Medium-Term Plan

Starting from fiscal 2016, TDK has enacted the Medium-Term Plan that covers the three-year period to fiscal 2018, and actively targets further enhanced corporate value through sustainable growth. In accordance with its basic policy of fostering collaboration within the group to realize further growth, the TDK Group is pursuing "zero defect quality" based on superior technological competence, and promoting true globalization through swift and efficient management.

Focusing on Five Priority Businesses and New Businesses

The Medium-Term Plan defines a growth strategy for five priority businesses in the three priority markets "Automotive," "ICT," and "Industrial Equipment and Energy," and also shines a spotlight on new businesses.

Increasing automotive sales to 30% of total net sales

As automobiles rely more and more on electrical and electronic equipment, demand will rise not only for conventional parts such as capacitors and inductors, but also for customized products including magnetic sensors and automotive chargers. The markets for wireless power transfer systems are also on the horizon, which will further stimulate demand. We aim to raise the share of the automotive sector in our total net sales to 30% by fiscal 2018.





POINT 2

New Businesses in Growth Fields

On the strength of our strategic global R&D framework, we are making full use of the rich and varied technological resources that the TDK Group has built up over time. In particular, advanced thin-film technology gained from the development of HDD magnetic heads is being adapted to thin-film components, magnetic sensors, SESUB modules, energy units, and other products. The target figures for these new businesses by fiscal 2018 are sales in excess of ¥100 billion and a sales ratio of 8% of our total net sales.

Fiscal 2015 Fiscal 2018 8%

Thin-Film Components -

Fusion of thin-film technology and materials technology derived from the passive components field enables expanded marketing of new products.





Wearable and Health Care Devices

Expand the sales of power management units utilizing semiconductor embedded substrate (SESUB) technology





New Businesses

Sensors for Automobiles and Industrial Equipment

Expand the sales of TMR/GMR sensors and pressure sensors utilizing sophisticated sensing





TMR sensor

Expand the sales of high-efficiency bidirectional DC-DC converters for renewable energy and wireless power transfer systems for industrial equipment.



and receiving coil unit for wireless power transfer

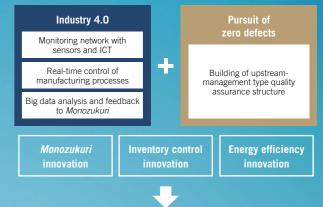


POINT 3

Monozukuri Innovation — Zero defect quality based on high technology —

TDK is pursuing a "zero defect quality" policy, based on the "Industry 4.0" concept. This is a collective term for an approach currently being promoted by the German government, aimed at revolutionizing the way things are made, by greatly raising the levels of digitization, automatization, and virtualization. At TDK, we are incorporating "Industry 4.0" concepts such as sensor based monitoring and real-time control of manufacturing processes, and we are combining these with upstream management, narrowed tolerances, and other aspects of our quest for zero defects, leading to TDK's unique Monozukuri revolution.

In 2016, we plan to implement these at new factories in Akita Prefecture. Subsequently, the approach will be expanