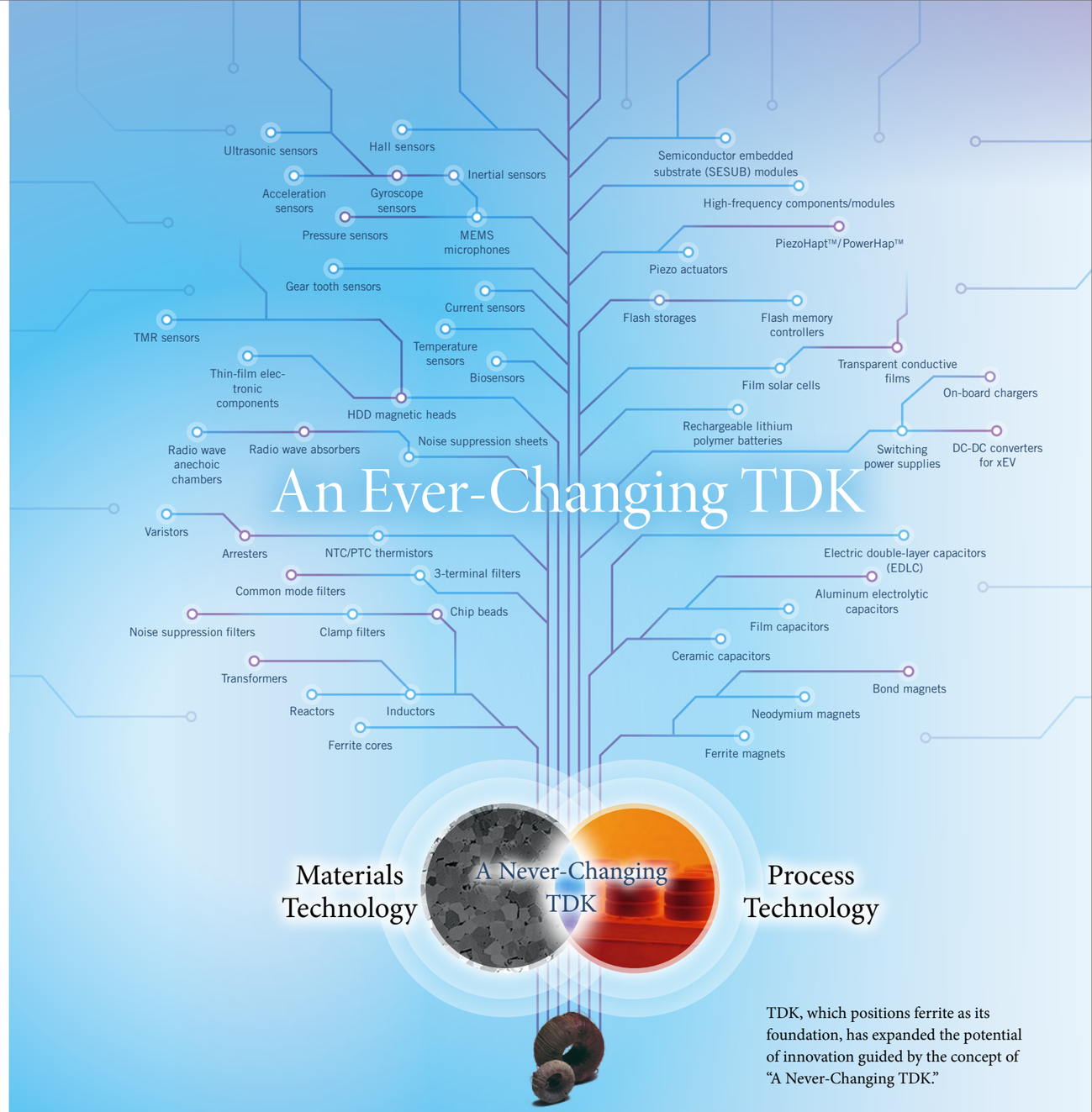
- Materials design technology
- Powder control technology
- Microstructure control technology

We create high-performance and function products with nanometer-order control technology.

- Forming technology
- Sintering technology
- Thick-film process technology
- Thin-film process technology

P.10–P.11 Five Core Technologies as the Foundations of Growth

An Ever-Changing TDK



TDK, which positions ferrite as its foundation, has expanded the potential of innovation guided by the concept of "A Never-Changing TDK."

Four Great World-Class Innovations by TDK

1935 INNOVATION 1

Ferrite



The invention of ferrite by the Tokyo Institute of Technology and the commercial development of ferrite cores by TDK was recognized in 2009 by the Institute of Electrical and Electronics Engineers as an IEEE Milestone—a historic achievement that has made significant contributions to society and the global electronics industry.

1968 INNOVATION 2

Music cassette tapes



TDK developed the world's first cassette tape for music in response to demand from consumers to enjoy music easily. Our top-notch magnetic material and coating technologies later became the foundation for various innovations.

1980 INNOVATION 3

Fine multilayering technology



TDK developed the world's first multilayer chip inductor by laminating a three-dimensional helical coil inside a chip. This technology has become the foundation for the miniaturization and weight reduction of electronic equipment.

1987 INNOVATION 4

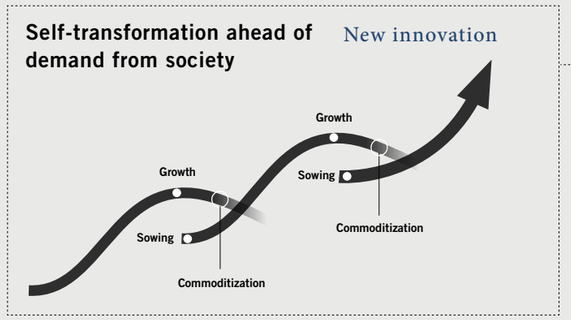
Thin-film head technology

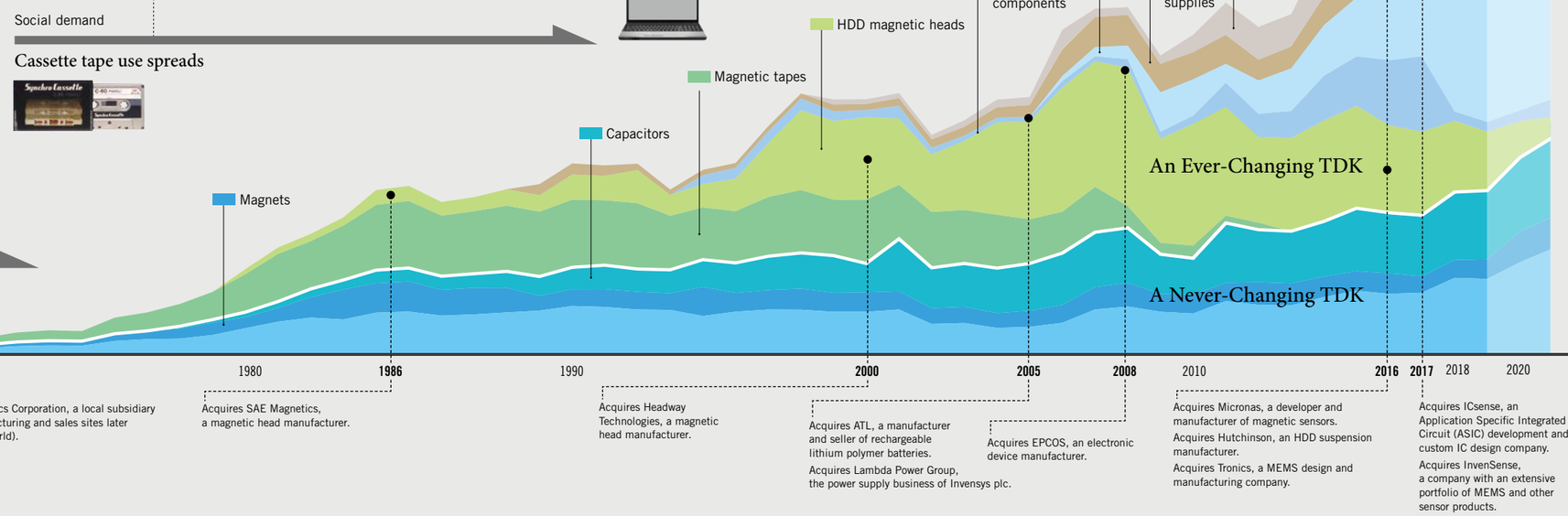


TDK has contributed to the astonishing high recording density of hard disk drives (HDDs) by utilizing nano-level thin-film process technology.

TDK Evolves Constantly Based on a Never-Changing TDK

TDK has a solid foundation of passive components and ferrite-based products and core technologies, centering on materials and process technologies. While our core products continue to sell well, we are sowing seeds in anticipation of future demand from society based on a sustainable growth plan of nonlinear evolution that entails boldly replacing our core businesses.





Self-Transformation Is the Driving Force behind TDK's Growth

TDK has transformed itself as a company in many ways, not merely in its business portfolio. We have achieved rapid globalization as a result of expanding our overseas sites to establish suitable production locations and by pursuing a dynamic M&A strategy. In addition, we continue to strengthen corporate governance—for example, by switching to global standards to match our global business structure—not in response to external demand, but to improve the chances of success of our strategies from a long-term perspective.

Increasing Globalization



Strengthening governance



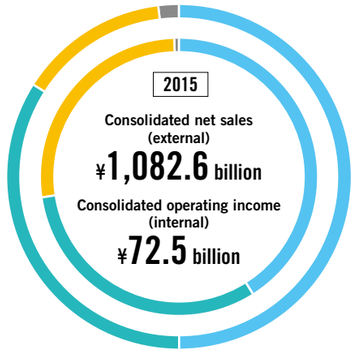
(as of June 2018)

Growing in the automotive market



To Answer the Needs of a New World

Anticipating a transformation of social structures, TDK is breaking ground on another path of nonlinear evolution. Taking a long-term view, TDK has made many bold moves, including selling its high-frequency components business, which had been driving profitability, and focusing on M&As in the area of sensors.



New “nonlinear evolution”

- Passive Components
- Magnetic Application Products
- Film Application Products
- Other

EXIT → INVEST

Sale of high-frequency components business and deepening of collaboration with Qualcomm

TDK and Qualcomm established RF360 Holdings, a joint venture to supply high-frequency components, and the Company will complete the sale of all shares to Qualcomm in August 2019. The sale of the high-frequency components business, a driving force for earnings, is a manifestation of TDK’s strong will to transformation itself with a view toward the future of society.

TDK × Qualcomm

Main synergies from the collaboration

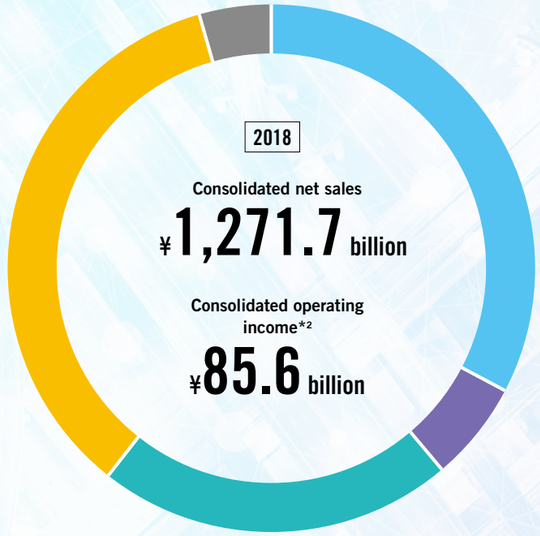
- Technical cooperation on a wide range of cutting-edge technologies in next-generation mobile communications, IoT, and automotive-related fields including passive components, batteries, wireless power transfers, sensors, and MEMS
- Enhanced reference design capabilities through Qualcomm

Dynamic M&As focusing on sensors

TDK has changed its business portfolio through acquisitions focusing on sensors and has developed a new growth foundation for the future.

SENSOR	March 2016	Micronas Hall sensors
HDD	October 2016	Hutchinson HDD suspensions
SENSOR	December 2016	Tronics MEMS inertial sensors
SENSOR	March 2017	ICsense ASIC design and development
SENSOR	May 2017	InvenSense Acceleration sensors, gyroscope sensors
SENSOR	February 2018	Chirp Ultrasonic sensors

Establishing a Foothold for the Future

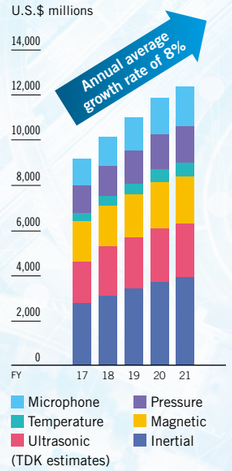


- **Passive Components*1** Net sales **32.9%** (¥417.8 billion)
- **Sensor Application Products*1** Net sales **6.1%** (¥77.4 billion)
- **Magnetic Application Products*1** Net sales **21.8%** (¥277.5 billion)
- **Energy Application Products*1** Net sales **34.8%** (¥442.8 billion)
- **Other*1** Net sales **4.4%** (¥56.3 billion)

*1 In accordance with segment reorganization in the first quarter of fiscal 2019, the Energy Application Products segment was newly established. Certain products of Other Passive Components in the Passive Components segment were classified into the Other segment, certain products of the Other segment were classified into Other Passive Components in the Passive Components segment, and certain products of the Sensor Application Products segment were reclassified into the Other segment. Sales in fiscal 2018 have also been reclassified to conform to the new segmentation.

*2 To comply with the U.S. Financial Accounting Standards Board’s Accounting Standards Update No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, we are revising our business results for fiscal 2018, which were reported on April 27, 2018—operating income, research and development expenses, cost of sales, and selling, general and administrative expenses (revised operating income: ¥85,633 million to ¥89,692 million; revised research and development expenses: ¥103,457 million to ¥102,641 million). The disclosure of revised cost of sales and selling, general and administrative expenses will be made at the announcement of financial results for fiscal 2019. The figures before adjustment are shown.

Prospective demand for sensors worldwide (non-optical) by product



A new world is coming with advances in IoT and AI whereby everything will connect via the Internet, behave autonomously, and be upgraded autonomously. In such a world, we expect the following business opportunities to emerge in which we can make use of our core technologies.

- Numerous sensors will connect the real world and cyberspace; steady growth is expected in our target non-optical sensor market
- Demand will expand for small, large-capacity, high-reliability batteries supporting the autonomous operation of things
- The electrification of automobiles will advance further, with self-driving vehicles to appear in the future
- IoT will accelerate the digitization of manufacturing and conversion to services
- Renewable energy will spread rapidly

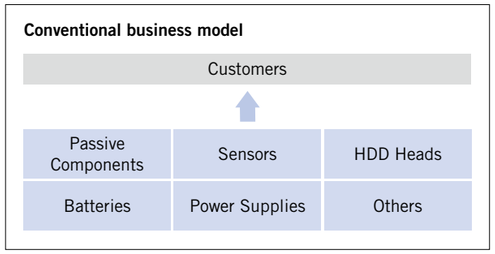
In our existing businesses, the following changes in the business environment have been clearly observed.

- Shrinking of the HDD market due to the expanded use of SSDs, but growth in demand for data centers
  (P.66–P.67 Magnetic Application Products Segment)
- Demand for modularization due to the further enhancement of smartphone functionality

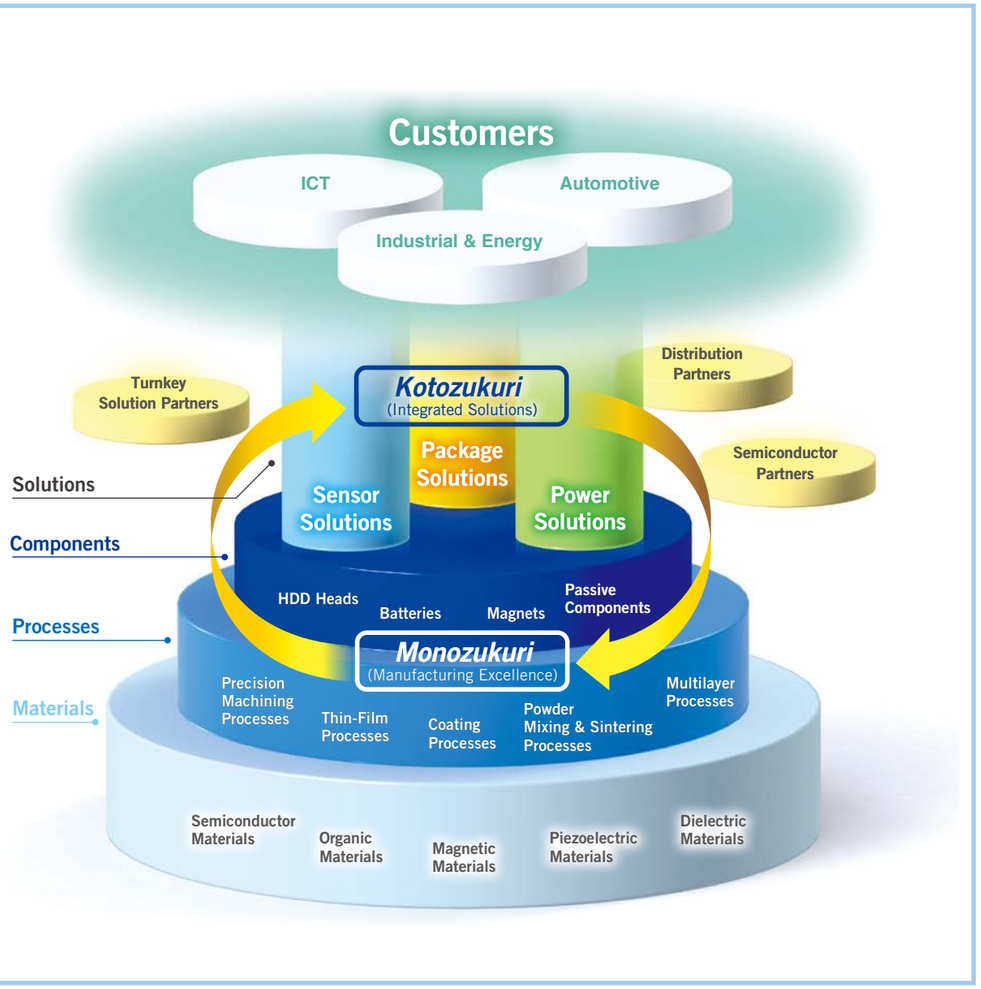
Transforming Our Business Model with a View Toward the Future

TDK is proceeding to switch from a conventional business model involving production to order and single-item sales to a new business model. Going forward, we will be generating ideas from *Kotozukuri* (integrated solutions)—sensor solutions, power solutions, and package solutions—and converting them into products through *Monozukuri* (manufacturing excellence), the foundation of our business. This approach is nothing less than a reexamination of the origins of TDK stated in the corporate motto, "contribute to culture and industry through creativity."

Conventional business model



Trans-formation



Competitive advantages supporting the sustainability of our business model

01 Materials and Process Technologies

Creating "black boxes" to prevent imitation

Materials technology elicits raw materials suitable for the targeted properties in a product through advanced expertise in complex composition processes and control of additives. Process technology maximizes the properties of these materials while also expanding the scope of their application in products. Creating "black boxes" for techniques for controlling crystal particles at the atomic level, for intellectual property, and for other know-how makes them difficult to imitate overnight.



02 Customer Base

Enabling investment from a long-term perspective

TDK has built strong relationships with its customers in the automotive, ICT, industrial & energy markets, and other markets. This allows us to more accurately forecast future changes in technology trends, and reduces the risks involved in making aggressive R&D and capital investments.



03 Strength of Diversity

A spirit of equality leading to M&A success

TDK has built relationships with the companies it has acquired based not on controlling them but on positioning them as equal partners. This expertise in post-merger integration (PMI) is a powerful weapon in ensuring the success of our business portfolio.



04 Global Business Base

Overseas sales in excess of 90%

TDK's global business base, with 84.5% of production outside of Japan and 91.1% of sales generated overseas, is a competitive advantage that will allow us to capture business opportunities in the IoT market, which is expected to expand worldwide.



05 Integrated Production

A powerful competitive advantage in the age of IoT

Integrated production, where everything from materials to the final product is handled in-house, allows TDK to improve its manufacturing excellence and increase productivity through the introduction of IoT and robots. Our ability to also control quality entirely in-house gives TDK a competitive advantage in areas where quality requirements are particularly high, including the automotive market.



Five Core Technologies as the Foundations of Growth

Since its inception, TDK has grown on the strength of five core technologies: materials technology based on ferrite; process technology used to realize materials' characteristics; evaluation and simulation technology to promote development designs; product design technology for merging electronic components into advanced and multiple functions; and production technology to support mass output.

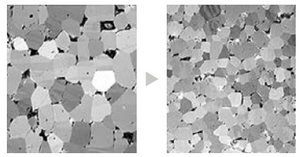
TDK continues to steadily polish this core know-how not to make defects during the production process. The goal is the *Arubeki Sugata* (ideal process) of *Monozukuri* through harmony between people and robots, moving to realize "Industry 4.0 + Zero Defect."

Materials Technology

Researching the properties of materials at the atomic level and developing original electronic components and devices to meet advanced needs.



Materials design technology
Realizing required characteristics through main materials blending and trace additive control.



Powder control technology
Improving materials' characteristics through crystal grain miniaturization and uniformity.



Microstructure control technology
Realizing required characteristics through control of crystal grain internal composition and grain boundaries.

Process Technology

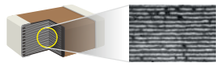
Creating high-performance and function products with nanometer-order control technology.



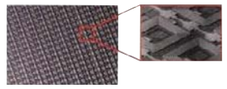
Forming technology
Adding binding agents to material powder and forming small, slim and complex-shaped products.



Sintering technology
Sintering to solidify and harden with precision control of temperature and atmosphere (gas components in the furnace).



Thick-film process technology
Printing and multilayering electrodes and other elements to produce chip capacitors, chip inductors, and other layered electronic components.



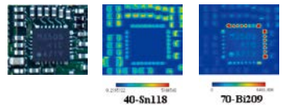
Thin-film process technology
Forming thin film to create electrodes, coils, and head elements to manufacture HDD magnetic heads and thin-film electronic components.

Evaluation and Simulation Technology

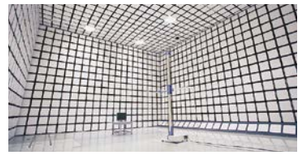
Initiating such as material analysis, simulation of product structure, heat and magnetic fields, and noise measurements and countermeasures to raise product functions.



Evaluation and analysis technology
Conducting microstructure observations, atom distribution visualization, and other advanced processes.



Simulation technology
Visualizing heat distribution released from circuits, distribution of noise-causing magnetic fields, among others.



EMC countermeasure technology
Protecting electronic equipment from external noise penetration, as well as controlling noise released by such equipment.

Product Design Technology

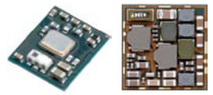
Integrating electronic components to realize high-performance/multiple-function electronic devices and optimum combination modules.



Circuit technology
Using optimum component selection, wiring, radiant heat design, and other simulation to advance circuit designs.



Packaging technology
Pursuing smaller size and higher performance with component final assembly, binding, sealing, advanced structural design, configuration design, and other expertise.



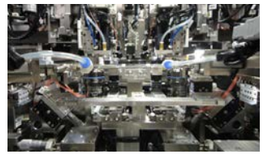
Semiconductor Embedded Substrate (SESUB) technology
Embedding ICs, components, wiring, and other elements in substrate thickness to achieve modularization.



Low temperature cofired ceramic (LTCC) technology
Printing and laminating capacitors, inductors, and numerous other elements on dielectric sheets to achieve modularization.

Production Technology

Stepping to further raise quality, cost, delivery, and service (QCDS) via speedy responses to market changes, together with increasing product capacity.



Equipment technology
Superb products emerge from superb production equipment. Development of original engineering methods and in-house creation of production facilities are key TDK *Monozukuri* strengths.

The Impressive TDK Electronic Component Lineup

Five Core Technologies

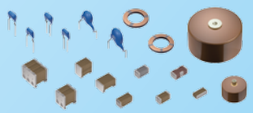
Fertile resources to address diversified needs

TDK contributes to society with a wide-ranging electronic component lineup created with core technologies and "*Monozukuri* power." The list includes passive components indispensable for advanced functions in ICs and other active components; a broad selection of non-optical sensors; the core product of magnets since the Company's foundation; HDD magnetic heads leading the world; batteries earning global top-class shares for use in mobile devices; and other offerings.

Passive components

We supply a wide range of passive components such as multilayer ceramic chip capacitors (MLCCs), for which over 1,000 units are used in high-end smartphones, inductors, piezo actuators, aluminum electrolytic capacitors, and other items.

Ceramic capacitors



Piezoelectric material components, circuit protection components



Inductive devices



Aluminum electrolytic capacitors, film capacitors



Automotive



ICT

Sensors

TDK fields a top world-ranking array of non-optical sensors. The lineup includes magnetic, temperature, pressure, gas, microphone, gyroscope, acceleration, barometric pressure, ultrasonic, and other sensor types.



Power supplies

Focused on industrial equipment models, the TDK power supply lineup spans AC-DC switching power supplies, DC-DC converters, and storage battery chargers, along with models for use in xEVs as well.



HDD magnetic heads

TDK is the world's only specialized manufacturer of HDD magnetic heads. Thermal assisted magnetic recording (TAMR) and other cutting-edge technologies play key roles in the continuing quest to expand HDD memory capacity.



Batteries

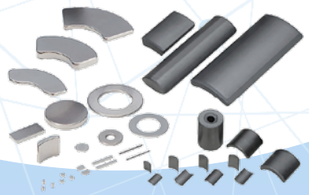
Rechargeable lithium polymer batteries for smartphones and other smart devices from ATL have earned TDK the world's leading position in this domain, with the mission to pioneer even more powerful models ongoing.



Contributing to Society Behind the Scenes

Magnets

TDK magnets support energy and resource saving and higher efficiency in automobiles, infrastructure, industrial equipment, and other vital sectors.



Industrial & Energy



Shigenao Ishiguro
President & CEO

With its founding spirit as an immutable guidepost, TDK will achieve sustained improvement in corporate value.

Under its new Medium-Term Plan, TDK will contribute to a more affluent society through electronics, offering solutions based on *Kotozukuri* (integrated solutions) and realized through *Monozukuri* (manufacturing excellence).

A never-changing TDK, an ever-changing TDK

About 88 years ago, a black substance was invented; this was the magnetic material ferrite, a product of research conducted by Dr. Yogoro Kato and Dr. Takeshi Takei of the Tokyo Institute of Technology. Tokyo Denki Kagaku Kogyo K.K. (today's TDK), founded in 1935 by Kenzo Saito, was the first to commercialize this previously unknown material with the development of its so-called "ferrite core." Since its pioneering application in wireless telecommunications equipment in 1937, the uses of ferrite have expanded to include radio, television, microwave ovens, and more.

Ferrite continues to play a role as an essential magnetic material across a wide array of fields, from flat-screen televisions to components in automobiles, as they rely increasingly on electronics. As TDK's core technologies, materials technology that is derived from ferrite and the process technology that maximizes the properties of materials have brought the world a variety of new products. From ceramic capacitors, to passive components that have continued to evolve through technical refinements, to magnets, they serve as the foundation of the electronics industry to this day. Throughout its long history, the Company has kept its focus on this kind of *Monozukuri* as the base for a never-changing TDK.

Kenzo Saito continuously took on new challenges, considering his own mission from the perspective of society's future needs. That management philosophy is reflected in TDK's corporate motto, "Contribute to culture and industry through creativity," and in its corporate principles of "Vision," "Courage," and "Trust." Having inherited this founding spirit, TDK has always been quick to respond to the future needs of society. Starting with the commercialization of ferrite, TDK's electronic components, along with its four great world-class innovations, have been nurtured by uses beneficial to society, from the cassette tapes that answered the desire to listen to music on-the-go, to multilayer electronic components that even today contribute to more compact electronic devices, to the HDD magnetic heads that supported the explosive expansion in memory capacity.

> TDK has always focused on the future needs of society

This ability to continue to anticipate society's future needs and translate those needs into products through *Monozukuri* is what has allowed us to transform our product portfolio before our mainstay products enter a decline, leading to our sustainable growth.

Self-transformation with an eye on the future

Going into the new millennium, TDK was confident that the spread of mobile phones and smartphones pointed to one trend representing the future needs of society. In 2005, we acquired Amperex Technology Limited (ATL), a manufacturer of rechargeable lithium polymer batteries. In 2008, we made our full-scale entry into the high-frequency components business through our acquisition of EPCOS AG (EPCOS). Taking advantage of our proprietary fine processing, module, and other technologies, we went on to contribute to the global spread of mobile devices. During our previous Medium-Term Plan (from fiscal 2016 to fiscal 2018), these smartphone components continued to deliver strong earnings growth, but by then we had already begun turning our thoughts to the next thing that would represent the future needs of society.

In smartphones, the anticipated start of commercial fifth-generation mobile communications system (5G) services will require components to be more highly integrated and highly functional. These technical requirements will be taken to an even higher dimension in more compact IoT devices. Intelligent components utilizing AI are also developing, going beyond automobiles and industrial equipment to play a role throughout our daily lives, and representing the formation of a new ecosystem for an industry structure built around integrated circuits.

The right path was already in front of us

It made sense, then, that TDK should ask how it can provide its customers with timely solutions not by insisting on self-sufficiency, but by comparing and adjusting its technology to that of the semiconductor manufacturers. These factors were behind the management decision to carve out a portion of our high-frequency components business through a joint venture with Qualcomm Incorporated (Qualcomm).

In the two years since I was appointed president in 2016, we have worked to build a new pillar for growth that would replace our high-frequency components; the right path, however, was already in front of us.

Our founding spirit as a guidepost

In an advanced “smart” society created by IoT, where everything around us—from electronic devices to automobiles and production equipment—is connected through the internet and capable of exchanging information and operating autonomously, I believe the potential for electronic components will see limitless expansion. Among those components, sensors are one area in which we are confident TDK can contribute to society by leveraging our core technologies. By taking advantage of our materials technology, we can greatly improve quality and performance, and our process technology, including thin-film and fine processing technologies, will ensure we can respond to advanced requirements for precision.

TDK has been active in pursuing M&A as a means of building a lineup of sensor technologies that offer potential synergies with the magnetic sensors and temperature and pressure sensors it has worked on until now. We have worked to expand our offerings in non-optical sensors, targeting companies that contribute to the development of the MEMS sensor market, which is expected to see enormous growth going forward.

Power electronics is another area we have positioned as a pillar of our business. Society's shift from fossil fuels to renewable energy, in automobiles and a wide variety of other fields, is expected to quickly accelerate, and the efficient use of energy will become an issue. With rechargeable lithium polymer batteries from ATL, power supplies provided by TDK-Lambda Corporation (TDK-Lambda), and the magnets built into generators and motors, TDK can contribute to resolving these issues across a wide range of fields.

Contributing to society through *Kotozukuri*

Conventional electronic components were a build-to-order industry, with products developed and manufactured according to customer specifications, and were essentially sold on an individual basis. Today, however, a succession of completely new services, products, and functions are being created that are not simply an extension of existing offerings, and that take advantage of dramatically evolving technology. By, for instance, combining multiple sensors with different functions, a communication module to send the collected data, along with batteries, processing circuits, and software, TDK could offer a solution in the form of a packaged, modularized product, thus greatly expanding its business opportunities. What that will require is *Kotozukuri* that dovetails with a founding spirit originating in an understanding of society’s future needs.

Under Value Creation 2020, its new Medium-Term Plan covering the period from fiscal 2019 through fiscal 2021, TDK will turn to its founding spirit as a guidepost in offering a timely response to society’s requirements, utilizing *Monozukuri* to realize solutions based on the *Kotozukuri* concept—sensor solutions, power solutions, and package solutions—while continuing to follow a cycle that ties *Kotozukuri* to the further evolution of *Monozukuri*.

Improving corporate value through the pursuit of three types of value

Under Value Creation 2020, our new Medium-Term Plan, we have broken down corporate value into three components—Commercial Value (execution of growth strategy), Asset Value (improving asset efficiency), and Social Value (enhancing enterprise value)—and have established targets and specific measures for each of these.

Involving all employees in advancing strategy

The target set for Commercial Value calls for achieving net sales of ¥1.65 trillion in fiscal 2021, or growth of about 30% over fiscal 2018, and a compound annual growth rate (CAGR) of 9%.

Regarding Asset Value, we have established a target of operating income ratio above 10% with an ROE of more than 14%. Plans call for capital investments totaling ¥500 billion over three years, the same level as the previous Medium-Term Plan. In terms of operating income, we now see a clear trend toward profit growth in the Passive Components segment, where demand is strong in the automotive and industrial equipment markets, and in the Energy Application Products segment, primarily batteries. The Sensor Application Products segment, which has reached a stage that requires a certain level of development investment in addition to acquisition-related expenses, will also be developed into a business that will contribute to profit during the term of this Medium-Term Plan.

To enhance the effectiveness of our strategy and increase the likelihood of achieving the Plan's targets, we will design and manage a logic tree that takes the three types of value down to the level of specific measures for each business and work site. We will place particular emphasis on business speed. The greatest reason ATL enjoys the support of so many customers is its unrivaled ability to respond quickly in the prototype development process and production. That kind of speed is a differentiating component in advancing *Kotozukuri* and, through enhanced added value and an improved cash conversion cycle, is also a factor affecting profitability. TDK will establish a "First-to-Market product ratio" as a key performance indicator (KPI) and accelerate the business cycle across all of its organizations.

Providing solutions across a wide range of fields

2017 was a year in which we sensed a clear global trend toward electric vehicles. As use of xEV spreads, and in the evolutionary process from there to connected cars and advanced driving assistance systems (ADAS), we believe the role of electronic components will expand further, serving as the interface between IC algorithms and the real world. Further, the trend is toward society-altering, cutting-edge technologies to first be adopted in smartphones, before then being applied to automobiles and industrial equipment, and we sense a similar progression taking place with wireless power supplies, biometric authentication, and other technologies. In batteries, as well as in passive components—where we transferred a portion of our high-frequency components business—we do not plan to intentionally reduce the ratio of products for smartphones. We will continue to take on that market while keeping a close eye on 5G and other future communication standards. With the addition of other fields, including the industrial equipment and energy sector—where innovation, backed by Industry 4.0, is progressing—, home appliances, and others, we will offer sensor solutions, power solutions, and package solutions. In the medical sector, we hope to sow the seeds across a wide range of fields in which we have determined we can make a contribution to society.

To do that, all of our organizations—from TDK Group operating companies and sales, our customer contact point, to the front lines of *Monozukuri* and our R&D sites—will be joined organically and autonomously to create a stream of *Kotozukuri* architecture. Essential to that effort will be open collaboration with partners having technology that TDK does not, with a particular focus on close cooperation with IC manufacturers.

With Qualcomm, we are now working together on high-frequency solutions across a wide range of areas, including next-generation mobile communications, IoT, and automotive-related fields. We are also engaged in a variety of joint development projects, including sensor reference design. In addition to IC manufacturers, we will work with IoT solution partners, and press forward in cooperating with industries and organizations with which TDK may not have had direct contact in the past.

Creating a stream of *Kotozukuri* architecture

In May 2018, TDK acquired Faraday Semi LLC (Faraday Semi), a venture company. The company's Point of Load (POL) power semiconductor μPOL™*, among the world's smallest, has enormous potential as a solution for reducing power supply space, offering greater system functionality, and shortening design time. The power solution realized through the combination of Faraday Semi's semiconductor with TDK's SESUB (Semiconductor Embedded Substrate) packaging technology is one such example. We are also first in the world to begin mass production of a rechargeable solid-state battery. Taking advantage of this so-called "battery componentization," enabling a complete solution on the substrate, we plan to seek its potential across all types of IoT devices.

* μPOL™: A DC-DC converter placed adjacent to the ASIC, FPGA, or other LSI.

Achieving growth across all segments

1. Passive Components

We will target a CAGR of 7%. We will offer customized, optimal solutions in GPUs, CPUs, power supplies, interfaces, and a broad range of other areas, pursuing the high reliability and large capacity required in automobiles. For smartphones, we will achieve growth centered on ceramic passive components. We will expand applications for and our customer base in other fields as well, with the goal of achieving stable growth.

2. Sensor Application Products

In anticipation of reaching ¥200 billion in net sales, our plans call for steady growth in sensors for automobiles and for expanding sensors for consumer products, achieving major growth with a target CAGR of 35%. Through M&A activity since 2016, TDK has acquired a world-class arsenal of technology in non-optical sensors, including temperature and pressure sensors, magnetic sensors, and MEMS sensors. This will allow for a growth rate of about 10% per year as we focus our target on the entire non-optical sensor market, which is expected to grow to US$12 billion by 2021.

We will steadily expand sales of automotive sensors through organic growth. TDK is currently considering development of a sensor that offers redundancy, combining tunnel magneto resistance (TMR) sensors that apply HDD magnetic head technology cultivated by TDK with Hall sensors. In addition, since the temperature and pressure sensors installed in gasoline-powered vehicles will also be needed in xEVs, we expect demand to continue growing. We will also expand applications for automotive use, including acceleration sensors, gyroscope sensors, ToF sensors, and other MEMS sensors.

We anticipate enormous growth in sensors for consumer products, exceeding that for automotive sensors. In the magnetic sensor field, progress is being made in replacing them with TMR sensors, which feature high accuracy and low power consumption. We will also move forward with development of new applications for microphones, ultrasonic sensors, and other MEMS sensors for use in smart speakers, fingerprint authentication, and other areas.

3. Magnetic Application Products

Rather than assuming any great growth in HDD magnetic heads, our policy is to grow sales of power-related magnetic products, including magnets, while ensuring a CAGR of 2%. By providing technology to meet the needs of the high capacity storage age, we will contribute to the HDD industry as the only manufacturer specializing in HDD magnetic heads. We will also attempt to apply HDD suspension technology from Hutchinson Technology Incorporated (Hutchinson) to areas such as the ICT market and medical field. Profitability in magnets has improved, with losses halved in fiscal 2018, and during the current medium-term, we plan to shift toward a structure that can generate profit. One particularly promising area is magnets for in-vehicle motors. Leveraging our core technology to realize innovations in configuration and performance, we hope to contribute to maximizing motor and generator efficiency.

4. Energy Application Products

Here, we will aim for stable growth with a CAGR of 8%. Rather than assuming major growth in batteries for smartphones, we will move forward with a horizontal deployment of ATL's "First-to-Market" success model by expanding our applications and customer base. We will also push to develop the small cell market, including wearable devices, while also developing the market for use in more high-powered devices such as e-scooters, automated guided vehicles (AGVs), drones, and others. In power supply products, our efforts will center on TDK-Lambda, providing customized power supply solutions for medical devices, robotics, and other uses through vertical integration from materials to finished products. In automotive power supply, we will pursue smaller, lighter, and more highly efficient products while offering solutions through redundant, reliable design with an eye toward the full-scale expansion of the xEV market.

Areas where refinements should continue for sustainable growth

TDK has worked to strengthen its ability to develop its own candidates for acquisition while gaining insight into each company's technology and corporate culture. Rather than adapting these companies to TDK's way of doing things following an acquisition, we have respected their different approaches and cultures, handing them leadership over their own businesses. Cultivating the strength of diversity by allowing our varied human resources to maximize the potential of their individual capabilities has become the driver of nonlinear self-transformation.

Pushing forward with *Kotozukuri* will require bringing the approximately 140 companies of the TDK Group together, heading in the same direction even as we reinforce the dynamism of diversity. While progress is already being made toward collaboration among Group companies in a variety of areas, including product development and quality control, we intend to introduce cross-functional cooperation as a means of further strengthening these organic linkages. As part of that effort, Andreas Keller, our general manager of the Human Resources HQ, is building a global human resource system. Going forward, enhancing the mobility of our human resources globally will help further reinforce our base for long-term sustainable growth.

> Moving forward with innovation aimed at true globalization

As the globalization of TDK has progressed further through M&A in recent years, diversity management has become an important issue. This is why, under the Human Resources HQ, we are pushing ahead with programs to discover and foster outstanding human resources worldwide to serve as management candidates. With more than 90% of our personnel consisting of non-Japanese employees, we believe HQ functions do not necessarily need to be located in Japan, or led by Japanese managers.

We also will not compromise when it comes to refining *Monozukuri*, the foundation of our sustainable growth. In the automotive field, where TDK hopes to continue expanding its business, a single incidence of a product defect that leads to the loss of human life could threaten our very survival as a company. This is why we continue to press forward with *Monozukuri* Innovation, which combines Industry 4.0 concepts with a zero-defect approach to quality. For the past several years, our factories in Akita Prefecture, where TDK was founded, have engaged in *Monozukuri* activities based on our concept of *Arubeki Sugata* (ideal process). At its most basic, the *Arubeki Sugata* behind improved reliability should involve preventing defects during the production process, rather than the conventional approach of sifting out defective products. With this in mind, we are undertaking a fundamental review of *Monozukuri*. We have already completed and are working to test a model line that prevents defects before they happen, by ensuring optimal coordination between robots and human workers, using sensors to monitor every step of the production process, and detecting signs of potentially defective products. In the common language of TDK, this activity has become known as *Arubeki Sugata*, and is being utilized in front-line improvements at our sites around the world.

The aspirations embodied in Social Value

I would like to close by talking about my aspirations for Social Value, the last of the three types of value highlighted in our new Medium-Term Plan. When I joined TDK 36 years ago, our business in the automotive industry involved only very limited fields, such as car radios. Today, though, we have entered an era in which automobiles cannot move without electronics. The things that electronic components can do to benefit society will likely expand even further going forward. Advanced technology is not merely for the select few. It can contribute to resolving issues in ultra-aging society, and can enrich the lives of even society's most vulnerable. Technology also has the power to solve issues on a global scale, including tightened energy supply and demand and global warming. Sustainable development goals (SDGs) and other worldwide trends emphasize that profit is not the goal, but the result of contributions to society. Social Value embodies my determination to return us to our founding spirit, which has something in common with this concept.

> Moving forward, encouraged by our founder's beliefs

The road we are to follow will not necessarily be an easy one. A variety of competition exists in growth markets, and the megatrends bringing major changes to the structure of industry make it impossible to clearly foresee the future of our business environment. Still, encouraged by the beliefs of our founder, we will not be led astray by these uncertainties, and will continue moving forward with our corporate motto "Contribute to culture and industry through creativity."

October 2018

Shigenao ISHIGURO

President & CEO

An Ever-Changing TDK

Automotive

Pursuing automotive quality in reliability and energy efficiency, TDK will contribute to the electrification of automobiles and the popularization of xEVs.

ICT

Targeting the fifth-generation mobile communications system (5G) and beyond, TDK will provide solutions including increased component miniaturization and space saving and high-efficiency electric power management.

Industrial & Energy

Working to supply answers true to the concept of *Kotozukuri* (integrated solutions), TDK will contribute to the solution of social issues linked to industrial equipment and energy sectors.

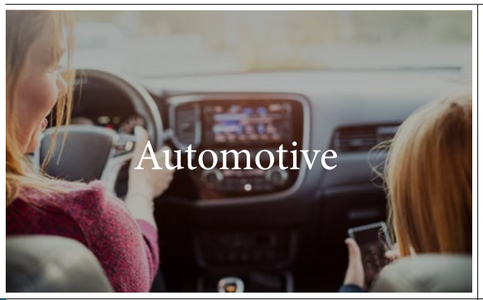
Infinite Possibilities

By no means limited to the "Automotive," "ICT," and "Industrial & Energy" markets, TDK will steadily expand the infinite possibilities of electronic components to a diverse range of domains.

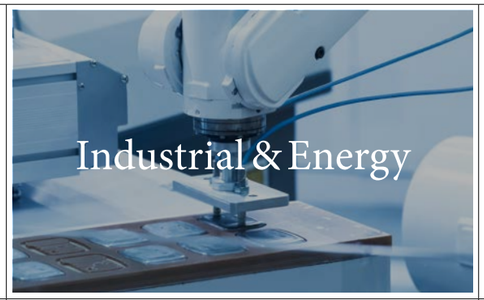
A Never-Changing TDK

TDK Overview

In accordance with segment reorganization in the first quarter of fiscal 2019, the Energy Application Products segment was newly established. Certain products of Other Passive Components in the Passive Components segment were classified into the Other segment, certain products of the Other segment were classified into Other Passive Components in the Passive Components segment, and certain products of the Sensor Application Products segment were reclassified into the Other segment.







Passive Components

Capacitors
Soft-termination multilayer ceramic chip capacitors, aluminum electrolytic capacitors, etc.

Inductive devices
SMD inductors with guaranteed high temperature ratings, common mode filters for automotive-use LAN, etc.

Other passive components
Piezo actuators

Capacitors
3-terminal feed-through capacitors, etc.

Inductive devices
SMD inductors, thin-film common-mode filters, etc.

Other passive components
Ceramic high-frequency components, VCMs/OISs, multilayer chip varistors, etc.

Capacitors
Film capacitors, aluminum electrolytic capacitors, etc.

Inductive devices
Transformers, EMC filters, etc.

Other passive components
Varistors, arresters, etc.

Competitors

Capacitors: Murata Manufacturing, TAIYO YUDEN, SEMCO (Korea), Yageo (Taiwan), etc.
Inductive devices: Murata Manufacturing, TAIYO YUDEN, SEMCO (Korea), Cyntec (Taiwan), etc.
Other passive components: Murata Manufacturing, ALPS ELECTRIC, Panasonic, AMOTEC (Korea), etc.

Sensor Application Products

Sensors
Sensors (gear tooth, pressure, angle, current, temperature, etc.)

Sensors
Sensors (barometric pressure, gyroscope, acceleration, MEMS microphone, etc.)

Sensors
Sensors (pressure, gyroscope, acceleration, current, etc.)

Competitors

Murata Manufacturing, ALPS ELECTRIC, TAIYO YUDEN, Bosch (Germany), STMicroelectronics (Switzerland), Infineon (Germany), Asahi Kasei Microdevices, Allegro (USA), Shibaura Electronics, etc.

Magnetic Application Products

Magnets
Magnets for motors (cooling fan, door lock), magnets for xEV drive motors, etc.

Recording devices
HDD magnetic heads, HDD suspensions, etc.

Magnets
HDD magnets, etc.

Magnets
Magnets for industrial equipment, etc.

Competitors

HDD magnetic heads*: Seagate Technology (USA), Western Digital Technologies (USA)
HDD suspensions: NHK SPRING, etc.
Magnets: Shin-Etsu Chemical, Hitachi Metals, ZHONG KE SAN HUAN (China), etc.

Energy Application Products

Power supplies
DC-DC converters, on-board chargers

Energy devices
Rechargeable lithium polymer batteries (for smartphones, tablet devices, notebook computers, wearable devices, game consoles)

Power supplies
High current digital POL converters

Energy devices
Rechargeable lithium polymer batteries (for drones, AGVs)

Power supplies
Bidirectional DC-DC converters, AC-DC power modules

Competitors

Energy devices: Samsung SDI (Korea), LG Chemical (Korea), Murata Manufacturing, Panasonic, Maxell, etc.
Power supplies: XP Power (Singapore), MEAN WELL (Taiwan), Delta Electronics (Taiwan), Cosel, etc.

World shares of main products
(TDK research)

Capacitors
Ceramic capacitors for automobiles: 40–45%

Inductive devices
Inductors: 20–25%

Other passive components
Ceramic high-frequency components: 30–35%
Varistors: 30–35%
Gas arresters: 75–80%

Sensors
Temperature sensors (NTC thermistors): 30–35%
Other sensors: Currently undisclosed

Recording devices
HDD magnetic heads: 20–25%
HDD suspensions: 55–60%

Energy devices
Rechargeable lithium polymer batteries: 30–40%

Power supplies
Power supplies for industrial equipment: 15–20%

* TDK is the world's only specialized manufacturer of HDD magnetic heads. HDD magnetic head production is currently concentrated at three companies—TDK, Seagate Technology, and Western Digital Technologies.

Summary of the Previous Medium-Term Plan

Through fiscal 2015

Sowing seeds to grow with the expanding smartphone market

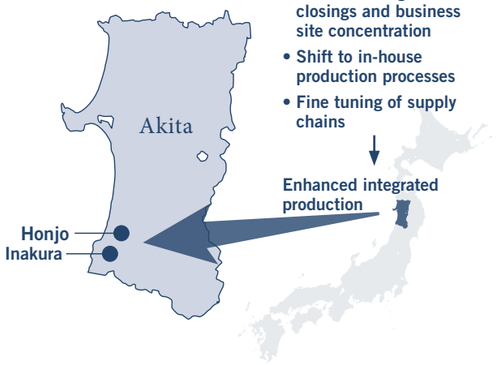
In 2005, TDK acquired ATL of Hong Kong, an entity possessing original technology in rechargeable lithium polymer batteries. Purchased in 2008 was EPCOS, which used competence in high-frequency components and modules technologies to forge a powerful presence in European automobile and industrial equipment markets. Combining their technologies with our own expertise in components and production technologies, we strategically moved to tap into the expanding markets for cellphones, smartphones, and other products.

Promoting large-scale structural reform

The swift decline with the global financial crisis triggered by the September 2008 collapse of Lehman Brothers, the Great East Japan Earthquake of 2011, flooding in Thailand, appreciation of the Japanese yen to peak at ¥75 to the US dollar, and other developments harshly impacted our business environment. Moving to shore up its earnings framework, TDK advanced sweeping structural reforms from fiscal 2012. This included withdrawal from recording media and other non-core businesses, concentrating management resources in core units, consolidation of domestic and overseas business sites, optimizing personnel and business sites, and other strategies. Our performance figures shifted into a rapid recovery mode from fiscal 2013.

Structural reforms to bolster integrated production

In Japan, we closed aging passive component manufacturing bases and concentrated business sites while adopting in-house production processes previously outsourced to collaborating plants. Overseas, we acted to simplify complex supply chains. These initiatives, focused on restoring *Monozukuri* power through "integrated production," proved potent not only in lowering the group's fixed costs, but also in cutting lead time and distribution costs. This laid the foundation for today's *Monozukuri* Innovation concept known as *Arubeki Sugata* (ideal process).



M&A

2005 ATL
Rechargeable lithium polymer batteries

With its acquisition of ATL, TDK emerged as one of the leading corporate forces in the production of rechargeable lithium polymer batteries for use in smartphones and other mobile devices.



Lambda Power Group
Power supplies for industrial equipment

2007 Magnecomp
HDD suspensions

2008 EPCOS
Full lineup of electronic components, modules, and systems

Riding the tailwind of the global smartphone boom, EPCOS high-frequency components have been a pivotal driving force behind the growth of TDK revenues.



Structural reform

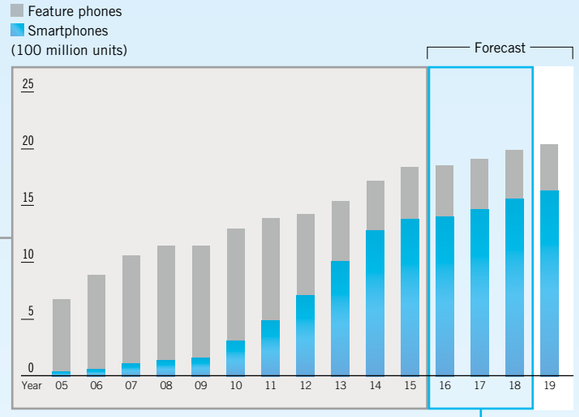
2011 Business portfolio slimming
- Withdrawal from organic EL displays, Linear Tape-Open (LTO*), Blu-ray, and other non-core businesses
- Product-specific reassessment

*LTO: Standard for computer-use magnetic tape

Groupwide business efficiency improvements
- Promotion of domestic and overseas business site consolidation
- Sales of idle properties
- Optimization of personnel and business sites
- Simplification of organization and business processes

Management resource concentration in growth sectors and core businesses
- Expansion of the thin-film components business utilizing magnetic and magnetic head technologies
- Strengthening of core technologies such as materials and process technologies, development of micro-size, high-function passive components

Smartphone market trends (unit shipments)



Source: IHS Technology

M&A

2016 Micronas
Hall sensors

Hutchinson
HDD suspensions

Tronics
MEMS inertial sensors

2017 ICsense
ASIC design and development

InvenSense
Acceleration sensors, gyroscope sensors

Fiscal 2016 to fiscal 2018

Harvesting and fruits of structural reform

Reviewing the results of the previous Medium-Term Plan (fiscal 2016 to fiscal 2018), sales set all-time record highs each term, with structural reforms proving effective in strengthening the earnings structure and operating income also gaining ground. TDK cultivated ATL's rechargeable lithium polymer batteries and EPCOS's high-frequency components, riding the tailwind of the global expansion of the smartphone market. This stance was accompanied by solid efforts to address demands for component miniaturization and modularization to keep pace with the steady move to higher smartphone function, polishing our underlying technology to be ready for the next stage of evolution.

Operating income ratio

2.6% → 6.7%
2013/3 → 2018/3

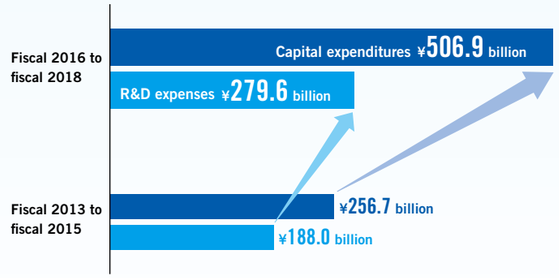
Sales to the automotive market

¥142.7 billion → ¥231.4 billion
2013/3 → 2018/3

New strategic positioning to meet the next stage of social needs

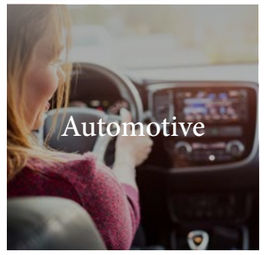
Against the backdrop of redoubled demand for customization and modularization in the smartphone market, needs have grown for coordination of the various electronic components mounted in those products. To constantly supply customers with optimum solutions, TDK moved from traditional in-house self-sufficiency to cooperation with IC manufacturers, transferring one portion of our high-frequency component business to Qualcomm. Similarly, in gearing up to meet the next stage of social needs, from 2016 we pursued sensor-focused M&A as a means to field a wide-ranging arsenal of technology, while solid growth investment was advanced to expand sales to the automotive market.

Growth investment targeting the future



Management Environment

Within the Automotive, ICT, and Industrial & Energy markets targeted by TDK, major structural changes are unfolding to reflect today's technological evolution. This trend is also instrumental in boosting innovation in terms of Industry 4.0 and other forms of *Monozukuri*.

	Market environment
	• Increased on-board use of electronic components powered by the evolution in advanced driving assistance systems (ADAS) and autonomous driving • Full-fledged surge in the xEV market • Greater demand for safety designs in-vehicle components
	• Slowed growth in markets of developed nations • Expanding demand in India and other emerging markets • Advances toward slimming and multiple and higher functions in mobile terminals • Expanding modularization demands • Commercialization of fifth-generation mobile communications system (5G)
	• Expansion of "smart cities" in which "smart grids" (next-generation power distribution network) being built in various regions serve as energy infrastructure • Growing demand for wind power generation, solar power generation, and other renewable energy • Rising need for improved power generation efficiency
	• "Industry 4.0" and other production innovations utilizing cutting-edge technologies such as the IoT • Growing need for increased quality with increased mounting of electronic components in automobiles, medical devices, and other domains demanding high reliability • Surging labor costs in China • Projections for a steady decrease in Japan's working-age population
	• Heightened role of companies in achieving sustainable development goals (SDGs) • Expanding interest in environmental, social, and governance (ESG) investment

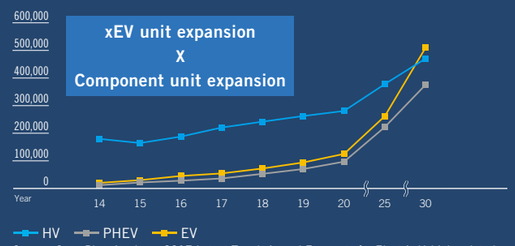
Megatrend 1

Full-fledged surge in the xEV market

With tightened environmental regulations in major countries, the shift to xEV by major manufacturers, entries into the market by newly emerging makers, and lower costs sparked by technological advances and increased volume, the move toward electric vehicles is set to become irreversible. This trend is forecast to increase demand for passive components, sensors, on-board power supplies, motor-use magnets, and other components.

Spread of electric vehicles (HV, PHEV, EV)

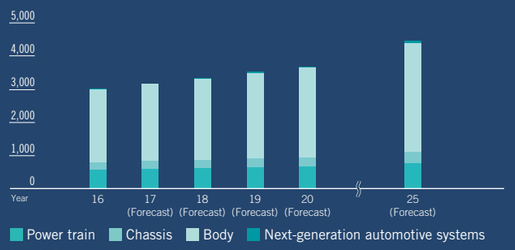
Units



Source: Sogo Planning Inc., *2017 Latest Trends in and Forecasts for Electric Vehicle-related Markets*

Global market forecast for in-vehicle motors by system area

Million units



Note 1: Based on number of vehicles produced
Note 2: Forecast figures for 2017 and beyond (as of March 2018)
Source: Yano Research Institute Ltd., *The latest trends and future prospects of on-vehicle motor market*

Global in-vehicle motors market scale



Note 1: Based on number of vehicles produced
Note 2: Forecast figures for 2025 and beyond (as of March 2018)
Source: Yano Research Institute Ltd., *The latest trends and future prospects of on-vehicle motor market*

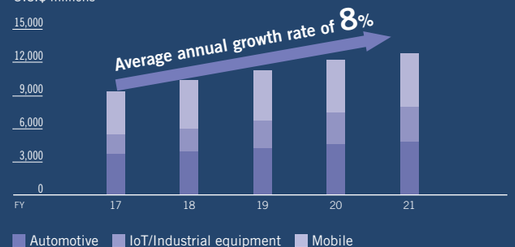
Megatrend 2

Dawning of the one-trillion-sensor age

Sensor demand in the IoT society, in which all things will come to be linked on the Internet, is estimated at several trillion units.

Outlook for global sensor demand by market (non-optical)

U.S.$ millions



(TDK estimates)

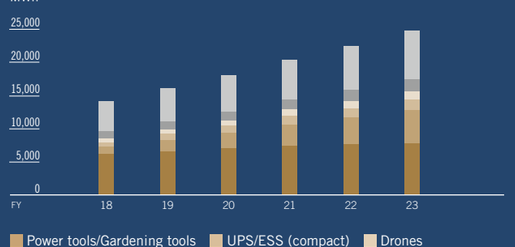
Megatrend 3

Expanding demand for safer and highly efficient rechargeable batteries

The IoT age is forecast to generate demand for safer, smaller, and thinner batteries.

Forecast of worldwide demand for rechargeable batteries (non-ICT market)

MWh

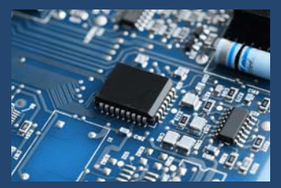


(TDK estimates)

Megatrend 4

Evolution of IC-focused ecosystems

Along with the electrification of automobiles, higher functions in smart devices, and the move to smart capacity in various areas, the evolution of industrial ecosystems is advancing with the focus on semiconductor manufacturers as enterprises shouldering the burden of those core functions.



Medium-Term Plan “Value Creation 2020”

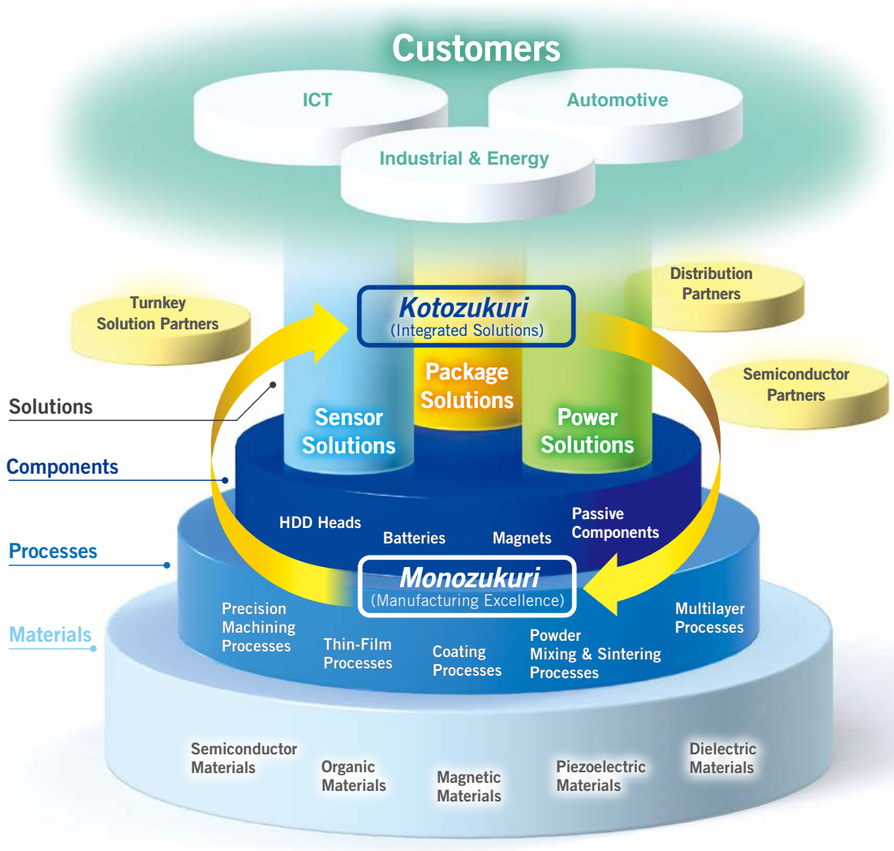
Working from the future-focused growth foundation developed to date as a solid foothold, TDK has unveiled its newest three-year Medium-Term Plan, set to run from fiscal 2019 through fiscal 2021. This vision has been launched with the aim of forging sustainable improvements in corporate value.

Medium-Term Plan Basic Policy

“Value Creation 2020”

Leap to new heights by providing market-needed solutions based on our electronic components business

Based on the new Medium-Term Plan “Value Creation 2020,” TDK is aiming to generate three types of “value” aimed at raising its corporate worth—Commercial Value (execution of growth strategy), Asset Value (improving asset efficiency), and Social Value (enhancing enterprise value)—while serving society and growing its business in the wake of that progress. Toward this end, the essential focus will be firmly placed on the electronic components business that has excelled as the cornerstone of TDK growth since its foundation, while vigorously advancing collaboration with IC manufacturers and IoT solution partners as well. By combining the solutions stemming from the concept of *Kotozukuri* (integrated solutions) with our traditional *Monozukuri* (manufacturing excellence), we will supply the values sought by our customers.



Commercial Value

Management targets in the medium term: Sales by segment

Net sales

- Results (fiscal 2018): ¥1,271.7 billion
- Target (fiscal 2021): ¥1,650.0 billion
- CAGR: 9%

CAGR by segment

- Passive Components: 7%
- Sensor Application Products: 35%
- Magnetic Application Products: 2%
- Energy Application Products: 8%

P.60–P.69
Overview of Business Conditions by Segment, Business Strategies

Asset Value

Medium-term financial strategy

- To execute growth strategies and promote the improvement of our financial condition, we aim to achieve positive free cash flow while executing well-balanced capital allocation to investments, shareholder returns, and the reduction of interest-bearing debts.
- Aiming for the steady recovery of previous investments
- Pursuing the enhancement of Companywide asset efficiency

- Steadily recover growth investments executed toward transforming business earnings structure
- Execute further growth investments based on a well-balanced capital allocation

Well-balanced capital allocation

- Growth investments
- Shareholder returns
- Repayment of interest-bearing debt

→ Negative free cash flow ↓ Positive free cash flow

Medium-term financial targets

Capital efficiency	Shareholder returns	Financial soundness
• Operating income ratio: over 10% • ROE: over 14%	• Increase dividends stably through growth of income per share • Target a 30% dividend payout ratio	• Stockholders’ equity ratio over 50% • Net cash

P.34–P.35
Message from the Corporate Officer of Finance & Accounting

Social Value

Aiming for a sustainable society and enterprise

- TDK will realize greater happiness and well-being in society through cutting-edge technologies
- TDK will effectively utilize finite resources
- TDK will be a global and diversified enterprise

P.46–P.55
Moving to Improve Sustainable Corporate Value

Message from the Corporate Officer of Corporate Planning



Integrating the TDK Group's diverse management resources in an autonomous and organic manner and contributing to the innovative society unfolding before us

Seiji Osaka
General Manager of the Corporate Strategy HQ
Executive Vice President
Director

Key point of Value Creation 2020

Autonomous and organic integration of management resources

Ever since its foundation, TDK has cherished its corporate motto of "Contribute to culture and industry through creativity." On the basis of ferrite, we have developed various material and component technologies. Even after eight decades, this great ferrite tree continues to grow. In addition, to respond to the requirements of customers, rather than always going it alone, we have cooperated with partners around the world and boldly engaged in mergers and acquisitions so as to obtain the technologies and management resources required. In the previous Medium-Term Plan period, because the smartphone market was growing rapidly and the demand for modularization further increasing, we carved out part of our high-frequency components business to establish a joint enterprise with Qualcomm and embarked in technical cooperation with them.

In our new Medium-Term Plan, Value Creation 2020, our main vision is to seize business opportunities in the xEV and IoT markets through a combination of *Kotozukuri* (integrated solutions) in cooperation with IC makers and a wide range of other partners and *Monozukuri* (manufacturing excellence) using TDK's own outstanding material and process technologies.

TDK has the most wide-ranging product and technology portfolio in the electronic components industry. In the automotive field, for example, we have various passive components for autonomous driving and electric vehicles, as well as magnetic application products such as magnets used in motors, DC-DC converters, and on-board chargers and other energy application products. As well through aggressive M&As in recent years, we have built an impressive lineup of sensor application products. TDK's wide-ranging component technologies will also be essential in continuing technological evolutions such as the IoT, fifth-generation mobile communications system (5G), and renewable energy.

Furthermore, TDK's management resources, including our outstanding human resources, extend around the globe. The key point of Value Creation 2020 is to autonomously and organically integrate these resources and create a single mighty force that can supply timely solutions to customers.

Logic tree toward the realization of Value Creation 2020

All measures linked in consideration of each business's characteristics

TDK has 4 business companies, 20 business groups, and numerous cash-flow business units. Each unit has a leader with responsibility for invested capital and profit/loss and a team consisting of professional human resources. We have built a logic tree of management strategy so as to autonomously and organically integrate these units and realize our Medium-Term Plan.

There are common reasons for the success of competitive products, such as passive components, rechargeable lithium polymer batteries, and HDD magnetic heads. These include the fostering of distinctive core technologies, which are essential for business growth; the setting of strategic applications; the identification of priority customers and value-chain partners; the building of a roadmap for product design; and efforts to synchronize product design and the manufacturing process in the best possible way. Since market structures and competition factors differ by product and strategic business, the structure of the strategic logic tree will also differ for each business. We established Value Creation 2020 after clarifying the direction of growth for each business (priority markets and technology differentiation) and repeating the task of checking whether all work was being properly conducted in line with this direction. We will share specific visions and key performance indicators among the teams as a whole and link their work so as to steadily realize our targets.

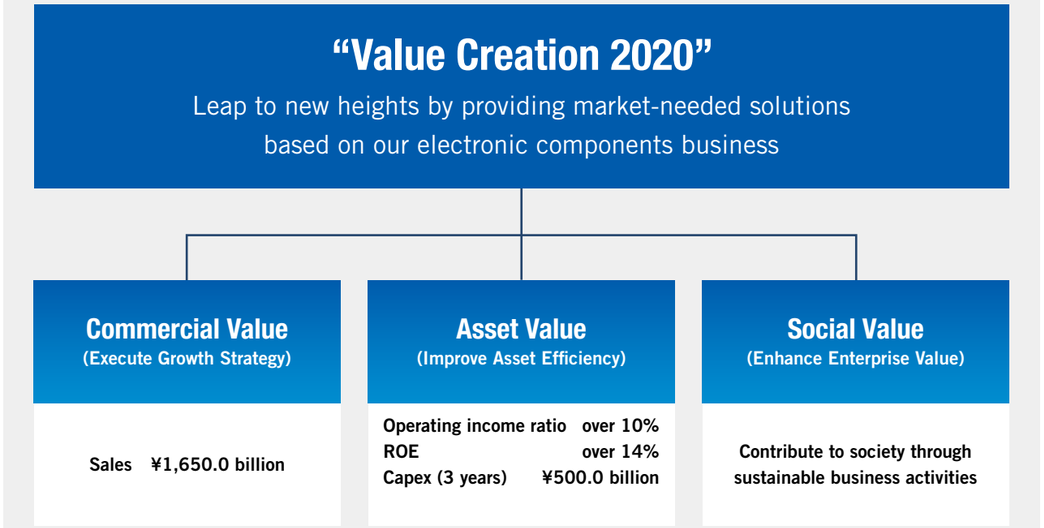
Inheritance and practice of founding spirit

Aiming to be a company that will continue to grow even after 100 years

It is said that when a company gets bigger, cracks begin to appear. TDK has grown into an enterprise with net sales of more than ¥1 trillion, but we will continue to cherish the corporate principles proclaimed at the time of our founding in 1935 of "Vision," "Courage," and "Trust." Throughout TDK's history of eight decades, while constantly innovating our core businesses, we have maintained a venture spirit with our multilateral businesses and global human resources acquired through M&As and more, creating a positive chemical reaction. Our aim is to be a company that is aware of the future affluent society awaiting the electronic components business, directly confronts the challenges of diverse customers, difficult technologies, and fierce competition, and will continue to grow and evolve even after 100 years. We have encapsulated these feelings in the words "Attracting Tomorrow*," which we are using as a communication message to our stakeholders.

* Attracting Tomorrow: TDK created this communication message in 2015, when the Company marked its 80th anniversary. It implies an attitude of making deliberate efforts ourselves to attract the future, rather than just waiting for the future to come.

Logic tree of management strategy



Message from the Corporate Officer of Finance & Accounting



Strengthening the foundations of growth through the definite retrieval of growth investment and implementation of further growth investment by means of balanced capital distribution

Tetsuji Yamanishi
General Manager of Finance & Accounting HQ
Senior Vice President
Representative Director

Fiscal 2018 review

Building a foothold for the next stage based on support from existing businesses

In fiscal 2018, using funds obtained from the partial transfer of its high-frequency components business, TDK made efforts to change its business portfolio through M&As, mainly involving sensor companies, and also implemented aggressive capital investment toward the further growth of existing businesses. Although TDK recorded losses due to the transfer of its high-frequency components business, net sales registered a record high for the fifth consecutive term. Operating income declined 59.0% from fiscal 2017 to ¥85.6 billion*. However, when temporary profits and losses, including ¥144.4 billion in transfer gains and ¥21.2 billion in structural reform expenses included in the previous term's operating income are subtracted, the figure still came to ¥85.5 billion, showing that the operating income in fiscal 2018 was actually up over the previous term. Registering a real increase in operating income mainly through our existing businesses, even when ¥10.9 billion spent on the acquisition of InvenSense, was a major achievement.

However, our return on equity (ROE) and operating income ratio were only 7.8% and 6.7%, respectively, so the improvement of our earning capacity is still incomplete. In addition, although we have aimed to put our free cash flow in the black, because of bringing forward capital investment in response to robust demand and other factors, even when acquisition funds are subtracted, our free cash flow registered a deficit. As a result, stockholders' equity ratio dropped 4.4 percentage points to 43.3%, which was lower than what we had imagined was necessary from the perspective of achieving a sound financial condition.

Base financial and capital strategy in Value Creation 2020

Reaping the benefits of completed investment and aggressively implementing growth investment

In fiscal 2018, cash outflow took precedence with a view to the next Medium-Term Plan. As well as establishing a foothold for medium-term business growth and reaping the benefits of investments made so far, it is necessary for us to continue aggressively implementing growth investment so as to respond to vigorous demand. Achieving a sound financial condition is another important theme. The basic policy of our financial and capital strategy is to aim to put our free cash flow in the black by channeling cash equally to investments, shareholder returns, and the reduction of interest-bearing debts. For this purpose, it is important to improve the capital efficiency of TDK as a whole. That is the reason why we identified financial and capital strategy as our Asset Value, one of the three components in improving corporate value, in Value Creation 2020.

Projected scenario to put free cash flow in the black

Realizing a surplus through balanced capital distribution

The operating income ratio of the Passive Components segment in fiscal 2018 was almost the same as in fiscal 2017, when the transfer gains were excluded, signifying progress in the improvement of earning capacity. During the period of the current Medium-Term Plan, demand for components in the automotive market is expected to remain robust, so we can look forward to continuing stable income. The operating income ratio of the Energy Application Products segment in fiscal 2018 was 16.3%, which I think was higher than we expected. Over the medium term we expect to maintain a level of about 15%. Regarding our HDD magnetic heads, demand for personal computer HDDs is certainly going to decline, but data center demand can be expected to increase in a stable manner. Thus, for the Magnetic Application Products segment, we expect to secure an operating income ratio of around 10%. The main focus is the Sensor Application Products segment. If we can realize a compound annual growth rate (CAGR) of 35%, I believe we can expect an operating income ratio here of about 10%. This is our scenario for achieving an operating income ratio in excess of 10%.

We expect depreciation and amortization to be ¥120–130 billion a year on average, and our net cash provided by operating activities in the final fiscal year is expected to be about ¥100 billion. Regarding capital investment, we are planning to invest about ¥500 billion over the three years, which is the same level as the previous Medium-Term Plan. Of this, we will invest about ¥210 billion in fiscal 2019 and then around ¥150 billion in each of the remaining two years. With this scenario, we aim to register a surplus in our free cash flow in the plan's final fiscal year.

Based on this scenario, we will promote the improvement of our financial condition by reducing interest-bearing debts and achieving a stockholders' equity ratio of 50% and a debt-to-equity ratio* of about 0.3. We will also implement shareholder returns with the aim of achieving a dividend payout ratio of 30%.

* The debt-to-equity ratio is one indicator used to measure the soundness of a company's management; it indicates the ratio of liabilities to funds.

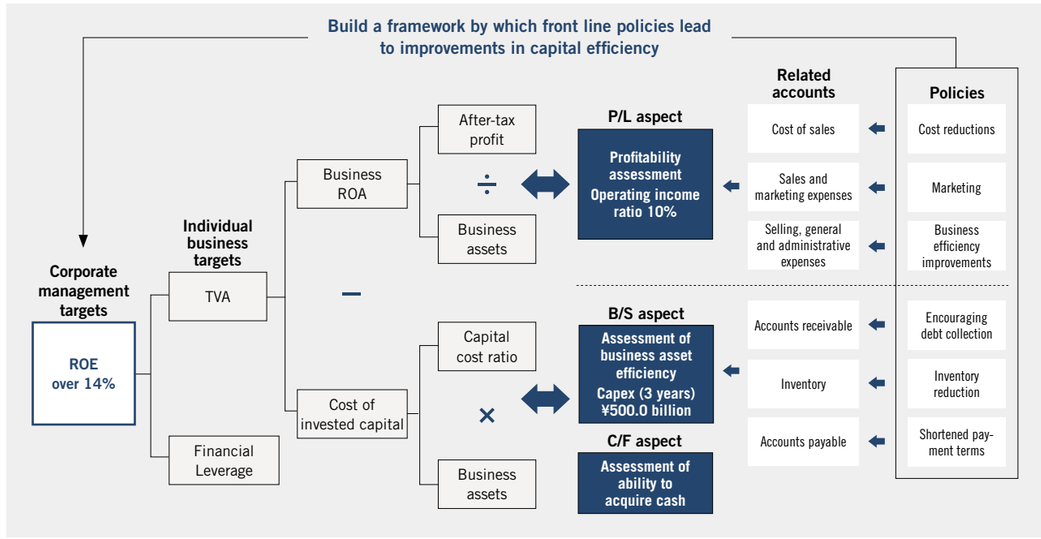
Pursuit of Asset Value

Enhancing efficiency in all business activities as well as investment

Of the capital investment of about ¥500 billion, we expect to channel about 40% to the bolstering of production capacity to meet the increased quantitative demand for batteries. Our plan is to have the most investment in the first fiscal year of the plan and then gradually reduce the amount in the second and third years. In the case of batteries, investment has run ahead in recent years, but at last this sector is beginning to generate a positive free cash flow. About 30% of the remaining capital investment will go to passive components and about 20% to other businesses, including magnets. Regarding M&As, we will implement small-scale investments to supplement necessary technologies so as to respond to needs, but since we have established a foothold for business growth, we do not expect any large-scale investments. With regard to investments, we will endeavor to pursue efficiency more than ever before. Our policy is to further strengthen investment appraisal, such as earning capacity and cash acquisition capability, based on the TDK Value Added (TVA) indicator comparing earnings to cost of capital (weighted average cost of capital multiplied by invested capital).

We will endeavor to improve the asset efficiency of TDK as a whole by not only raising business efficiency but also accelerating the entire business cycle of sales and marketing, development, manufacturing, and headquarters functions. Our aim is to steadily execute measures through the operation of a logic tree connecting key performance indicators in business operations—such as asset turnover ratio and yield—and medium-term financial targets, and to achieve an ROE in excess of 14%.

Financial and operation logic tree



* To comply with the U.S. Financial Accounting Standards Board's Accounting Standards Update No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, we are revising our business results for fiscal 2018, which were reported on April 27, 2018—operating income, research and development expenses, cost of sales, and selling, general and administrative expenses (revised operating income: ¥85,633 million to ¥89,692 million; revised research and development expenses: ¥103,457 million to ¥102,641 million). The disclosure of revised cost of sales and selling, general and administrative expenses will be made at the announcement of financial results for fiscal 2019. The figures before adjustment are shown.

Executing Growth Strategies

TDK is targeting consolidated net sales of ¥1,650 billion in its new Medium-Term Plan. In order to achieve this goal, we are leveraging our advanced materials and process technologies and our product lineup of sophisticated electronic components to offer *Kotozukuri* solutions that solve the true needs of society in a timely manner.



Needs

What electronic components must offer

The category of xEV (which includes HEVs, PHEVs, and EVs) is poised to experience explosive growth on a global scale. The spread of advanced driving assistance systems (ADAS) is progressing, and the race toward practical implementation of autonomous driving is heating up. As a result of these developments, electronic components for use in xEV must possess the following qualities.

1. Reliability

Because the malfunction or breakdown of an automotive component can lead to serious accidents with loss of life, the ratio of defective parts must be resolutely driven toward zero, and redundancy must be built in to guard against failure. This means that all components used in systems for automotive use must meet stringent performance requirements. When used in combustion engines or electric motors as well as in other parts of the power train, high heat resistance and vibration resistance are absolutely essential.

2. Light weight and high efficiency

In order to realize low power consumption, electronic components must become smaller, lighter, and more efficient.

3. Suitable for realizing new driving experiences

Electronic control, networking, and other techniques not only serve to achieve more convenience and higher levels of operability but are also expected to enable new kinds of driving experiences.

Solution

What TDK delivers

Meeting specific automotive needs

Since entering the field of automotive electronic components, TDK has accumulated extensive know-how that enables it to provide products and solutions that are optimally suited to the requirements of xEVs.

Reliability

Pursuit of high-quality automotive components

Electronic components for use in automobiles are critical for safety. To withstand the extreme environmental conditions in which they must operate, passive components such as multilayer ceramic chip capacitors (MLCCs) and inductors as well as all other components need to be highly resistant to vibrations and shocks and possess high levels of heat and humidity resistance. TDK is currently engaged in *Monozukuri* Innovation aimed at achieving zero-defect quality.

P.42 *Monozukuri* Innovation

Improved energy efficiency

Key aspects for widespread acceptance of xEVs are improved fuel economy and lower charging costs. TDK has successfully introduced more compact and efficient DC-DC converters and power supply units for on-board chargers. Neodymium magnets from TDK contribute to make drive motors more efficient, and its TMR sensors enable more precise control for further enhanced efficiency. Through a variety of products, we are helping realize more energy-efficient driving.


On-board charger


Magnet

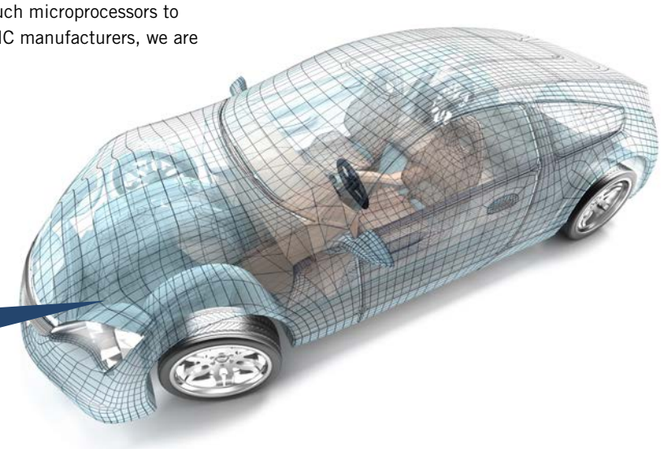
Linking the algorithms of IC manufacturers to the real world

Engine control units (ECUs) for use in cars often incorporate a GPU for handling three-dimensional image data as well as chips to process various information. Passive components serve to link such microprocessors to real-world conditions. In close cooperation with IC manufacturers, we are heightening demand for ECUs.

Number of ECUs

For power train, body, safety, multimedia applications, etc.

Between 10 to as many as 50



In total, the electric and electronic equipment in a car is made up of as many as twenty to thirty thousand individual components, including some 3,000 or more multilayer ceramic chip capacitors.


MLCCs


Inductors


Common mode filters

Sensors made possible by higher accuracy of materials technology

Modern automobiles employ a large number of TDK sensors for power train, body, safety, and communication applications. Development of such high-performance sensors was made possible by improving the accuracy of our materials technology. Enhanced safety, increased driving comfort, better fuel economy, and reduced power consumption are the result. Advanced driving assistance systems (ADAS) rely on sophisticated sensing technology to provide accurate information about the vehicle as well as its surroundings.

The industry's largest lineup of non-optical sensors



COLUMN

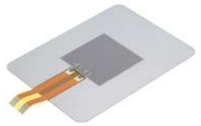
Wireless power transfer

In addition to the electromagnetic induction method that is increasingly found in practical applications, TDK is working on systems for transferring power to moving objects using the magnetic resonance method. We understood the potential of this approach at an early stage and are promoting development aimed at practical realization. Once wireless power transfer has become a reality, making it possible, for example, to safely recharge an xEV by simply parking it on a designated space, significant changes in industrial and social infrastructure are bound to happen.

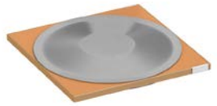


Haptics

Harnessing haptic technology that utilizes vibrations has enabled us to create the PiezoHapt™ actuator and PowerHap™ products with extremely fast response times. This will prove useful for navigation system displays, console switches, and other automotive applications. In the future, we intend to expand the product range to growth markets including home appliances and electronic equipment, robots and industrial equipment, medical devices, and more.



PiezoHapt™



PowerHap™



Needs

What electronic components must offer

Commercial services using fifth-generation mobile communications system (5G) are expected to begin operation in Japan in 2019. This will be accompanied by another leap in smartphone performance and a growing number of IoT terminals. However, circuit complexity will also increase further, making space savings through component miniaturization as well as effective power management more important than ever.

Solution

What TDK delivers

Realizing smaller dimensions and higher performance

Advanced technology first implemented in smartphones tends to migrate to the automotive sector and other applications as well. While closely watching progress in the area of 5G and subsequent communication standards, TDK continues to push the technological boundaries in the ICT market.

Capturing demand stimulated by 5G

We are actively engaged in further advancing the state of the art in a range of fields. This includes ceramic filters and other ceramic electronic components, the development of packaged modules in technical cooperation with IC manufacturers, and rechargeable lithium polymer batteries. We also expect IoT devices to further evolve toward smaller footprints, lower profiles, and higher integration. TDK's involvement in this area is exemplified by its semiconductor embedded substrate (SESUB) technology, which enables the creation of highly competitive modules with small size and low profile. The next generation of electronic components and modules is currently being created in our labs.

SESUB

Rather than simply mounting chips on a substrate, this unique technology enables three-dimensional embedding of chips whose thickness has been reduced to as little as 100 µm directly in the substrate. Ultra-compact power supply modules as well as Bluetooth and other similar modules created with this technology contribute to even thinner and smaller mobile devices. Further advances in integration density and application to a wide range of IoT devices are on the cards.

SESUB technology



Bluetooth module



Power management unit

MEMS technology



MEMS microphone



MEMS pressure sensor



Potential
Industry 4.0 & Society 5.0

Needs

What electronic components must offer

Industry 4.0 is a concept for thorough innovation of industrial production that is being realized in various countries around the globe. In Japan, work is progressing on a system that integrates IoT, AI, robots, autonomous driving, and more in a high-level fusion of cyberspace and physical space. The aim of this so-called “Society 5.0” concept is to combine economic advancement with finding solutions for social issues, through cooperation by the public and private sectors. Sensors and other electronic components incorporated in a multitude of different objects must deliver unprecedented levels of durability and safety.

Solution

What TDK delivers

Enriching society with state-of-the-art technology

While forging ahead with production innovation, TDK is also engaged in efforts to improve energy efficiency, boost the spread of renewable energy, and reduce the burden of medical treatment and care providers, among others, through the supply of solutions based on the concept of *Kotozukuri*.

Expanding market for consumer-use sensors

Our extensive lineup includes magnetic sensors, MEMS sensors, advanced high-accuracy motion sensors with three-, six-, or nine-axis, and various other types. These sensors are being increasingly used not only in smartphones and other mobile devices but also in various other consumer product applications.

Kotozukuri in the medical and nursing care field

The fusion of sensor technology and software technology in wearable devices makes it possible to measure and store vital data, supporting *Kotozukuri* solutions in the fields of medicine and caregiving. In cooperation with TOKAI Corporation, a company known for its involvement in hospital and nursing care facilities, we are working to achieve the early realization of 24-hour remote monitoring. Another remote monitoring system to detect wandering of dementia patients is being developed in collaboration with the Oita University Faculty of Medicine.



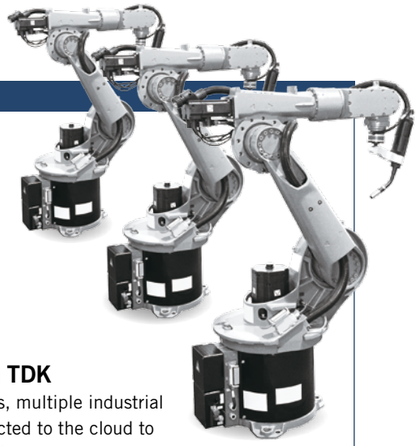
Wristband type wearable device
Silmee™ W20

COLUMN

Drones and TDK

The use of industrial drones is expanding beyond agriculture, logistics, surveying, and disaster countermeasures to other fields as well, and further market growth is expected. TDK is contributing to the evolution of drones by supplying a seven-axis sensor (three-axis gyroscope, three-axis acceleration, and barometric pressure) as well as batteries and other parts.





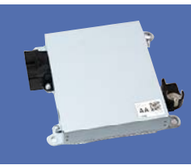
Robotics and TDK

In smart factories, multiple industrial robots are connected to the cloud to share data collected by sensors, enabling AI-based analysis for an enormous improvement in production efficiency. TDK is able to provide the various non-optical sensors required for this type of application. Furthermore, the robot joints use a large number of electric motors. TDK magnets for such motors also contribute to the evolution of robotics.

Enhancing the power efficiency of things that drive the IoT society

In 2025, it is expected that IT-related power consumption will account for about 15% of the world’s electricity consumption. Building energy systems with high efficiency and low power consumption is therefore crucial for the IoT society.

TDK has its roots in a revolutionary magnetic material called ferrite, and developed magnetics expertise into one of its core technologies. Now, TDK has somewhat shifted its focus from traditional component sales to modular solutions that combine hardware and software aspects. We are offering a versatile lineup of power solutions, focused on the three areas of energy conversion, energy storage, and energy control. In all of these areas, we are able to provide high added value through sophisticated synergy.

Energy conversion	• AC-DC/DC-DC converters • Bidirectional converters • Magnets for drive and power generation applications	
Energy storage	• Rechargeable lithium polymer batteries • Electric double layer capacitors (EDLCs)	
Energy control	• Transformers for battery management systems • Battery management units • IGBT transformers • Various sensors (current sensors, temperature sensors, etc.) • SESUB technology	

Monozukuri Innovation

Strengthening the *Monozukuri* power that drives *Kotozukuri* solutions

The *Kotozukuri* solutions offered by TDK are based on a thorough mastery of materials technology, process technology, and integrated production that results in highly competitive electronic components. In market sectors that are expected to see further growth, improved reliability is a major requirement. TDK is therefore pursuing *Monozukuri* Innovation that combines the Industry 4.0 concept with its zero-defect quality policy.

Toward that end, the Akita Plant has come up with a special manufacturing concept on its own called *Arubeki Sugata* (ideal process) quality. If one relentlessly improves quality and reliability, the end result will be a production line that does not make defective products, which in effect is what the production process should be like. This is the aim of the drastic *Monozukuri* Innovation that we are implementing. Automation, the use of robots, and other measures all serve to achieve this goal. We are building a model line in which each process conforms to the *Arubeki Sugata* principle. After thorough testing and evaluation, this will be applied to existing lines. *Arubeki Sugata* has become the watchword of the TDK Group as we engage in *Monozukuri* Innovation at a global level.

Arubeki Sugata

Rather than having to sort out defective products from the final output of a line, thorough quality management covers the entire process from materials input to completion of the product.

- Management of zero-defect quality
- Optimization of facilities and human resources
- Quality control activities from the bottom up

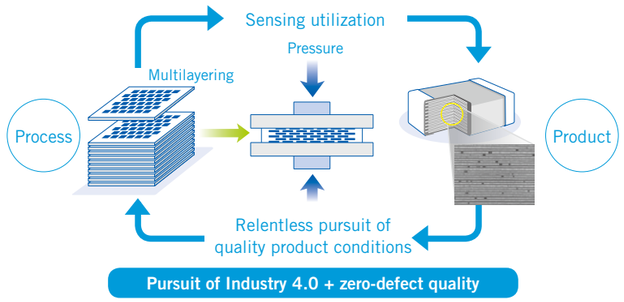


Honjo Factory East Site, Akita Prefecture

COLUMN

Implementing a model line

At the Honjo Factory East Site, which was completed in 2016, we are building a model line for MLCCs (multilayer ceramic chip capacitors) that pursues the zero-defect quality policy. In the multilayering process, which has a major effect on the quality of MLCCs, an enormous amount of data about facility operation status and the condition of the product is collected and matched to reference quality data. This results in a drastic improvement in quality conditions. The know-how obtained from this model line will be applied to other production processes as well.



Post-Merger Integration (PMI) and Creating Synergies

PMI expertise taken to the next level

In keeping with efforts to reform our business structure, we embarked on a full-scale M&A strategy. More than 10 years before the turn of the century, we made our first move by acquiring the magnetic heads manufacturer SAE Magnetics (H.K.) Ltd. in 1986. This was followed by the acquisition of Headway Technologies Inc. in 2000, another manufacturer in the same field. In 2005, we acquired the Lambda Power Group (now TDK-Lambda), a leader in industrial power supplies, and the rechargeable lithium polymer battery manufacturer ATL. In 2008, the passive component manufacturer EPCOS with a forte in high-frequency components became part of the TDK Group. These M&As provided a clear boost to our corporate value and have become the drivers for TDK's evolution in recent years. In the electronic component sector, an acquisition or merger requires careful assessment of complex technological factors. As a result, we have accumulated extensive know-how in making our own judgments and decisions regarding target companies. When we determine that a business excels in regard to management, strategy, technology, and operation, we go ahead with the acquisition, but that does not mean that we try to impose the TDK way. Rather, we want to maintain the dynamism of the acquired company. This approach involves respect for various cultures and business philosophies. Leveraging our strength of diversity adds to the strength of Group companies.



Rule 1 **We take the initiative in selecting a target company.**

Rule 2 **We do not try to impose the TDK way after acquisition.**



We Are Truly Thrilled!

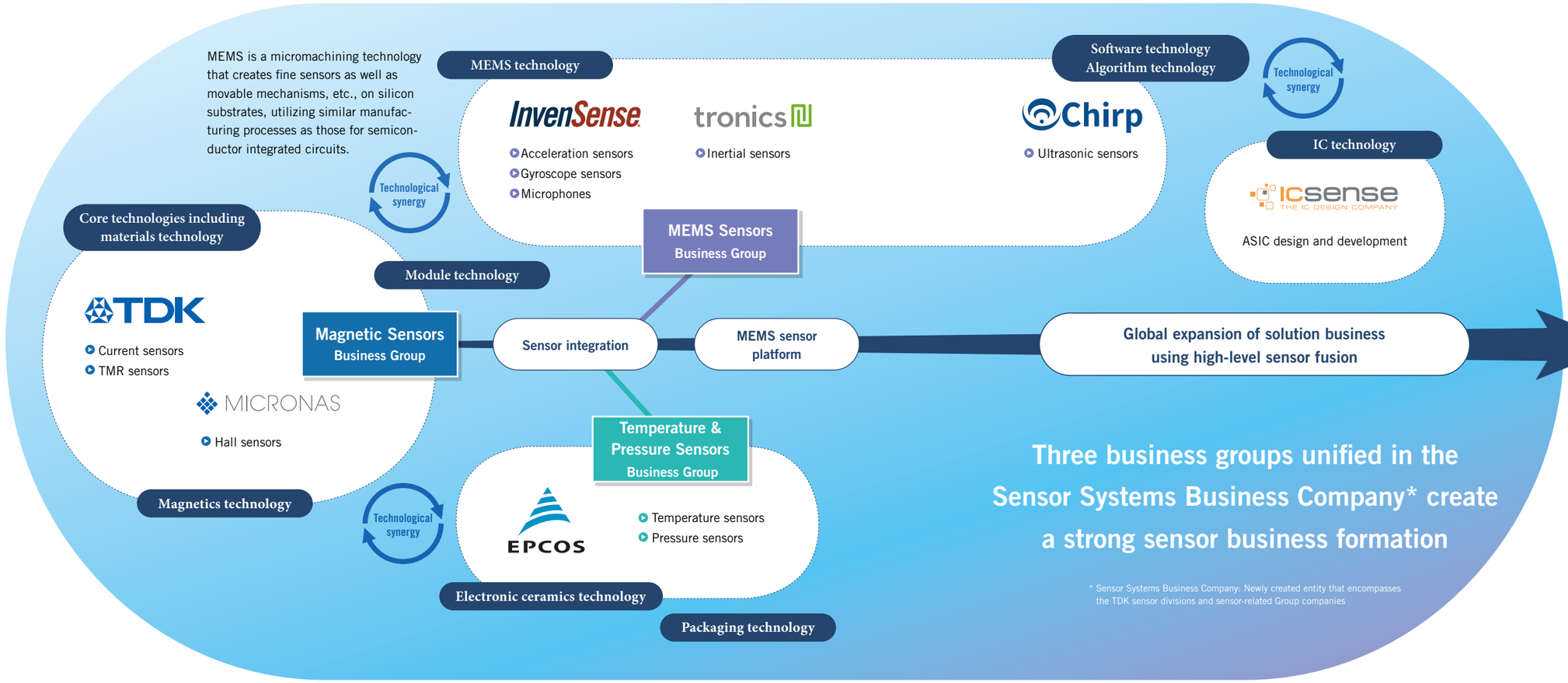
Behrooz Abdi
General Manager
MEMS Sensors Business Group
Sensor Systems Business Company

InvenSense, of which I am the CEO, is a pioneer in motion sensors. We began working on six- and nine-axis sensors ahead of the entire industry. Our broad portfolio is made possible by a solid grounding in microphone, inertial, pressure, and ultrasonic sensor technology. We have grown at a rapid pace, offering solutions for many consumer products including smartphones, drones, wearables, game consoles, virtual reality (VR) and augmented reality (AR) devices, inertial navigation systems, and image stabilization for cameras.

Just as decision making in humans relies on a combination of sensory input for seeing, hearing, smelling, and touching, the future will require complex sensor combinations. InvenSense will blaze a path into this future together with TDK. InvenSense has the capability to create solutions on a single system chip that integrate MEMS sensors with firmware and proprietary algorithms. By merging this strength with TDK's powerful materials technology and semiconductor embedded substrate (SESUB) technology, and by fusing the Group's management resources, a highly unique business model has been created (**P.44–P.45 Synergies Behind the Sensor Business**). Our access to markets and our scope of activities have expanded, responding to increasing demand in the area of advanced driving assistance systems (ADAS), along with ICT, IoT, industrial equipment, and the automotive sector. We are truly thrilled by these developments.

Synergies Behind the Sensor Business

Bold M&A strategy dramatically expands the sensor portfolio. Impressive product lineup comprises all kinds of non-optical sensors.



Addition of Hall sensors strengthens magnetic sensor technology

TDK's magnetic sensor technology comprising TMR and other similar sesors has been further strengthened by the addition of Hall sensors from Micronas, which have earned high acclaim in the automotive industry. Products that integrate TMR sensors and Hall sensors have also been developed. Targeting the automotive and industrial equipment markets, we are growing the business with a wide lineup of sensor solutions.

Temperature and pressure sensors drive electronic ceramics technology

Temperature sensors with NTC thermistors and pressure sensors utilizing piezo-ceramic technology are just a few examples of the versatile product portfolio developed by TDK and EPCOS through advanced electronic ceramics technology. We are also pursuing the technological synergy that arises from the integration of different sensors. Tangible results include the development of integrated temperature/humidity/barometric pressure sensor modules made possible by MEMS technology.

Various MEMS sensors significantly expand the add-on portfolio

The MEMS sensor product and technology of the TDK Group received a significant boost by the addition of gyroscope sensors and acceleration sensors from InvenSense, a company with extensive design expertise, along with inertial sensors from Tronics and ultrasonic sensors from Chirp. The MEMS sensor platform suitable for advanced sensor fusion has also been strengthened. We are expanding our MEMS sensor solutions not only for the ICT market but also for the automotive market and others.

Securing IC design technology indispensable for sensor systems

The integrated circuit chips that process the signals obtained through sensing are an indispensable part of any sensor system. The addition of ICsense, Europe's premier Application Specific Integrated Circuit (ASIC) design company, to the TDK Group has further elevated our capability to provide high-performance, high-value-added sensor products and solutions.

High-level sensor fusion powered by sophisticated software technology

In systems that comprise a large number of sensors, dedicated software makes it possible to realize integrated control of sensor-derived information, enhance functionality and expandability, and create new solutions along with intricate power management. InvenSense and other TDK Group companies possess the required software technology and expertise that forms the basis for high-level sensor fusion in the age of IoT.



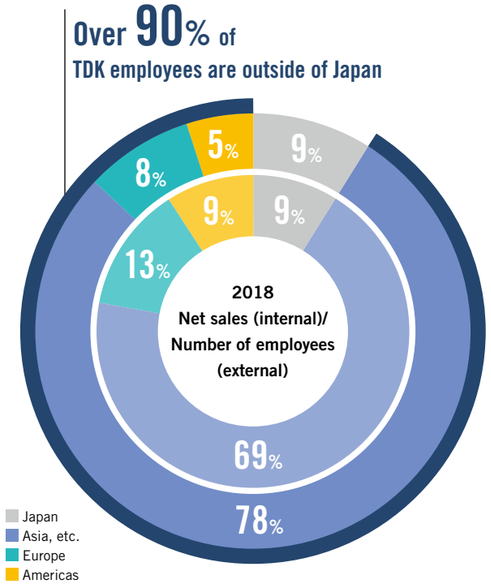
Global Human Resource Strategies Bolstered by Strength of Diversity

Strength of diversity built through TDK-style post-merger integration (PMI)

Since the 1960s when the Company began expanding overseas, TDK has led the movement toward globalization among Japanese companies. In the 2000s, we began pursuing the bold reform of our business structure through M&As. Starting with Hong Kong-based ATL in 2005 and Germany-based EPCOS in 2008, companies that have joined the TDK fold are significantly driving TDK's earnings many years on. The secret to our integrative approach is to not control companies through capital but to delegate authority on an equal partnership basis. We take this approach because we understand that electronic components are a highly distinctive business field, and that every region has its own needs, business practices, systems, and other unique characteristics. Because the corporate managers of the companies we have acquired are familiar with those specifics, we feel they are the ones best qualified to execute management strategies. Meanwhile, we concentrate on maximizing the corporate value of the TDK Group as a whole by creating synergies through the integration of management resources such as materials technology, process technology, and the customer base.

A culture that encourages and harnesses diverse value systems to promote innovation is a hidden competitive advantage of TDK's strength-of-diversity approach.

Global Business Composition





The growing need for an HR strategies adaptive to business globalization

Since 2016, we have been aggressively pursuing an M&A strategy primarily in the area of sensors, and have been creating a new business structure. TDK has expanded its business to more than 30 countries and regions around the world, and in fiscal 2018 the overseas sales ratio was 91.1% and the overseas employee ratio 90.7%. In order to provide optimal solutions to customers in a market that is becoming more globalized, we must further increase our strength of diversity while at the same time maximizing Group synergies by reaching beyond limitations imposed by time, geography, and culture. Against this backdrop, we feel the growing importance of further promoting management diversity, and discovering, developing, and utilizing human resources across international borders.

Initiating a global HR strategies

In fiscal 2019, TDK began the full-scale implementation of its global human resources strategy aimed at discovering and developing borderless global talent. To promote this initiative, the Human Resources HQ has been established in Munich, Germany. It is headed by TDK corporate officer and general manager Andreas Keller. With the Human Resources HQ located outside of Japan and with non-Japanese in top management roles, TDK is a rare example among Japanese companies.

Due to aggressive M&A in recent years, there has been a sharp increase in the globalization of human resources and diversification of specializations in the TDK Group. Accompanying these developments, to ensure more objective personnel evaluations, we are establishing common global standards. We will promote the proper placement of talented people beyond the boundaries of country or division, carefully select management candidates, and work to further increase our strength of diversity. We are already working on establishing a consolidated human resource database and expanding the scope of its use, and will go all out to develop global leaders.





Andreas Keller

TDK's global HR strategies

- Establish the Human Resources HQ in Munich, Germany
- Build a consolidated global HR database
- Set common global standards for evaluating personnel
- Cultivate global leaders beyond boundaries of country or division

Territorial career development program

A territorial career development program is being implemented to find individuals within the Group who have strong, untapped capabilities, to train a new generation of candidates for all key positions, and to develop global leaders who will play an active role in a wide range of fields, thereby raising the management skills of the entire organization. Candidates will participate in the program five times a year in their region. During the program, practical issues will be addressed through group work with members gathered from various regions and divisions.





Promoting a Global Human Resource Strategies to Realize the Strength of True Diversity

Andreas Keller
Corporate Officer
General Manager of Human Resources HQ

Over 100,000 employees are playing an active role in the TDK Group. Approximately 90% of those employees are based in countries other than Japan, with nearly 80% having joined the TDK Group through M&As. TDK has a culture that values the individuality and working approach of every new consolidated subsidiary that has joined the Group, without forcing these companies to adopt a style similar to the Company. This cultural acceptance has been a major reason why each Group Company has been able to achieve growth as part of the TDK Group whilst leveraging its own individual strengths to the greatest possible extent. The true strength of the TDK Group's diversity lies not only in the fact that it possesses the technologies and capabilities of its subsidiaries, but rather in respecting the cultures of each individual Group company and offering motivation through the fostering of interaction between these companies. It also comes through sharing best practices that should be incorporated at our headquarters and at other Group companies. Furthermore, to promptly achieve the TDK Group's goals, I believe it is imperative that we promote our human resource strategies on a global basis under a shared vision.

To realize further growth whilst leveraging the strength of true diversity, we will adhere to a policy of putting the best people in the best place at the best possible time, thus actively cultivating through various newly introduced management training programs successors on a Groupwide basis to take over important positions. Under this policy, we will actively promote interaction not only between our headquarters and Group companies but also between Group companies themselves. This interaction will not only be limited to technical positions, but will also extend to employees in charge of corporate functions such as legal or others, thereby giving all employees an opportunity to play an active role on a global scale. Our aim is to accelerate this interaction through the Global Communication and English Training program, as well as introducing a consistent global mobility guideline. This is just the beginning of our strive and ambition to establish a global human resources platform.

Since entering the TDK Group 18 years ago as a staff member at a local subsidiary, I have gained much experience at Group companies in various countries. As of 2018, I have been serving as a corporate officer at the company's headquarters. Through this experience, I have come to believe that providing our global employees, regardless of their Group company, with the opportunity to play an active role on the global stage, and at the company's headquarters, is a huge motivational factor.

Going forward, whilst leveraging the individual characteristics of each Group company, we will promote our human resource strategies under the concept of One TDK, thus bringing the entire Group together. By doing so, we will realize further growth of the TDK Group as a whole.

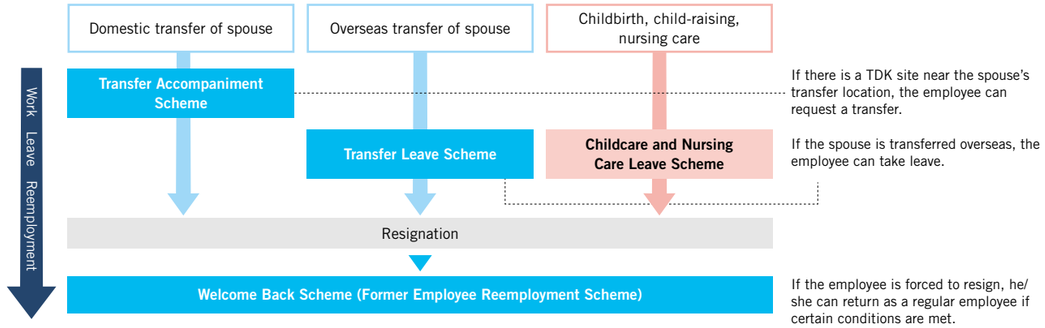
TDK's Workstyle Innovation

Diversification of workstyles to suit various stages in life

TDK introduced three schemes in October 2017 with the aim of enabling employees to choose workstyles suited to various stages in life and to continue working with peace of mind.

The Spouse Domestic Transfer Accompaniment Scheme provides support to employees accompanying spouses who undergo a domestic transfer requiring a change of residence by, for example, investigating whether acceptance by a TDK site in the employee's desired area is possible. The Spouse Overseas Transfer Leave Scheme enables employees wishing to accompany spouses who are transferred overseas to take a leave of up to three years. After the leave ends, in principle, the employee returns to the same workplace as before the leave. The Welcome Back Scheme (Former Employee Reemployment Scheme) assists the return to work as regular employees of former employees who have quit their jobs because of marriage, childbirth, child-raising, nursing care, spouse transfer, among other circumstances.

Introduction of schemes to diversify workstyles



Introduction of Second Career Scheme

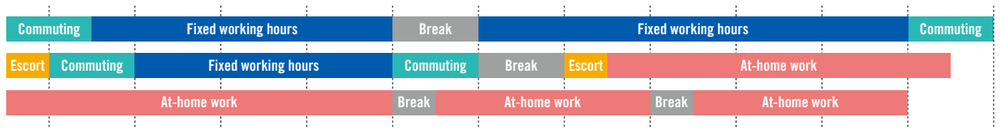
TDK has also introduced the Second Career Scheme, which, when an employee reaches mandatory retirement age, extends the employment contract to the age of 65. The aim of this scheme is to fulfill TDK's social responsibility of responding to the revised Act Concerning Stabilization of Employment of Older Persons and to effectively utilize the knowledge, skills, and experience of elderly employees for the further growth of the Company.

Toward the realization of work-life balance

In April 2018, TDK introduced a Work-at-Home Scheme and a Super Flextime Scheme. The aim of these schemes is to support a work-life balance by providing employees who have child-raising and nursing-care responsibilities with opportunities to work at home and by applying a flextime system that does not have any core time. By making use of these schemes, even more employees can improve their work-life balance.

Unlike the usual flextime system, the Super Flextime Scheme does not set any core time. Employees can choose their working hours flexibly anytime from 6 a.m. to 10 p.m.

Image of the Super Flextime Scheme



The TDK Group's Materiality

TDK believes it is important to promote CSR activities that respond to changes among stakeholders and in the social and business environment surrounding the Group. Since fiscal 2014, TDK has promoted the study of materiality in accordance with the fourth edition of the Global Reporting Initiative guidelines (GRI-G4), and in fiscal 2016, we finalized our materiality*. With regard to the designated important CSR issues of "Contribute to the World through Technology," "Develop Human Resources," "Consider the Societal and Environmental Impact of the Supply Chain," and "Develop and Prosper in Harmony with the Global Environment," we are continuing to promote activities.

* The details of the materiality finalization process may be viewed on the following website: http://www.global.tdk.com/corp/en/csr/csr_philosophy/csr02000.htm

The materiality finalization process

GRI-G4 made a revision from requiring comprehensive information disclosure to requiring information disclosure with the focus on materiality. The objective of this revision was to encourage companies to determine their reporting content purposefully by getting management to be more deeply involved in CSR. TDK held discussions with stakeholders outside the Company, implemented a dialogue with management, and finalized materiality through the following process.

STEP 1

Identifying social issues

We confirmed the daily communications content with stakeholders and conducted simulations of various social issues in light of ISO26000 and other international standards relating to CSR.

STEP 2

Prioritizing material issues from TDK's own perspective

We prioritized the importance of the aforementioned identified social issues by "management strategies," "impact of the Group's business on society," "degree of stakeholder interest," and "responses to the current situation."

STEP 3

Prioritization from stakeholders' perspectives

We studied on prioritization from stakeholders' perspectives, reflecting the CSR Report review conducted by experts from Asia, Europe, and the U.S. as well as the exchanges of views with CSR experts.

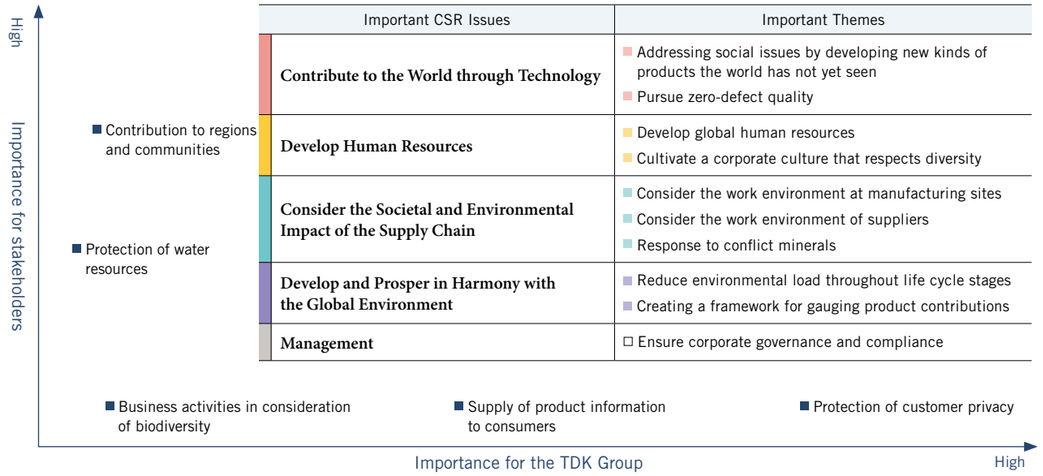
STEP 4

Finalization of materiality

We reconsidered our areas of priority from the perspectives of TDK and stakeholders and, after gaining approval from the Executive Committee, finalized the materiality of the TDK Group.

Finalization of the materiality

The prioritization in Steps 2 and 3 was conducted on the basis of 46 items chosen in consideration of items required by GRI-G4, and 19 material issues were identified. These issues were further sorted and classified and finally condensed into the following important themes for the promotion of activities going forward. After approval has been received from the Executive Committee, the competent departments in TDK's headquarters are taking the initiative in setting key performance indicators in coordination with TDK Group companies in order to promote related activities.



Important CSR Issues	Important Themes
Contribute to the World through Technology	Addressing social issues by developing new kinds of products the world has not yet seen Pursue zero-defect quality
Develop Human Resources	Develop global human resources Cultivate a corporate culture that respects diversity
Consider the Societal and Environmental Impact of the Supply Chain	Consider the work environment at manufacturing sites Consider the work environment of suppliers Response to conflict minerals
Develop and Prosper in Harmony with the Global Environment	Reduce environmental load throughout life cycle stages Creating a framework for gauging product contributions
Management	☐ Ensure corporate governance and compliance

Important CSR Issues	Important Themes	Main Points
Contribute to the World through Technology	**Addressing social issues by developing new kinds of products the world has not yet seen**	TDK aims to solve social issues through unique technological development.
	Pursue zero-defect product quality	On the basis of our high level of technology, we will pursue zero-defect quality through uniformly managed production processes from materials to manufacturing.
Develop Human Resources	**Develop global human resources**	Toward the promotion of genuine globalization, we will strive to develop the human resources who will serve as its foundation.
	Cultivate a corporate culture that respects diversity	In order to continue generating innovative creativity, we will build a tolerant corporate culture that respects the diversity of human resources.
Consider the Societal and Environmental Impact of the Supply Chain	**Consider the work environment at manufacturing sites**	In light of the latest requirements, we will gauge considerations for the labor environment at production sites, which we need as a supplier, and if necessary implement education and guidance toward improvement.
	Consider the work environment of suppliers	In light of the latest requirements, we will gauge considerations for the labor environment of suppliers, which we need as a buyer, and if necessary implement education and guidance toward improvement.
	Response to conflict minerals	We will execute our social responsibility as a midstream company appropriately through the continued implementation of required efforts and an understanding of the latest requirements.
Develop and Prosper in Harmony with the Global Environment	**Reduce environmental load throughout life cycle stages**	We will promote environmental activities on the basis of the TDK Environmental Vision 2035*.
	Creating a framework for gauging product contributions	Through the setting of a framework for gauging product contributions in the industry, we will promote social understanding of the level of TDK's environmental contribution.
Management	**Ensure corporate governance and compliance**	Through the development of appropriate corporate governance and thorough implementation of compliance, we will aim to enhance our corporate value.

* For details of the goals and achievements of environmental activities, please see the following website: https://www.global.tdk.com/corp/en/csr/environmental_responsibility/csr03200.htm

Optimization of the Value Chain

Overall strategy | *Monozukuri* Innovation
Social factors | Environmental factors

Value Chain	Procurement	Development and design		Manufacturing	Logistics	Sales

Strategic Fit (Optimization of value chain to promote strategy)

Overall value chain

- Pursuit of integrated production from materials to finished products
- Creation of "black boxes" in core domains to ensure firm control of technological advantage
- Backflow of customer needs upstream
- Enhancement of profitability by accelerating the business cycle across all processes

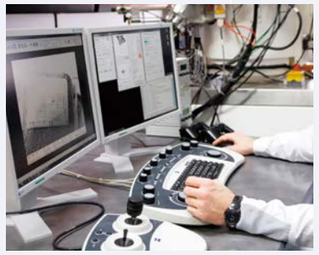
Procurement

- Stable procurement of magnetic materials
- Assurance of the quality of raw materials
- Procurement of rare-metal alternatives, etc.



Development and design

- Acceleration of the development cycle
- Development of demand areas through our global 4-pole network
- Concentration on strategic areas of development resources
- New product development based on long-term road map
- Fusion of intellectual property within Group
- Collaboration with IC manufacturers
- Management and utilization of intellectual property
- Development of products not using rare metals



Manufacturing

- Pursuit of location free to realize uniform quality worldwide
- Pursuit of zero defects through source management
- Pursuit of production efficiency through utilization of IoT
- Reduction of inventories through shortening of lead times



Logistics

- Assurance of logistics quality (contribution to "Just In Time")



Sales

- Strengthened relations with customers
- Improvement of cash flows
- Effective utilization of information systems



ESG

Overall value chain

- Development of human resources to promote *Monozukuri* Innovation
- Development of global human resources
- Cultivation of a corporate culture that respects diversity
- Reduction of environmental load throughout lifecycle perspective
- Creation of a framework for gauging product contributions

Procurement

- Assurance of procured product quality
- Implementation of CSR check sheets/audits
- Green procurement
- Response to conflict minerals
- Consideration of work environment of suppliers

CSR-compliant supplier ratio

91.2%

Development and design

- Development of products contributing to the environment
- Product assessment



Manufacturing

- Reduction of environment load at plants
- Improvement of energy efficiency
- Consideration of work environment at production sites

Implementation of CSR self-checks at manufacturing sites

100%

Logistics

- Reduction of environmental load of logistics



Sales

- Strengthening of quality assurance setup
- Promotion of sales of products contributing to the environment

Reduction of CO_2 emissions through products

2,041
thousand t-CO_2

FOCUS

Strategic Fit

Reduction of procurement risk relating to magnetic materials and strengthening of materials technology

For TDK, whose core technology is magnetics, the stable procurement of magnetic materials is an important issue in the promotion of medium- and long-term management strategy. In particular, the dysprosium added to neodymium magnets, which boast the strongest magnetic force, is a rare-earth element. As well as ensuring the stable supply of magnetic materials, TDK is making efforts to reduce business risks, such as the development of neodymium magnets that do not rely on rare-earth elements. We are also tackling the continuous evolution of materials technology. In July 2018, TDK concluded a capital and business tie-up contract with Toda Kogyo Corp. and agreed to turn it into an equity-method affiliated company.

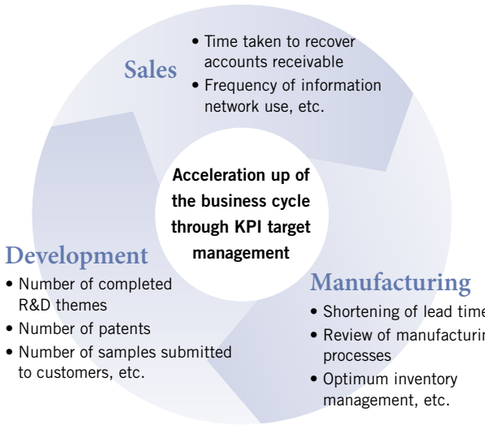
TDK's active involvement in new material development based on Toda's forte in magnetic materials and material synthesis technology will lead to a strengthening of the competitiveness of our electronic components.



Neodymium magnets

Acceleration of cycle time

TDK is making efforts to accelerate the business cycle in all processes, including sales, manufacturing, and development. In addition to accelerating the supply of samples and improving development speed, we have set specific KPIs, such as the reduction of inventories, the shortening of production lead times, and the launch of products with top market shares, so as to strengthen our competitiveness and improve our earnings.



R&D at global sites with differing regional features

TDK is tackling innovations utilizing its strength of diversity. For example, while TDK itself is strong in the development of materials technology and production technology, there are companies that are strong in the pursuit of state-of-the-art technology, companies that are strong in the development of applications, and companies that are strong in the development of environment-friendly products, especially in Europe, where environmental awareness is deep-rooted. Companies with expertise in different fields, due to national or regional characteristics or the like, are promoting R&D utilizing their respective strengths. Through mutually complementary development, we are endeavoring to enhance our competitiveness on a global scale.

Promotion of innovations utilizing TDK's strength of diversity

USA (San Jose)
Many semiconductor and related companies are located in San Jose, which is near Silicon Valley. Here, TDK jointly implements surveys of state-of-the-art information and communications technology and product development.

Germany (Munich)
In a region where awareness of the environment and energy saving is strong, TDK implements technical surveys and development in such fields as automotive and industrial equipment.

China (Shenzhen)
Here, TDK develops technologies that can be deployed in all directions, including the expanding automotive, ICT, and industrial equipment markets.

China (Shanghai)
Here, TDK implements EMC support, the proposal of optimum components, and other activities.

Japan (Chiba)
Here, TDK implements R&D on medium- to long-term themes (new materials, new manufacturing methods, new products, etc.).

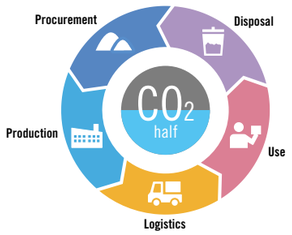
Israel (Tel Aviv)
There are many high-tech startups in Tel Aviv, which is the site of TDK-Lambda. Here, TDK implements surveys and development of new technologies.

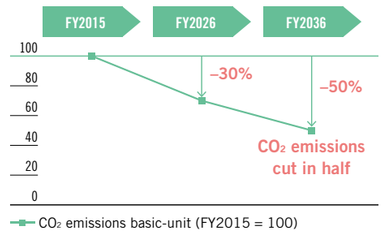
FOCUS

ESG

TDK Environmental Vision 2035

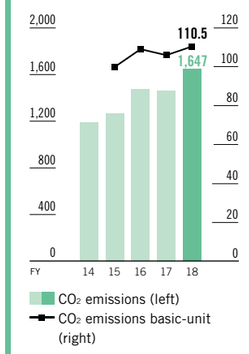
At TDK, we believe that long-term environmental action plays a key role in the effort to achieve sustainable development in society. TDK Environmental Vision 2035, launched in fiscal 2016, sets the goal of "halving the CO_2 emissions basic-unit in a life-cycle perspective by 2035," based on operating businesses with low enough environmental loads not to disturb natural cycles. This stance stems from the belief that minimizing the environmental load in business activities, and revitalizing the natural environment, is the duty of companies that supply products designed to contribute to its customers and the society. Moreover, modeled on the United Nations Climate Change Conference (COP 21) Paris Agreement, which seeks to curb global warming by achieving a balance between greenhouse gas emissions and absorption sources, TDK pursues the ideal corporate posture.



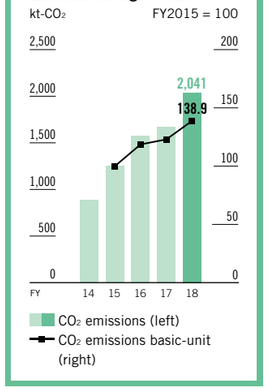


Major achievements

Trends in CO_2 Emissions from Production Activities (Global)*



Trend in the Reduction of CO_2 Emissions through Products*



* A third-party review of the calculation method was performed. Please refer to the following website for more information.
http://www.global.tdk.com/corp/en/csr/csr_data/csr05900.htm

Consolidated Business Results Highlights

Years ended March 31

Yen millions

Consolidated Business Highlights*1	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net sales	¥ 866,285	¥ 727,400	¥ 792,624	¥ 862,492	¥ 802,534	¥ 841,847	¥ 984,525	¥1,082,560	¥1,152,255	¥1,178,257	**¥1,271,747**
(Overseas sales)	714,172	610,944	704,874	764,807	702,469	747,062	890,520	989,348	1,061,203	1,073,024	**1,158,004**
Cost of sales	635,529	605,943	604,454	645,514	624,271	668,258	763,572	802,225	831,123	855,948	**930,516*3**
Selling, general and administrative expenses	143,581	175,762	158,727	149,114	157,724	151,535	184,337	207,876	227,718	113,649	**255,598*3**
Operating income (loss)	87,175	(54,305)	29,443	67,864	20,539	22,054	36,616	72,459	93,414	208,660	**85,633*3**
Income (loss) before income taxes	91,505	(81,630)						74,517	91,839	211,717	**89,811**
Income (loss) from continuing operations before income taxes			25,576	64,519	14,668	19,765	39,772				
Net income (loss) attributable to TDK	71,461	(63,160)	13,520	45,264	(2,454)	1,195	16,288	49,440	64,828	145,099	**63,463**
Capital expenditures	84,312	98,425	64,370	78,638	99,653	85,606	68,606	102,525	160,674	167,631	**178,612**
Depreciation and amortization	71,297	89,567	83,788	77,594	80,197	77,938	83,109	80,249	83,224	87,491	**92,171**
Research and development expenses	57,387	57,645	53,942	52,973	52,551	53,943	63,385	70,644	84,920	91,254	**103,457*3**
Ratio of overseas production to net sales (%)	70.1	74.0	80.5	83.6	80.2	81.8	86.7	87.9	86.3	86.1	**84.5**
Net cash provided by operating activities	119,413	59,189	118,247	101,879	55,334	108,942	127,308	142,850	151,563	160,136	**91,310**
Net cash used in investing activities	(141,892)	(275,410)	(105,963)	(61,341)	(29,898)	(90,156)	(55,438)	(127,312)	(140,585)	(71,111)	**(246,099)**
Net cash provided by (used in) financing activities	(75,941)	223,637	(38,369)	(31,860)	12,929	4,395	(56,118)	(35,243)	29,305	(37,753)	**110,088**
Cash and cash equivalents at end of period	166,105	165,705	132,984	129,091	167,015	213,687	250,848	265,104	285,468	330,388	**279,624**
Total assets	935,533	1,101,036	1,091,458	1,060,853	1,072,829	1,169,575	1,239,553	1,404,253	1,450,564	1,664,333	**1,905,209**
Stockholders' equity	716,577	554,218	543,756	534,273	498,159	561,169	635,327	738,861	675,361	793,614	**824,634**
Working capital	300,859	281,536	286,370	199,186	219,918	232,693	279,504	352,364	289,760	388,542	**296,899**
Number of shares issued (thousands)	129,591	129,591	129,591	129,591	129,591	129,591	129,591	129,591	129,591	129,591	**129,591**
Per Share Data											Yen
Net income (loss) attributable to TDK (basic)	¥551.72	¥(489.71)	¥104.82	¥350.90	¥(19.06)	¥ 9.50	¥129.47	¥392.78	¥514.23	¥1,150.16	**¥502.80**
Net assets	5,557	4,297	4,215	4,142	3,957	4,461	5,050	5,865	5,355	6,289	**6,532**
Dividends	130.00	130.00	60.00	80.00	80.00	70.00	70.00	90.00	120.00	120.00	**130.00**
Payout ratio (%)	23.4	—	57.2	22.8	—	737.2	54.1	22.9	23.3	10.4	**25.9**
Key Financial Ratios											
Overseas sales ratio (%)	82.4	84.0	88.9	88.7	87.5	88.7	90.5	91.4	92.1	91.1	**91.1**
SG&A ratio (%)	16.6	24.2	20.0	17.3	19.6	18.0	18.7	19.2	19.8	9.7	**20.1**
Operating income ratio (%)	10.1	(7.5)	3.7	7.9	2.6	2.6	3.7	6.7	8.1	17.7	**6.7**
ROE (%)	9.7	(9.9)	2.5	8.4	(0.5)	0.2	2.7	7.2	9.2	19.8	**7.8**
ROA (%)	7.4	(6.2)	1.2	4.2	(0.2)	0.1	1.4	3.7	4.5	9.3	**3.6**
Non-Financial Indicators											
Number of employees	60,212	66,429	80,590	87,809	79,175	79,863	83,581	88,076	91,648	99,693	**102,883**
Overseas employees ratio (%)	82.8	84.1	87.2	88.5	87.4	88.2	89.1	89.8	90.3	90.7	**90.7**
CO_2 emissions in production activities (t-CO_2)	926,695	909,747	878,303	1,095,462	1,109,926	1,102,989	1,190,458	1,269,086	1,474,119	1,463,396	**1,647,096**
CO_2 emissions reduction in manufacturing (t-CO_2)*2					321,000	498,000	886,000	1,251,000	1,581,000	1,675,000	**2,041,000**

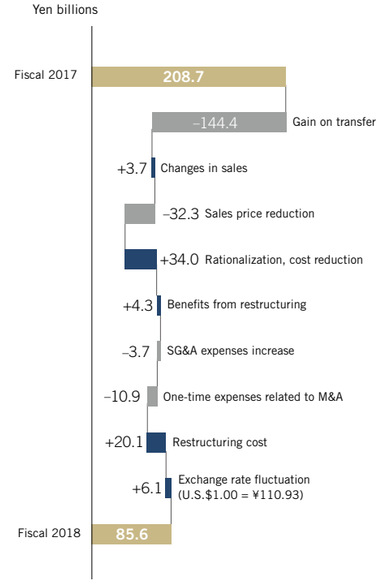
*1 In accordance with the provisions of ASC No. 205-20, "Presentation of Financial Statements–Discontinued Operations," operating results related to the data tape business and the blu-ray business are separately presented as discontinued operations in the consolidated statements of operations for the year ended March 31, 2014. Also, reclassifications are made to the consolidated statements of operations after the year ended March 31, 2010, to conform to the presentation used for the year ended March 31, 2014.

*2 Because the TDK Environmental Action 2020 Plan came into effect from fiscal 2011, the "CO_2 emissions through products (environmental contributions) (t-CO_2)" figures are for fiscal 2012 onward.

*3 To comply with the U.S. Financial Accounting Standards Board's Accounting Standards Update No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, we are revising our business results for fiscal 2018, which were reported on April 27, 2018—operating income, research and development expenses, cost of sales, and selling, general and administrative expenses (revised operating income: ¥85,633 million to ¥89,692 million; revised research and development expenses: ¥103,457 million to ¥102,641 million). The disclosure of revised cost of sales and selling, general and administrative expenses will be made at the announcement of financial results for fiscal 2019. The figures before adjustment are shown.

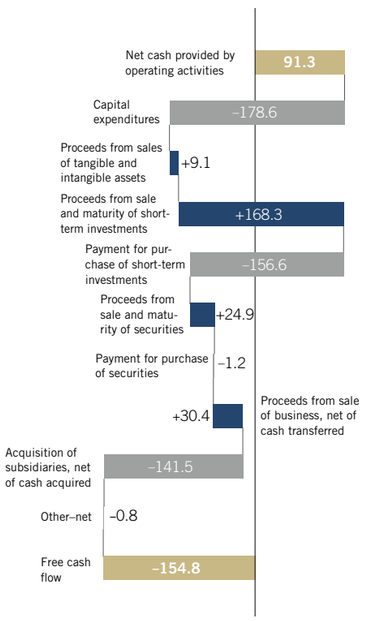
Breakdown of Operating Income Changes*3

Yen billions



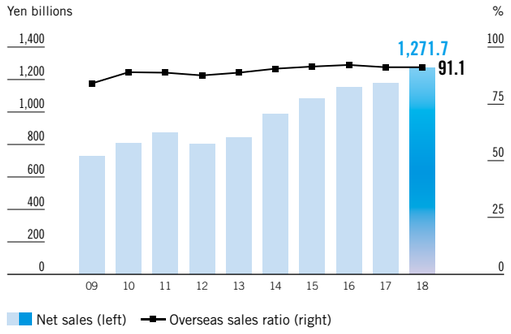
Breakdown of Free Cash Flow

Yen billions



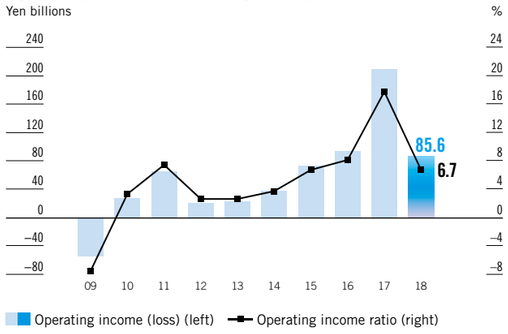
* To comply with the U.S. Financial Accounting Standards Board's Accounting Standards Update No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, we are revising our business results for fiscal 2018, which were reported on April 27, 2018—operating income, research and development expenses, cost of sales, and selling, general and administrative expenses (revised operating income: ¥85,633 million to ¥89,692 million; revised research and development expenses: ¥103,457 million to ¥102,641 million). The disclosure of revised cost of sales and selling, general and administrative expenses will be made at the announcement of financial results for fiscal 2019. The figures before adjustment are shown.

Net Sales / Overseas Sales Ratio



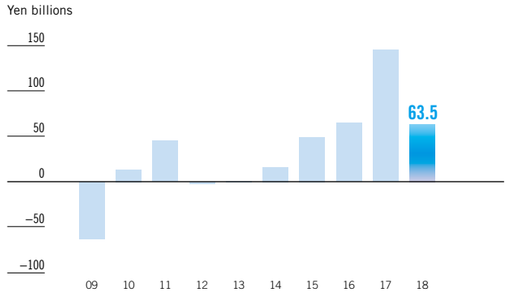
As a result of increases in the number of parts used on automobiles in conjunction with the electrification of vehicles and steady investment in semiconductors in the industrial equipment market, net sales were ¥1,271.7 billion, a record high, in fiscal 2018. Sales have increased over the past 11 years, particularly in the United States and Asia, and in fiscal 2018, sales outside Japan accounted for 91.1% of total net sales.

Operating Income (Loss) / Operating Income Ratio*



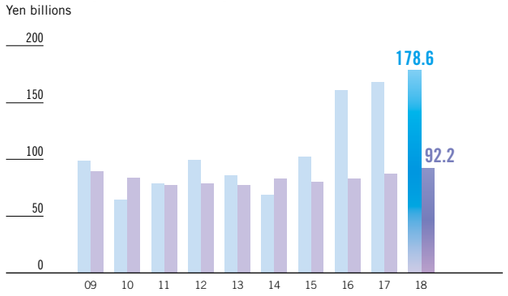
As a result of the structural reforms that were initiated in fiscal 2012, an earnings structure with a good balance among the different segments has been firmly established. In fiscal 2017, capital gains of ¥144.4 billion were recorded in conjunction with the business tie-up with Qualcomm and the agreement to establish a joint venture, and as a result, operating income in fiscal 2018 was down 59.0% year on year, to ¥85.6 billion, but income was up in real terms due to higher income from existing businesses.

Net Income (Loss) Attributable to TDK



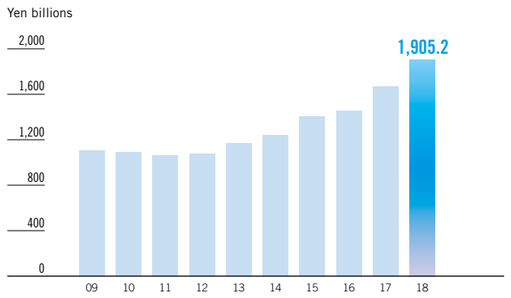
Performance was sluggish from fiscal 2009 due in part to reduced demand for electronic components resulting from the global economic slowdown and the impact of the Great East Japan Earthquake. After structural reforms were implemented beginning in fiscal 2012, however, results drastically improved. As a result of effects from reporting gains from the transfer of business to Qualcomm in fiscal 2017, net income in fiscal 2018 fell 56.3% year on year, to ¥63.5 billion, but income was up in real terms due to higher income from existing businesses.

Capital Expenditures / Depreciation and Amortization



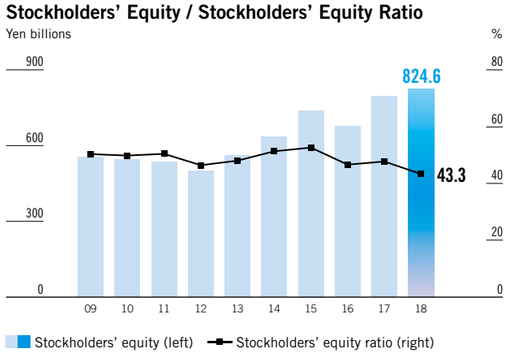
Under the three-year Medium-Term Plan covering the period from fiscal 2016 to fiscal 2018, TDK made ¥506.9 billion in capital investment. TDK continues to actively pursue capital investments aimed at accelerating strategic growth product expansion, strengthening its overseas R&D base, accelerating existing core business expansion, and accelerating *Monozukuri* Innovation.

Total Assets



Total assets as of the end of fiscal 2018 increased ¥240.9 billion. Liquidity on hand (cash and cash equivalents, short-term investments, and securities) decreased ¥63.2 billion year on year, but goodwill increased ¥96.8 billion, tangible fixed assets increased ¥81.0 billion, inventories increased ¥53.0 billion, and net trade receivables were up ¥49.1 billion. The primary cause of the increase in goodwill was the acquisition of InvenSense.

Stockholders' Equity / Stockholders' Equity Ratio



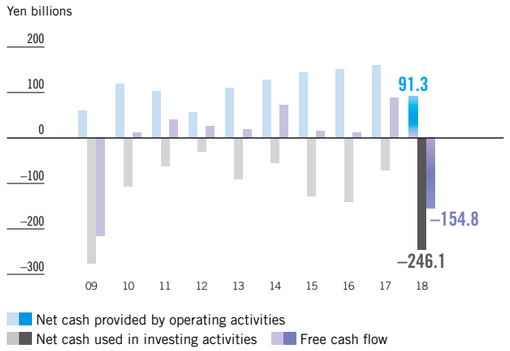
Stockholders' equity was up 3.9% year on year, to ¥824.6 billion, as of the end of fiscal 2018. For active capital investment, R&D, and M&A, long-term debt was up ¥79.9 billion year on year, short-term debt increased ¥46.9 billion, and trade payables increased ¥50.1 billion, and as a result, the stockholders' equity ratio declined 4.4 percentage points year on year, to 43.3%.

ROE / ROA



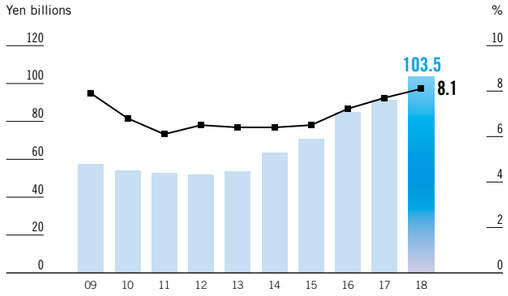
ROE and ROA declined sharply in fiscal 2009 following the global economic downturn, but after structural reforms were implemented from fiscal 2012, both have improved as a result of higher net income and other factors. As a result of the counteraction to special factors that resulted in reporting gains on the transfer of business to Qualcomm in fiscal 2017, ROE was down 12.0 percentage points year on year to 7.8%, and ROA fell 5.7 percentage points, to 3.6%, in fiscal 2018.

Cash Flows



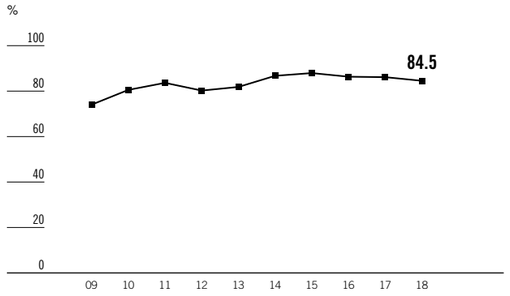
The business transfer to Qualcomm in fiscal 2017 resulted in a significant improvement in free cash flow. Funds obtained as compensation for the business transfer are being utilized in new M&A in accordance with our growth strategy, and we are working to further strengthen our earnings structure. In fiscal 2018, net cash used in investing activities increased substantially as we engaged in active capital investment, R&D, and M&A, and as a result, free cash flow was negative ¥154.8 billion.

R&D Expenses / R&D Expenses to Net Sales Ratio*



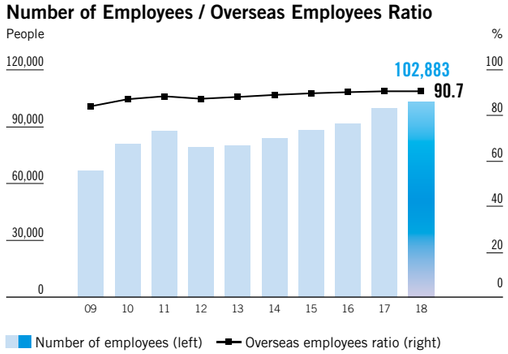
R&D expenses have continuously increased since fiscal 2012, and TDK invested ¥103.5 billion in R&D in fiscal 2018, a record high, so that it can respond to rapid technological innovation in electronics markets and maintain high competitiveness. Going forward, we will continue to actively invest in the development of new technology and further reinforce our R&D structures.

Overseas Production Ratio



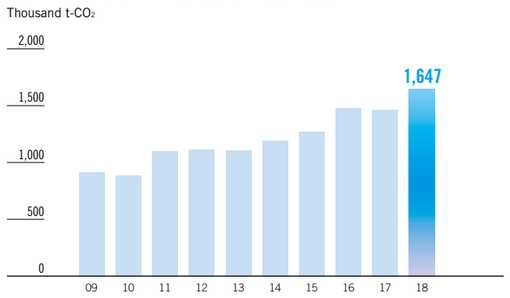
Compared with fiscal 2009, the overseas production ratio in fiscal 2018 was up 10.5 percentage points, reaching 84.5%. TDK seeks to establish location-independent production systems and is working to establish the ability to supply products with the same high quality from any location.

Number of Employees / Overseas Employees Ratio



TDK implemented personnel optimization measures as a part of the structural reforms conducted since fiscal 2012, but has been increasing the number of employees to raise competitiveness since fiscal 2016, the first year of the previous Medium-Term Plan, and the number reached 102,883 as of the end of fiscal 2018. In addition, the overseas employees ratio has been increasing and was 90.7% as of the end of fiscal 2018.

CO_2 Emissions in Production Activities



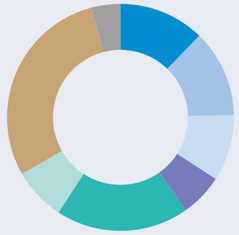
TDK established the TDK Environmental Vision 2035 and is working to reduce environmental load from a lifecycle perspective that covers all phases from the use of raw materials to the use and disposal of final products. We are aware that CO_2 emissions from energy consumption at production sites has a major environmental impact within TDK, and we are reducing energy use by implementing energy-saving measures through assessment at the time of capital investment and creating energy management structures.

Overview of Business Conditions by Segment

Note: Reporting segments were changed in fiscal 2019, but results for fiscal 2018 are reported based on the former segments.

Net Sales by Product Segment

¥1,271.7 billion



Passive Components Segment
- Capacitors **12%**
- Inductive Devices **12%**
- Other Passive Components **10%**

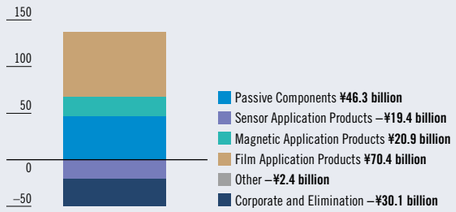
Sensor Application Products Segment
- Sensor Application Products **6%**

Magnetic Application Products Segment
- Recording Devices **19%**
- Other Magnetic Application Products **8%**

Film Application Products Segment
- Film Application Products **29%**
- Other **4%**

Breakdown of Operating Income*

¥85.6 billion



- Passive Components **¥46.3 billion**
- Sensor Application Products **–¥19.4 billion**
- Magnetic Application Products **¥20.9 billion**
- Film Application Products **¥70.4 billion**
- Other **–¥2.4 billion**
- Corporate and Elimination **–¥30.1 billion**

* To comply with the U.S. Financial Accounting Standards Board's Accounting Standards Update No. 2017-07, Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, we are revising our business results for fiscal 2018, which were reported on April 27, 2018—operating income, research and development expenses, cost of sales, and selling, general and administrative expenses (revised operating income: ¥85,633 million to ¥89,692 million; revised research and development expenses: ¥103,457 million to ¥102,641 million). The disclosure of revised cost of sales and selling, general and administrative expenses will be made at the announcement of financial results for fiscal 2019. The figures before adjustment are shown.

Changes in Reporting Segments

The previous four segments—Passive Components, Sensor Application Products, Magnetic Application Products, and Film Application Products—were changed into the following segments as of fiscal 2019: Passive Components, Sensor Application Products, Magnetic Application Products, and Energy Application Products, as well as Other, which includes products not included in these four reporting segments. P.62–P.69 Business Strategies

Previous reporting segments (through fiscal 2018)

Passive Components | Sensor Application Products | Magnetic Application Products | Film Application Products | + Other

New reporting segments (starting in fiscal 2019)

Passive Components | Sensor Application Products | Magnetic Application Products | Energy Application Products | + Other

- Power systems (from Magnetic Application Products)
- Energy devices (from Film Application Products)
- Energy systems (from Other)

Passive Components Segment

Net Sales

¥437,639 million

(down 17.1% year on year)

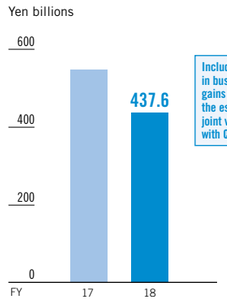
Operating Income

¥46,278 million

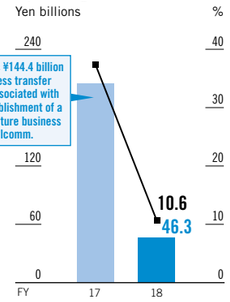
(down 76.9% year on year)

In fiscal 2018, net sales were ¥437.6 billion, down 17.1% year on year, operating income was ¥46.3 billion, down 76.9%, and the operating income ratio was 10.6%. Income fell due to effects in conjunction with the transfer of a portion of the high-frequency components business and did not recover on an amount basis, but profitability was nearly flat. Demand remains strong in the automotive market, and sales of capacitors increased at a steady pace. Sales of MLCC components grew in particular due to highly reliable products with redundant features for automotive use, contributing significantly to higher profitability in the Passive Components segment overall.

Net Sales



Operating Income / Operating Income Ratio



Sensor Application Products Segment

Net Sales

¥77,578 million

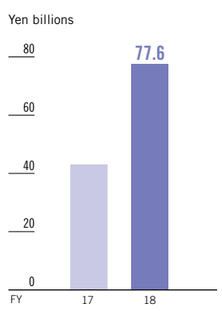
(up 81.0% year on year)

Operating Loss

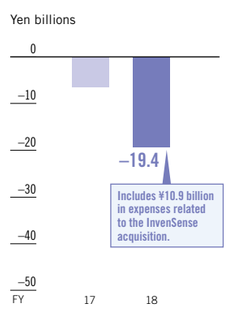
–¥19,381 million

In fiscal 2018, net sales were ¥77.6 billion, up 1.8 times from the previous fiscal year, in part due to effects from the acquisition of InvenSense. Operating losses were ¥19.4 billion, which included ¥10.9 billion in expenses related to the InvenSense acquisition. Sales in the automotive and ICT markets were up sharply, with automotive sales accounting for a little under 50% of the total, the ICT market slightly over 20%, and the industrial and energy market just under 30%, achieving a well-balanced sales structure. Expansion of the product portfolio and customer base is proceeding through acquisitions.

Net Sales



Operating Loss



Magnetic Application Products Segment

Net Sales

¥333,235 million

(up 1.0% year on year)

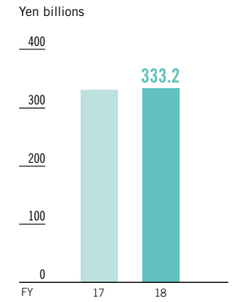
Operating Income

¥20,877 million

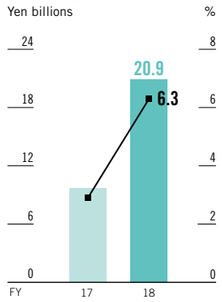
(up 115.1% year on year)

In fiscal 2018, net sales were ¥333.2 billion, up 1.0% year on year, operating income increased 2.2 times to ¥20.9 billion, and the operating income ratio was 6.3%. When the structural reform expenses reported in the prior fiscal year are taken into account, the effective increase in income was ¥1.2 billion, or 6.1%. Average prices for HDD magnetic heads increased as a result of a favorable product mix, resulting in stable profitability even though the sales volume was down. Power supplies were able to respond to robust demand in the industrial equipment market, pushing both sales and income higher. As for magnets, sales of HDD magnets were down, but sales of magnets for industrial equipment and motors increased, resulting in a substantial decrease in losses despite lower sales revenues.

Net Sales



Operating Income / Operating Income Ratio



Film Application Products Segment

Net Sales

¥370,953 million

(up 49.8% year on year)

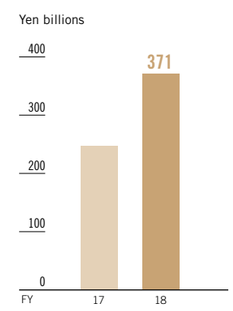
Operating Income

¥70,384 million

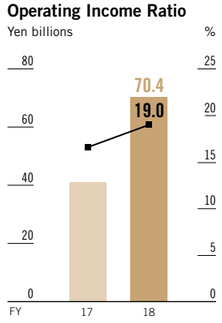
(up 70.8% year on year)

In fiscal 2018, net sales were ¥371.0 billion, up 1.5 times year on year, and operating income was ¥70.4 billion, up substantially by 1.7 times, and as a result, both net sales and operating income hit new record highs for the third consecutive year. The operating income ratio was 19.0%, and profitability was up sharply. In the smartphone market, demand fluctuated substantially throughout the year, but as a result of timely optimization of production capacity and reliable responses to market needs, sales increased. In addition, sales of products for applications other than smartphones increased steadily, and synergistic effects between higher volumes and increased productivity pushed income up.

Net Sales



Operating Income / Operating Income Ratio



Passive Components

Passive Components Segment

A brief guide to passive components

Passive components support electronics society

Electronic components include ICs, LSIs, and other active components, as well as capacitors, inductors, and other passive components that store, discharge, and consume electric power. Active components only function with help from passive components. On the circuit boards of mobile devices, electrical home appliances, office equipment, automobiles, robots, industrial equipment, and other devices, a wide variety of passive components are installed together with memories and CPUs consisting of an aggregation of many semiconductor devices.

TDK's passive components have their roots in a material called ferrite, originally invented in 1930 and certified as an IEEE Milestone in 2009. Ever since its beginnings, the Company has consistently blazed a path of innovation, making products smaller, lighter, and thinner and integrating them into modules, thereby contributing to the progress of electronic devices.



1935

Ferrite—the origin of TDK and its passive components

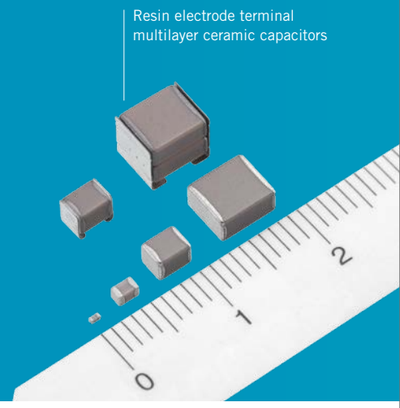
The magnetic material ferrite was invented in 1930 by Dr. Yogoro Kato and Dr. Takeshi Takei at the Tokyo Institute of Technology. TDK's first president, Kenzo Saito, founded the Company in 1935 with the aim of pioneering the industrial application of ferrite, which is still an indispensable material in our modern age of electronics.



2018

Passive components for automotive applications

Passive components intended for use in xEVs (HEVs/PHEVs/EVs) must be able to withstand extreme levels of vibrations, heat, shock, among other operating conditions, while maintaining complete reliability to guard against malfunction. TDK is continuing the development of such passive components that offer outstanding performance and meet the needs of automotive electrical equipment.



Resin electrode terminal multilayer ceramic capacitors

The business strategy in Value Creation 2020

Net Sales Target

CAGR 7%

As electronic components are being incorporated in more and more equipment and devices, TDK is expanding its client base beyond the automotive and ICT markets, as well as widening the scope of applications, thereby creating a solid earnings base. We are also engaged in a program of *Monozukuri* Innovation (P.42 ***Monozukuri* Innovation**), which implements forward-looking measures to meet the quality requirements of today's and tomorrow's industry.

In fiscal 2019, we expect net sales to grow by 3%–6%. Trends in the automotive market, such as the progress of xEVs, advanced driving assistance systems (ADAS), and autonomous driving, are expected to result in further expansion of the already strong demand for capacitors and inductors, which will be drivers of growth.

Commercial Value



Achieve steady and sustainable growth by expanding target markets and applications

Refine automotive components

- Product development matched to automotive needs
- Reference activities for automotive ECUs
- *Monozukuri* to enhance quality and reliability

Capture communications demand for 5G & Beyond

- Develop optimal millimeter-wave ceramic materials
- Develop various LTCC-based products

Upgrade and expand power-related components and propose new solutions

- High-reliability power inductors
- Wireless power transfer
- µPOL™
- Develop all-solid-state rechargeable batteries

Develop PZT applications

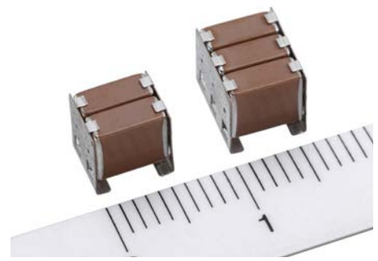
- PiezoHapt™ & PowerHap™
- Medical & Hygienic Application

Mount timely production responses to growing demand

- Invest in ramping up production
- Continue to drive *Monozukuri* Innovation

Expanding applications of automotive components

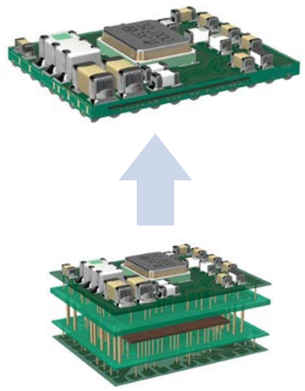
As cars increasingly rely on electric and electronic systems and xEVs become more widespread, the formation of eco-systems centered on semiconductors is progressing. We will continue to strengthen reference activities for automotive ECUs, whose numbers are expected to grow further. Furthermore, we will promote the development of products that meet automotive needs by offering customization and ensuring excellent reliability also under harsh operating conditions with vibrations, shocks, and high temperatures. Our portfolio of automotive-grade MLCCs is being further expanded, including resin electrode products with high vibration and bending stress resistance, and redundancy design products such as Mega Caps, as well as large-capacitance MLCCs that meet the needs of smaller size, higher voltage, and larger capacity in connection with higher functionality of ECUs for drive applications.



Mega Caps CA series realizes larger capacitance through horizontal linking

Upgrading and expanding power-related components and devise new solutions

Faraday Semi LLC (USA), which we acquired in May 2018, is a fast-growing semiconductor developer specializing in power management solutions, including point-of-load (POL) type DC-DC converters. By combining Faraday Semi's high-performance semiconductors with TDK's advanced packaging technology SESUB and latest component technology using 3D mounting technology, we have created a POL product (µPOL™) that leads the industry in terms of small dimensions and high power density. This will enable us to offer ultra-compact power solutions for which demand is increasing in the global ICT, industrial equipment, and automotive markets.



SESUB module

Sensor Application Products Segment

A brief guide to sensors

Key IoT devices

Sensors detect information and convert it into electric signals. There are sensors that concern our five senses, such as sight, hearing, and touch, as well as sensors for physical conditions, including temperature, humidity, barometric pressure, acceleration, and inertia. Other sensors can quantify such properties as magnetism and ultrasound that cannot be detected by human senses. Sensors fulfill crucial tasks in a myriad of electrical and electronic equipment including mobile devices, cars, and other products that we use in our daily life, providing unseen support for society.

Further stimulated by the explosive growth of IoT devices, the annual production of sensors is expected to exceed one trillion units by the 2020s, with various sensor combinations being mounted from now. Harnessing its advanced technology to offer a vast and impressive lineup of non-optical sensors, TDK will play a leading role in the age of IoT.



2015 → 2018

Application of TMR elements as highly sensitive reading elements from HDD magnetic heads

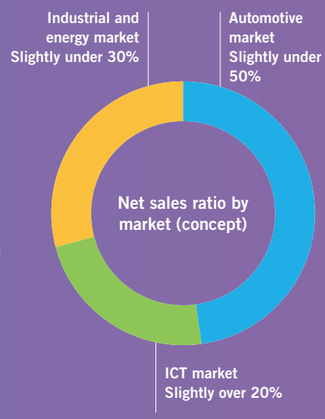
In 2015 we began full-scale production and market introduction of high-accuracy, high-sensitivity TMR sensors benefiting from HDD magnetic head technology.



TMR sensor

Toward a well-balanced customer portfolio

Through a policy of strategic M&As implemented by TDK since 2016, we have created a world-leading lineup of non-optical sensors. Such steps as the acquisition of InvenSense have also given us access to the consumer market.



The business strategy in Value Creation 2020

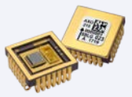
Net Sales Target

CAGR 35%

The Sensor Systems Business Company was established by consolidating the sensor-related business activities of the TDK Group. We are cooperating with IC manufacturers to develop modular products that integrate a combination of sensors. With the industry's best non-optical sensor lineup, we are poised to capture the growing sensing needs. Our steadily expanding range of automotive sensors is centered on Hall sensors and TMR sensors, and we are also expanding MEMS sensor applications for consumer use.

In fiscal 2019 we expect an increase in net sales of 29%–32%, mainly in the areas of MEMS sensors, which are positioned as growth drivers, and magnetic sensors for the ICT market.

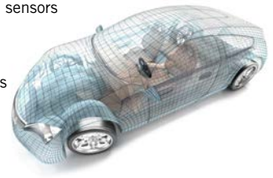
Commercial Value



Appropriately capture diversifying and growing sensing needs and expand this field into one of TDK's future core businesses

Steady expansion of automotive sensors

- Commence mass production of various TMR sensor projects (including redundancy design products)
- Develop higher-performance Hall sensors (2-axis/3-axis sensors)
- Develop new applications for temperature and pressure sensors
- Expand automotive applications of MEMS sensors (acceleration, gyroscope, ToF sensors)



Expansion of sensors for consumer applications

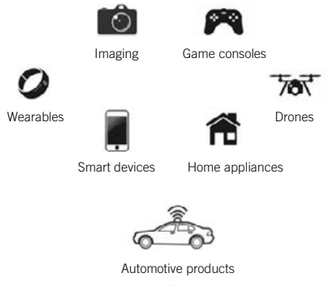
- Develop higher-performance 6-axis sensors and expand customer base
- Expand consumer applications of TMR sensors (camera module actuators, e-Compass)
- Expand applications of MEMS sensors (microphones, fingerprint recognition, gas detection)



Steadily expanding automotive sensors

In the area of TMR sensors, where mass production began in 2015, we are engaged in projects for various applications, including electric power steering systems, wipers, clutch and gearbox positioning devices, and pedal and throttle valve opening detection. TMR sensors are combined with Hall sensors from Micronas to enhance redundancy, and Application Specific Integrated Circuits (ASICs) from ICsense serve to improve accuracy. By differentiating ourselves through such products, we are further expanding our customer base and range of applications.

A large potential for growth exists for MEMS sensors, including gyroscope sensors, acceleration sensors, and microphones, as well as temperature and pressure sensors. As such concepts as ADAS and autonomous driving become a reality, the number of required sensors is bound to increase. Development of 6-axis sensors from InvenSense and other MEMS sensors that fully meet customer needs is making progress.



Expand customer base and applications in the automotive market through development of MEMS sensors, including 6-axis sensors from InvenSense

Cultivating and expanding markets through Group synergies

We are in a position to offer high-level solutions, creating products with high redundancy by integrating Micronas Hall sensors and TMR sensors, or fusing MEMS technology and software expertise from Tronics and InvenSense with materials technology and thin-film technology from TDK. TDK's long-standing relationships with customers are creating new opportunities for InvenSense products, moving beyond the consumer sector to the automotive and industrial equipment markets.

The acquisition of ICsense, which develops ASICs for signal processing of sensing data, has enabled the vertical integration of our value chain from materials technology to sensor elements, signal processing, and software design. In 2018 we acquired Chirp, a pioneering company in the field of ultrasonic 3D sensing technology that holds high promise for a wide range of applications, including augmented reality (AR) and virtual reality (VR) devices. Our Sensor Systems Business Company brings together these companies under a single umbrella for offering *Kotozukuri* solutions.



Magnetic Application Products Segment

A brief guide to magnets

Modern people would be helpless without them

Magnets, which retain their magnetic force without any supply of energy, are fundamental to sustaining modern society. For example, automobiles are equipped with about 100 compact motors that use ferrite magnets. Powerful neodymium magnets are also used in xEV drive motors.

Going forward, demand for high-performance magnets is expected to grow even further, including magnets for industrial equipment, robot motors, and power generators used in wind power generating systems. Since its founding, TDK has spent more than 80 years refining the magnetic materials technology that is part of its DNA and will contribute to society by continuing to refine that technology.



Magnetic Application Products

1959

Entering the magnetics business through ferrite application

The ferrite magnet material FB1A, developed in 1959, set TDK on the path to refining magnetic technology for many years.

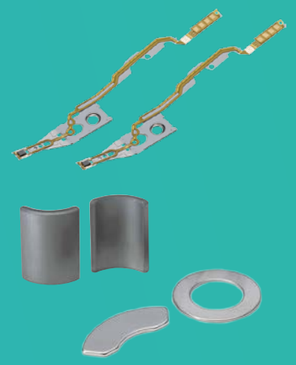


TDK's early ferrite magnet

2018

Pioneering the evolution of magnets for half a century

TDK has been pursuing the evolution of magnets for over half a century, right up to the latest neodymium magnets and lanthanum- and cobalt-free ferrite magnets. Through the application of technology, we have produced various innovations, such as HDD magnetic heads.



The business strategy in Value Creation 2020

Net Sales Target

CAGR 2%

Although the use of HDDs in PCs is declining, data centers are expected to stimulate further growth in demand for HDD magnetic heads. In this sector, TDK will continue to enhance cost competitiveness and introduce leading-edge products with large capacity. By developing advanced technologies, such as thermal assisted magnetic recording (TAMR), microwave assisted magnetic recording (MAMR), and dual stage actuators, TDK is contributing to the industry as the world's only specialized magnetic head manufacturer. While continuing to reform our profit structure, we will pioneer needs for automotive applications by tackling new technological developments.

In fiscal 2019 we expect net sales to decline by about 4%–7%. While sales quantities of HDD magnetic heads are seen to decline by about 6%, the application of HDD suspension technology developed by Hutchinson to new market sectors is expected to grow. We also anticipate sales of magnets to the automotive and industrial equipment and energy markets to remain firm.

Commercial Value (HDD magnetic heads & HDD suspensions)



Survive as the world's only specialized magnetic head manufacturer by introducing technologies catering to the needs of the era of large-capacity storage

Contribution to attaining higher density of HDDs

- TAMR
- MAMR
- Dual stage actuator

Application of suspension technology

- Additive metal deposition components

Commercial Value (Magnets)



Restore growth and profitability by steadily capturing growing demand for motors and generators

Achieve the design, prototyping, and mass production of magnets that optimize the efficiency of motors and generators (shape, magnetization, material)

Implement *Monozukuri* Innovation to realize TDK's *Arubeki Sugata* (ideal process) that will minimize losses

Contributing to further increasing storage density of HDDs

Thermal assisted magnetic recording (TAMR) heads

The evolution of HDDs toward higher storage densities was made possible by sophisticated miniaturization of the magnetic heads. Conventional technology in this area has its limits, but a solution to the problem lies in TAMR heads. The thermal fluctuation of magnetic particles increases as the temperature rises, making magnetization reversal (rewriting) easier even with a weak magnetic field at the head. The TAMR technology utilizes this effect by irradiating the recording layer with a laser spot to instantly heat it up while performing magnetic recording.

Microwave assisted magnetic recording (MAMR) heads

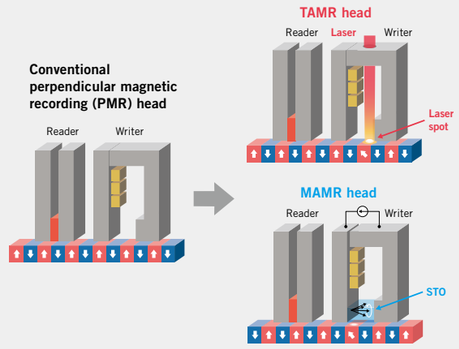
A spin-torque oscillator (STO) incorporated in the head generates a microwave field that is directed at the magnetic particles on the recording layer of the hard disk platter while recording. This intensifies the magnetic fluctuation of magnetic particles, which resembles the swinging motion of a spinning top, thereby facilitating magnetization reversal (rewriting) even with a weak magnetic field at the head. The advantage of this method lies in the fact that, unlike TAMR, there is no heating up of the recording layer.

Dual stage actuator

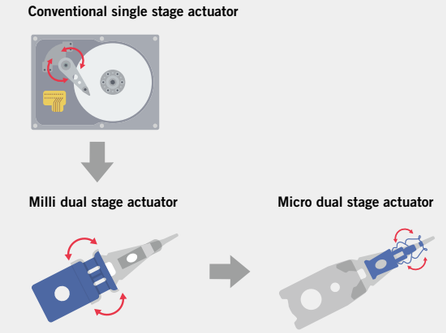
In addition to a swing scan around a pivot, the dual stage actuator uses a second swing structure located for instance on the suspension of the magnetic head. This greatly increases the positioning accuracy of the head. While the main actuator is driven as usual with a magnet and coil, the second swing structure employs a piezoelectric element that expands and contracts in response to a voltage.

Innovation in HDD magnetic heads and suspension

TAMR head and MAMR head



Dual stage actuator



Energy Application Products

Energy Application Products Segment

A brief guide to batteries and power supplies

TDK energy application products have great potential

Lithium-ion rechargeable batteries are widely used in mobile devices. A special type of this kind of battery is the rechargeable lithium polymer battery, which uses a polymer electrolyte in gel form. In addition to offering compact dimensions and light weight, such batteries also provide a high degree of shape flexibility, which is advantageous for replacing the formerly rectangular batteries in notebook computers and smartphones. Another area where surging demand for such batteries is expected are IoT devices, which need to combine small size with high capacity. Furthermore, amid the progress of power saving in various fields, power supplies with smaller size, lighter weight, and higher efficiency will be required. TDK's lineup covers a broad range of applications, including AC-DC and DC-DC converters, automotive inverters, and wireless power transfer systems.



The business strategy in Value Creation 2020

Net Sales Target

CAGR 8%

With regard to batteries for mobile devices in the ICT market, we are further bolstering our position and stepping up development of products for wearable devices and drones by adapting successful models, and we are also exploring high-power markets, including e-scooters and automated guided vehicles (AGVs).

As for power supply products, we will provide custom solutions with high added value through vertical integration extending from materials to in-house products, and we will strengthen our development efforts in the market for automotive and industrial equipment.

Shifting focus from conventional stand-alone products to units that combine hardware and software gives TDK a unique advantage in delivering integrated power solutions with high added value.

In fiscal 2019, we expect net sales to grow by about 8%–11%. We plan to expand production volume by about 15%, including production capacities for mini cell and high-power battery products. This will allow us to reliably meet demand in the smartphone market, and we are also actively pursuing new application venues.

Commercial Value



Provide high-efficiency, high-reliability power storage and power supply solutions through vertical integration of materials and components

Batteries

- Develop the mini cell market based on successes in the ICT market
- Apply materials technology and develop the power cell market based on collaboration with a strategic partner

Power supply solutions

- Address high-quality power supply solutions such as medical devices and robotics
- Expand programmable power supply and bidirectional power supply solutions
- Launch the EV power supply business targeting full-fledged expansion of the xEV market
- Pursue smaller, lighter, and higher-efficiency automotive power supplies

2005 → 2018

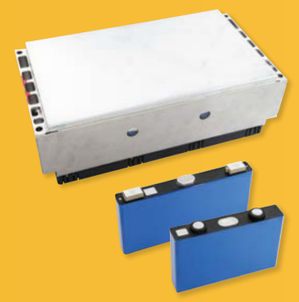
Acquisition of ATL opened the way into the battery market

In 2005 TDK acquired ATL, a Hong Kong-based manufacturer of rechargeable lithium polymer batteries. This paved the way for our full-scale entry into the energy sector.



Moving toward power solutions

ATL currently is one of the leading players in the consumer-use battery market. The wide lineup of TDK products, from materials to energy devices and power supplies, enables vertical integration and provides a solid base for comprehensive power solutions.



Solid-state battery CeraCharge™ allows charge/discharge

CeraCharge™ is the world's first SMD type all-ceramic solid-state battery that supports charging/discharging cycles. By harnessing layering technology gained in the area of multilayer ceramic chip capacitors (MLCCs), we have realized high energy density and small dimensions. Taking advantage of the high degree of safety, we will concentrate on developing dedicated products for IoT devices, wearable devices, energy harvesting systems, and similar consumer equipment with low capacity requirements.



Other Segment

Main Product Portfolio

Mechatronics (production equipment)

TDK is supplying the market with the most advanced factory automation equipment, including flip-chip bonders that make use of mechatronics technology.



Radio wave anechoic chamber

High-performance antennas and automated measurement systems with dedicated software improve the efficiency of EMC measurements. TDK offers EMC solutions comprising highly accurate EMC measurement services to support effective noise countermeasures in electronic devices.



Flash memory application devices

TDK supplies solid state drives (SSDs) with proprietary memory control chips and CompactFlash cards for industrial use.



DIALOGUE

TDK from Outside Perspectives

In June 2018, Makoto Sumita, whose former position was Outside Director and Chairman of the Board, assumed the post of Chairman & Director; at the same time, Kazunori Yagi, whose former position was Outside Audit & Supervisory Board Member, was named Outside Director and Chairman of the Board. We asked them to discuss openly and honestly about corporate governance.

(Note that Mr. Sumita shared his thoughts from the position of a director with an outside perspective.)

The governance reform trend

Sumita: For many years, the management style at Japanese companies has focused on maintaining long-term employment and stable business growth. Looking back over the past quarter century, however, one comes across cases in which the failure of companies to let go of unprofitable units had an impact on business. Companies are now introducing corporate governance codes with the goal of more clearly aiming management in the direction of profit growth, and I think developments in corporate initiatives that align with this objective are a good thing. That said, I also believe that more discussion is needed about a concept for governance that takes individual corporate characteristics into account, rather than trying to identify a single, uniform vision for governance practices.

Yagi: I also think it preferable that companies should avoid getting caught up with form in an attempt to reach for unrealistic goals. It is better that they take one year at a time, remaining constantly aware of questions of substance as they focus on business structure and fitness, and on responding to the posture of investors. From that standpoint, I think the revisions to the corporate governance code made in June of 2018 are designed to expose those companies whose efforts fail to involve matters of substance and that make only a formal response. The problem of so-called "short-termism" was one of the factors behind the current governance reforms. While a long-term approach to management is the ideal, talking only of far-off dreams can hardly be called management, and even investors focused on long-term holdings expect some kind of results over the medium term. Corporate management also needs to keep this middle term in mind.



Makoto Sumita
Chairman & Director

The role of outside directors

Sumita: Efforts to strengthen governance in Japan are sometimes criticized as taking a biased interpretation that primarily centers on the use of outside directors to apply the brakes on corporate actions. I think this observation is right on the mark. The true role of outside directors is in designating corporate leaders who have the mindset and character to take on bold challenges aimed at improving corporate value. If the outside directors are able to recognize a certain amount of rationality in policies on the business execution side, they can provide their full support without insisting on an excessive degree of certainty regarding future forecasts. Just as venture companies require supporters more than they need monitors, the role of outside directors will change according to the stage of a company's development. And because objectives vary from one company to another, that role varies as well.

Yagi: Corporate leaders are responsible for taking the wheel and applying the gas and the brakes. The role of outside directors is to monitor the suitability of management's driving, for example, when they may be going dangerously fast for a particular stretch of road. Companies naturally take risks, so excessive braking at the threat of just any risk does not make sense. The question is how much risk the company should take; the business execution side has the experience and expertise to know how much risk is acceptable. My approach, except in cases where an action could put the survival of the company at risk, is to try to understand the intent of the action and advise them to give it a try if they insist.

Corporate governance at TDK

Sumita: TDK has implemented a number of forward-thinking efforts to date, introducing a system of Outside Directors in 2002 and increasing their number to three in 2009. We continue to maintain a strong awareness of the importance of governance.

At the same time, there are issues. On the Board, Outside Directors and Outside Audit & Supervisory Board Members participate in discussions, but the business execution side trends to spend a considerable amount of time explaining things to us. This is reflective of a corporate culture that tolerates a diversity of opinion, and careful explanations are always welcome. Still, sometimes the message can be conveyed more effectively when the business execution side can say with confidence, "we know there are a variety of opinions, but you can leave this up to us." This also makes for more efficient Board meetings. For a company to grow, it requires momentum, too.

Yagi: TDK fostered a consensus around the importance of governance at a fairly early stage, and I think it can be considered on the forefront of governance in terms of both form and substance.

How effective that governance is depends on whether a company's nomination and compensation advisory committees are functioning substantively. The compensation advisory committee has contributed to raising the level of management remuneration in Japan, which was low by international standards, and in many cases has functioned substantively. At the same time, I suspect that many business leaders are resistant to the function of the nomination advisory committee, which may prevent them from appointing the successor they intended. TDK introduced its Compensation Advisory Committee (2002) and Nomination Advisory Committee (2008) long before the discussion about governance reached its current heights, and I think the Company has made solid progress in improving its effectiveness. My understanding of the outstanding issues is similar to that of Mr. Sumita.

Mr. Sumita's appointment to Chairman & Director

Yagi: It is extremely rare for an outside director to join a company as its chairman. I can imagine having a watchdog appointed to the business execution side must have come in for some criticism. But if one defines that outsider status as someone having the perspective of external stakeholders, I believe that instead of delineating the role in terms of form, all directors should have that perspective. I think Mr. Sumita's appointment as chairman will, in terms of substance, effectively strengthen governance at TDK. He has extensive management experience and knowledge of the Company's business, and he has observed TDK from an objective viewpoint as an outside director. This appointment will free him of the restrictions of being an "outsider" and allow him to work toward improving TDK's corporate value. Still, I think this was only possible because someone like Mr. Sumita happened to be available for the role just as his predecessor Mr. Kamigama was resigning. Continuing in a similar vein going forward will likely be more difficult.



Kazunori Yagi
Outside Director,
Chairman of the Board

Value Creation 2020

Sumita: A considerable amount of time was apparently spent on working out the details of this Medium-Term Plan. When it was first explained to me, I could sense the strength of the president's aspirations.

The plan focuses not on top-line growth, but on simultaneously developing Commercial Value, Asset Value, and Social Value. Of these, the sensor business will be key to achieving the plan for Commercial Value.

The inclusion of Asset Value is a statement of TDK's intent to maintain financial discipline, balance its investment of management resources, and narrow its focus where necessary. Business opportunities are expanding, not just in batteries and sensors but in all of our businesses. Commensurate investment is required, so I think the skills of our financial executives will be put to the test. At the same time, my honest impression is that since the plan touches little on dividend policy, we will need to provide a little more explanation of our specific approach to shareholder returns.

Social Value is an indicator of our emphasis on ESG. Since our business now extends globally, and particularly since we now have locations in Europe, it is important that we bring this perspective to management. That said, the use of the ESG framework is still in its infancy, and this represents a three-year issue.

Yagi: I think communicating a corporate message around ESG and the SDGs represents a step forward. I think their real effectiveness will come by taking them down to the business strategy and operational level, for example, by clarifying a policy of ensuring components contribute to energy savings and by measuring results through KPIs.

In terms of management targets, you have set out an ambitious number, looking to double income within three years. In general, medium-term management plans have a term of about three years, but of course actual management does not end after three years—it continues as before. Since it is rare to start work on a business in a plan's initial year and have it deliver results three years later, normally one would work toward achieving the current plan while also making preparations for the next. While TDK also failed to meet its previous Medium-Term Plan, it did lay a foundation for the future in anticipation of the current plan, centered on the sensor business. This is why the current plan is being launched with adequate preparation. Still, the sensor market is by no means a blue ocean and, as an Outside Director, it is something I would like to pay particularly close attention to. Further, while I understand that possibilities are opening up in all directions, resources are limited, and I hope to convey my view that TDK needs to narrow its focus as much as possible to avoid getting involved in a war of attrition.

To offer a more unsparing opinion, looking at operating cash flow growth and the balance between liabilities, dividends, investments, and other factors indicates to me that, to date, capital efficiency has been less than stellar. TDK is one of the industry's most diversified companies, with many possibilities for growth. Combining those possibilities will allow the Company to offer customers a variety of solutions. Because the business is not structured solely around specific products, fields, or customers, you have also been able to reduce risk. While this diversification makes more than enough sense, it inevitably results in lower efficiency. Looking back at the past 10 years, in fact, the Company has consistently seen its asset turnover ratio fall. I believe that for TDK, Asset Value is a particularly important issue.

Hopes for TDK in the future

Sumita: As a free and open collective of individual business companies and regional groups, TDK is working to improve and grow. Still, investors will not support us unless we deliver results. I hope to see us become even more fixated on delivering results.

Yagi: To date, TDK has succeeded by giving Group companies a great deal of discretionary power and allowing them to manage themselves. Still, because of the volume of acquisitions in recent years, and the Company's aim of establishing them as drivers of future growth, TDK is also at the stage where the emphasis needs to be on Group governance. The important challenge going forward will be how well the Company can maintain its free-wheeling culture while creating a new management approach. That is truly vital to the success of the Medium-Term Plan. I hope to continue supporting that effort, offering the occasional "give it a try."

Strengthening Future-Oriented Governance

TDK, which first embarked on globalization in the 1960s and has successfully grown since then, remains constantly aware of global standards, and has worked to strengthen its corporate governance systems. Backed by changes in its business structure, today TDK continues to consider measures needed to achieve long-term, sustainable improvement in corporate value.

Factors behind strengthening of corporate governance

- Particularly in consumer-use components in the ICT field, performance will be affected by short-term market fluctuations. At the same time, it can take from several years to as long as a decade to see the results of investment in R&D expenses, and management decisions need to be based on a medium- to long-term perspective.
- As a global company, ensuring business moves forward smoothly requires a governance structure that is also compatible with the standards of countries in Europe and the Americas.
- With non-Japanese employees representing in excess of 90% of the workforce on a consolidated basis, TDK needs to consider further globalization at the officer level.

History of corporate governance reforms

2002/6
- Number of Directors reduced from 12 to 7
- **First Outside Director invited to join the Board**
- **Compensation Advisory Committee launched (chaired by an Outside Director)**
- Funding of Directors' retirement bonuses suspended

2004/6
- **First non-Japanese Corporate Officer appointed**

2008/8
- **Nomination Advisory Committee launched (chaired by an Outside Director)**

2009/6
- **2 non-Japanese Corporate Officers appointed; one Outside Director added for a total of 3**

2015/5
- **First analysis and evaluation conducted of Board of Directors' effectiveness, and an outline of the results publicized**

2016/6
- TDK Basic Policy on Corporate Governance established

2018/6
- **Makoto Sumita, formerly an Outside Director and Chairman of the Board, appointed Chairman & Director**

Evaluation of effectiveness

Outstanding issues following the June 2017 evaluation of effectiveness

- Ongoing validation of TDK's medium- to long-term growth strategy
- Management that balances the dynamism and governance of Group companies

June 2018 evaluation of effectiveness

The medium- to long-term growth strategy, which was considered the issue to be addressed on a continuous basis in the Board of Directors' evaluation for fiscal 2017, was intensively deliberated and verified on several occasions at Meetings of the Board of Directors and the results of the discussions were reflected in the final Medium-Term Plan.

With respect to issues to be addressed in the future, the Board of Directors recognized that, in order to steadily implement the new Medium-Term Plan, it would be important to properly demonstrate the supervisory and advisory functions on a continuous basis, further strengthen the corporate governance and compliance systems, including sharing in a timely manner important matters with the Board of Directors as well as responding to global business deployment, and further enhance the operational efficiency of the Board of Directors.

Sustained Improvements Stressing Effectiveness

Designing structures that emphasize increases in corporate value over the long term

POINTS

- TDK has pursued **an optimal balance** between monitoring-type governance (separation of management execution and supervisory functions) and management-type governance (Directors also serve as Corporate Officers).
- **TDK appointed an Outside Director as Chairman & Director**.

Emphasis on effectiveness over form

TDK has put inside directors in charge of non-business divisions and is working to increase the pace of decision-making and reinforce both monitoring and supervisory functions while designing structures that place greater emphasis on raising corporate value than form in all areas, including the processes related to nomination and compensation and policies on the appointment of outside officers. The appointment of an Outside Director as Chairman & Director is one part of these efforts.



Makoto Sumita

Chairman & Director (present post)
INNOTECH CORPORATION

From Outside Director to Chairman & Director of the Company

Mr. Sumita was appointed an Outside Audit & Supervisory Board Member in June 2011, served as an Outside Director starting in June 2013, and was recently appointed Chairman & Director. He has become well acquainted with the Company's management, business details, and so on through performance of his duties and was appointed with the expectation that he will reinforce decision-making on material matters, supervision of the performance of duties, and corporate governance from the perspective of an outside stakeholder.

Highly transparent nominating system

POINTS

- TDK established the Nomination Advisory Committee, **chaired by an Outside Director and comprising a majority of Outside Directors.**
- **The Committee contributes to ensuring the appropriateness of nominations** for TDK's Directors, Audit & Supervisory Board Members, and Corporate Officers, and transparency in the decision-making process.

Nomination policies and procedures

TDK established the Nomination Advisory Committee as an advisory body to the Board of Directors. The committee is chaired by an Outside Director, and a majority of its members are also Outside Directors. It contributes to securing transparency in the decision-making process and reasonableness in the appointment of Directors, Audit & Supervisory Board Members, and Corporate Officers by nominating candidates after deliberating on the expected requirements regarding nomination of Directors, Audit & Supervisory Board Members, and Corporate Officers. The Committee also deliberates on the independence of Outside Directors.

When nominating the CEO, the Committee formed an image of the ideal person suitable for the role of top executive and conducted deliberations that also covered such issues as systems and the term of office. An outside expert organization was also utilized, and efforts were made to ensure objectivity.

Outside officers appointed with an emphasis on effectiveness

POINTS

- TDK has established **"items to be verified regarding independence"** to ensure the independence of Outside Directors and Outside Audit & Supervisory Board Members.
- Outside Directors have **a deep understanding of technology and knowledge of global management**.
- Outside Audit & Supervisory Board Members comprise professionals from **important and diverse fields of expertise,** including finance, legal affairs, internal controls, risk management, and others.

One-third or more of the Directors is independent Outside Directors

The Board of Directors, comprising Directors and Audit & Supervisory Board Members, has a total of 11 members, of whom five are outside officers. To secure the independence of the Outside Directors and Outside Audit & Supervisory Board Members recruited to the board, TDK established "items to be verified regarding independence" by making reference to Article 436-2 (Securing Independent Director(s)/Auditor(s)) of the Securities Listing Regulations and Section III, 5(3)-2 of the Guidelines Concerning Listed Company Compliance, etc., established by the Tokyo Stock Exchange, Inc.

The basic policy is that one-third or more of the Directors shall be independent Outside Directors. Currently, three of seven directors are independent Outside Directors, and an independent Outside Director is chairman of the Board. To reinforce the independence, objectivity, and accountability functions of the Board of Directors in relation to the nomination and compensation of officers, majorities of the Nominating Advisory Committee and the Compensation Advisory Committee, which are advisory organizations to the Board of Directors, are independent Outside Directors and both committees are chaired by independent Outside Directors.

Actively inviting Outside Officers



Reasons for nomination of Outside Directors and Outside Audit & Supervisory Board Members

Outside Directors	Reasons for nomination
Kazumasa Yoshida	Mr. Yoshida has an abundance of experience and knowledge concerning the management of companies related to the electronics industry, global business, and consumer business as well as a broad perspective.
Kazuhiko Ishimura	Mr. Ishimura has an abundance of experience and advanced, specialized knowledge regarding business management as well as a broad perspective.
Kazunori Yagi	Mr. Yagi has extensive knowledge related to finance and accounting, as well as an abundance of experience and knowledge concerning corporate management in the electronics industry.

Outside Audit & Supervisory Board Members	Reasons for nomination
Toru Ishiguro	Mr. Ishiguro has specialized knowledge regarding the law as an attorney, specialized knowledge regarding corporate governance and internal control, and considerable insight in such areas.
Kiyoshi Fujimura	Mr. Fujimura has extensive knowledge related to finance and accounting, as well as an abundance of experience and knowledge concerning corporate management of a general trading company.

Outside Directors with extensive practical experience

Persons recruited as independent Outside Directors have extensive practical experience relating to corporate management or a high level of financial knowledge and are able to provide advice from an independent perspective with regard to general management for enhancing the Company's corporate value.



Kazumasa Yoshida

Former Representative Director and President
Intel K.K.



Kazuhiko Ishimura

Chairman & Director (present post)
AGC Inc.



Kazunori Yagi

Former Director, Executive Vice President and General Manager of Management Administration Headquarters
Yokogawa Electric Corporation

Remuneration system linked to medium- to long-term corporate value

POINTS

- The system was designed with **an emphasis on linkage with short-term as well as medium- to long-term results**.
- TDK constantly pursues the formulation of a competitive remuneration system to secure diverse and excellent human resources.
- TDK aims to set remuneration at levels enabling the maintenance of competitiveness compared with other companies of similar scale, mainly in the same business category.

Design and determination process of the remuneration for Directors and Audit & Supervisory Board Members

TDK designs its remuneration system for Directors and Audit & Supervisory Board Members with an emphasis on linkage with short-term as well as medium- to long-term results, and is also continuously pursuing the formulation of a competitive remuneration system so that it can recruit diverse and exceptional human resources, for the purpose of promoting as much as possible behavior on the part of Directors and Corporate Officers geared toward enhancing corporate results and stock value. With regard to the determination of individual compensation, the Compensation Advisory Committee, which is chaired by an independent Outside Director and of which more than half of the members are independent Outside Directors, examines the remuneration system and the level of remuneration pertaining to Directors and Corporate Officers and reports to the Board of Directors in order to preserve the transparency of the remuneration decision-making process and help ensure that individual remuneration is reasonable.

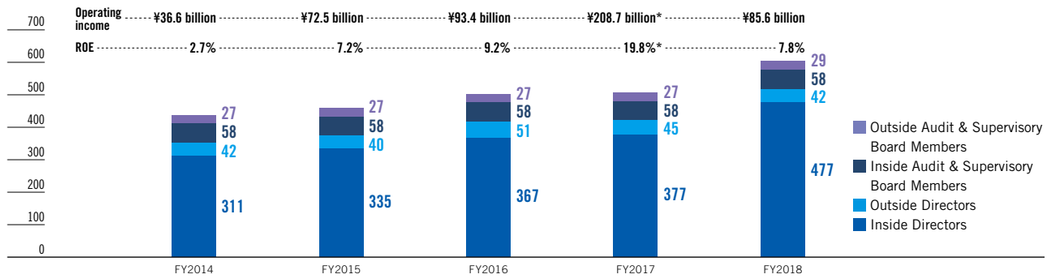
Results Linkage System

Factor	Type of compensation	Strategic purpose of compensation	Method of calculation
Short-term results linkage system	Results-linked bonus	Intended to clarify the responsibility of Directors and Corporate Officers to achieve consolidated financial results in each fiscal year and to increase motivation for raising short-term financial results.	In addition to consolidated financial results (operating income, ROE) in the relevant fiscal year, indicators are set for each division, and bonuses vary from 0% to 200% of base salary depending on the degree of attainment of targets.
Medium- to long-term results linkage system	Stock-linked compensation stock options	A system for raising corporate value from a medium- to long-term perspective and for Directors and Corporate Officers to share with shareholders not only the benefits of rising share prices but also the risks of falling share prices.	The exercise of a portion of stock options (stock-linked compensation) is conditioned on achieving certain financial results. For the conditions, consolidated financial results (operating income, ROE) under the Medium-Term Plan are set as indicators, and the number of options that can be exercised ranging from 0% to 100% of the options granted depends on the degree of achievement of those indicators. TDK established the Corporate Stock Ownership Guidelines and encourages officers to hold at least a certain number of shares (including stock options) set according to the officer's rank.

Standard Allowance

Compensation structure	Basic remuneration	+	Short-term incentive (Results-linked bonuses)	+	Medium- to long-term incentive (Stock-linked compensation stock options)
Linked indicators			Operating income, ROE, target of each division		Operating income, ROE
Fluctuation range			Depending on the degree of achievement of operating income and ROE, department objectives, vary from 0% to 200% with respect to the standard allowance		Depending on the degree of achievement of operating income and ROE, for the grant number, an exercisable percentage fluctuates within the range from 0% to 100%

Changes in total amount of remuneration for Directors and Audit & Supervisory Board Members



* Including ¥144.4 billion in business transfer gains associated with the establishment of the joint venture business with Qualcomm.

Diversity in response to globalization

POINTS

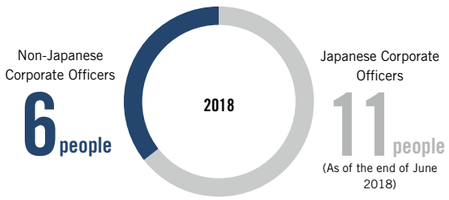
- **Six of 17 Corporate Officers (35%) are non-Japanese***.
- **Human Resources HQ was established in Germany** to promote further globalization.

* As of the end of June 2018

Promoting diversity in management systems

TDK began encouraging globalization at an early stage, appointing a non-Japanese as Corporate Officer in 2004 and promoting the globalization of management by increasing the number of non-Japanese Corporate Officers since then. Today, more than 90% of sales and employees are overseas, while 35% of the Company's Corporate Officers are non-Japanese. In recent years, globalization has advanced as TDK implemented a number of mergers and acquisitions, and the globalization and diversification of management structures is an important issue. We will continue to recruit outstanding human resources from around the world under the Human Resources HQ established in Germany in 2017.

Promoting diversity





Executive Vice President
Joachim Zichlarz
Chief Financial Officer of Electronic Components Business Company, and General Manager of Europe HQ



Corporate Officer
Joachim Thiele
Deputy General Manager of Electronic Components Sales & Marketing Group, and General Manager of Industrial & HA Group of Electronic Components Sales & Marketing Group



Corporate Officer
Michael Pocsatko
Deputy General Manager of Electronic Components Sales & Marketing Group, and General Manager of ICT Group of Electronic Components Sales & Marketing Group



Corporate Officer
Hong Tian
General Manager of Micro-actuator Solutions Business Group



Corporate Officer
Albert Ong
Chief Executive Officer of Magnetic Heads Business Company, and General Manager of HDD Components Business Group of Magnetic Heads Business Company



Corporate Officer
Andreas Keller
General Manager of Human Resources HQ

Directors, Audit & Supervisory Board Members, and Corporate Officers

(As of the end of June 2018)

Directors



Shigenao Ishiguro

Representative Director
President and CEO
General Manager of Humidifier Countermeasures HQ



Tetsuji Yamanishi

Representative Director
General Manager of Finance & Accounting HQ



Makoto Sumita

Director
Chairman



Seiji Osaka

Director
General Manager of Corporate Strategy HQ
In charge of Human Resources



Kazumasa Yoshida

Outside Director
Chairman of Compensation Advisory Committee
Member of Nomination Advisory Committee

Summary of career
Born on Aug. 20, 1958
Oct. 1984 Entered Intel Corporation
Oct. 1999 Manager of Technology/OEM Alliance Business Strategy of Enterprise Service Group of said company
Mar. 2000 General Manager of Communication Product Group of Intel K.K.
May 2002 General Manager of Intel Architecture Business of said company
Jun. 2003 Representative Director and President of said company
Dec. 2004 Vice President of Sales and Marketing Group of Intel Corporation
Jun. 2012 Outside Director of Onkyo Corporation (present post)
Feb. 2013 Outside Director of Gibson Brands, Inc.
Jun. 2013 Outside Director of CYBERDYNE Inc. (present post)
Oct. 2013 Advisor of Intel K.K.
Jun. 2014 Outside Director of the Company (present post)
Jun. 2015 Outside Director of Mamezou Holdings Co., Ltd. (present post)
Jul. 2016 Outside Director of FreeBit Co., Ltd. (present post)



Kazuhiko Ishimura

Outside Director
Member of Nomination Advisory Committee
Member of Compensation Advisory Committee

Summary of career
Born on Sep. 18, 1954
Apr. 1979 Entered AGC Inc.
Jan. 2006 Executive Officer and GM of Kansai Plant of said company
Jan. 2007 Senior Executive Officer & GM of Electronics & Energy General Division of said company
Mar. 2008 President & COO & Representative Director of said company
Jan. 2010 President & CEO & Representative Director of said company
Jan. 2015 Chairman & Representative Director of said company
Jun. 2015 Outside Director of the Company (present post)
Jun. 2017 Outside Director of IHI Corporation (present post)
Jan. 2018 Chairman & Director of AGC Inc. (present post)
Jun. 2018 Outside Director of Nomura Holdings, Inc. (present post)



Kazunori Yagi

Outside Director
Chairman of the Board
Chairman of Nomination Advisory Committee
Member of Compensation Advisory Committee

Summary of career
Born on Apr. 1, 1949
Apr. 1972 Entered Yokogawa Electric Corporation
Oct. 1999 Vice President (Officer) and General Manager of Finance & Business Planning, in charge of Corporate Marketing of said company
Apr. 2001 Senior Vice President and General Manager of Finance & Business Planning of said company
Jun. 2001 Director, Senior Vice President and General Manager of Finance & Business Planning of said company
Jul. 2002 Director, Executive Vice President and General Manager of Finance & Business Planning of said company
Jul. 2005 Director, Executive Vice President and General Manager of Management Administration Headquarters of said company
Jun. 2011 Advisor to said company, Outside Audit & Supervisory Board Member of Yokogawa Bridge Holdings Corporation (present post)
Jun. 2012 Outside Director of JSR Corporation
Jun. 2013 Outside Audit & Supervisory Board Member of the Company
Mar. 2014 Outside Director of OYO Corporation (present post)
Jun. 2017 Outside Audit & Supervisory Board Member of Sojitz Corporation (present post)
Jun. 2018 Outside Director of the Company (present post)

Audit & Supervisory Board Members



Junji Yoneyama

Full-Time Audit & Supervisory Board Member



Osamu Yotsui

Full-Time Audit & Supervisory Board Member



Toru Ishiguro

Outside Audit & Supervisory Board Member

Summary of career
Born on Jun. 19, 1954
Apr. 1980 Registered as lawyer in Japan
Joined Hamada & Matsumoto
Apr. 1984 Registered as lawyer in New York, the United States of America
Jan. 1985 Partner of Hamada & Matsumoto
Sep. 1987 Resident Partner of the London office of Hamada & Matsumoto
Jun. 2000 Outside Corporate Auditor of Monex Securities Ltd.
Dec. 2002 Partner of Mori Hamada & Matsumoto (present post)
Jun. 2015 Outside Audit & Supervisory Board Member of the Company (present post)
Jul. 2015 Outside Director of Daiwa Asset Management Co. Ltd. (present post)
Jul. 2016 Director of Japan Investor Protection Fund (present post)
Jun. 2017 Director of Japan Exchange Regulation (present post)



Kiyoshi Fujimura

Outside Audit & Supervisory Board Member

Summary of career
Born on Nov. 3, 1949
Apr. 1972 Entered Mitsubishi Corporation
Feb. 2002 Member of the Board, President and CEO of Mitsubishi Corporation Financial & Management Services (Japan) Ltd.
Jun. 2003 Senior Corporate Auditor of Mitsubishi Corporation
Jun. 2007 Senior Vice President of said company, CIO & CISO and Senior Assistant to person in charge of Work Restructuring & Internal Control System
Apr. 2008 Executive Vice President of said company, CIO, Work Restructuring & Internal Control System
Jun. 2008 Member of the Board, Executive Vice President of said company, CIO, Work Restructuring & Internal Control System
Apr. 2009 Member of the Board, Executive Vice President of said company, Work Restructuring & Internal Control System, IT Service Business Development, CIO
Apr. 2010 Member of the Board, Executive Vice President of said company, Audit & Internal Control System
Jun. 2012 Adviser of said company, Outside Corporate Auditor of AJINOMOTO CO., INC.
Jun. 2015 Outside Audit & Supervisory Board Member of the Company (present post)
Jun. 2018 Outside Director of Takasago Thermal Engineering Co., Ltd. (present post)

Corporate Officers

President and CEO
Shigenao Ishiguro

Senior Executive Vice President
Hiroyuki Uemura

Executive Vice Presidents
Atsuo Kobayashi
Seiji Osaka
Joachim Zichlarz

Senior Vice Presidents
Noboru Saito
Tetsuji Yamanishi
Mitsuru Nagata

Corporate Officers
Takakazu Momozuka
Joachim Thiele
Satoru Sueki
Michael Pocsatko
Hong Tian
Albert Ong
Dai Matsuoka
Osamu Hikita
Andreas Keller

Corporate Information

TDK Corporation and Consolidated Subsidiaries (U.S. GAAP)
As of March 31, 2018

Corporate Name	TDK Corporation
Corporate Headquarters	Nihonbashi Takashimaya Mitsui Building, 2-5-1 Nihonbashi, Chuo-ku, Tokyo 103-6128
Date of Establishment	December 7, 1935
Authorized Number of Shares	480,000,000 shares
Number of Shares Issued	129,590,659 shares
Number of Shareholders	21,565
Common Stock	¥32,641,976,312
Securities Traded	Tokyo Stock Exchange (Listed on the 1st Section in October 1961)
Securities Code	6762
Number of Employees (Consolidated)	102,883
Transfer Agent	Sumitomo Mitsui Trust Bank, Limited 1-4-1, Marunouchi, Chiyoda-ku, Tokyo 100-8233
Independent Registered Public Accounting Firm	KPMG AZSA LLC (the Japan member firm of KPMG International)

ADR Information

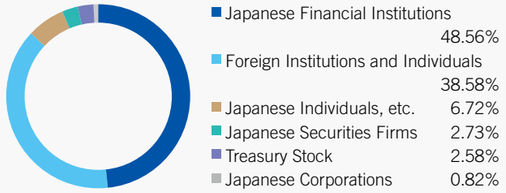
Type	Level 1 with sponsorship
ADR Ratio	1 common stock = 1 ADR
Ticker Symbol	TTDKY
CUSIP	872351408
Depositary Bank	Citibank, N.A. Shareholder Services P.O. Box 43077 Providence, Rhode Island 02940-3077 U.S.A. Tel: 1-877-248-4237 CITI-ADR (toll free) Tel: 1-816-843-4281 (out of U.S.) Fax: 1-201-324-3284 URL: http://www.citi.com/adr E-mail: citibank@shareholders-online.com

Principal Shareholders (10 largest shareholders)

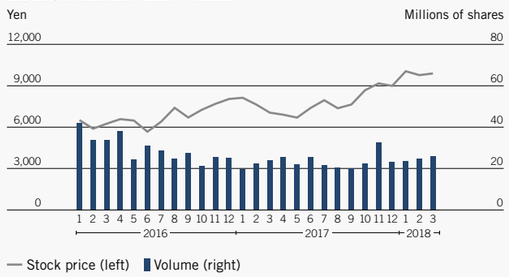
Name of shareholder	Number of shares held (thousands of shares)	Percentage of number of shares held in the total number of issued shares (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	24,086	19.08
Japan Trustee Services Bank, Ltd. (Trust account)	14,404	11.41
Trust & Custody Services Bank, Ltd. (Securities investment trust account)	3,437	2.72
STATE STREET BANK WEST CLIENT - TREATY 505234	2,355	1.87
Japan Trustee Services Bank, Ltd. (Trust account 5)	1,999	1.58
JPMC OPPENHEIMER JASDEC LENDING ACCOUNT	1,839	1.46
STATE STREET BANK AND TRUST COMPANY 505001	1,797	1.42
Nippon Life Insurance Company	1,640	1.30
Japan Trustee Services Bank, Ltd. (Trust account 7)	1,634	1.29
Japan Trustee Services Bank, Ltd. (Trust account 9)	1,626	1.29
Total	54,817	43.42

Note: Other than the above, the Company holds 3,346 thousand shares of treasury stock.

Status by Ownership



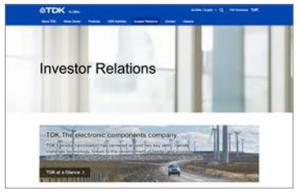
TDK Stock Price and Volume



About Our Website

Financial Information

http://www.global.tdk.com/corp/en/ir/index.htm



Investor Relations (IR)

- Securities Reports
- Quarterly Financial Statements
- Operational Risks

Non-Financial Information

http://www.global.tdk.com/corp/en/csr/index.htm



- CSR REPORT 2018
- CSR Activities

Product Information and Services

https://product.tdk.com/info/en/index.html



TDK Product Center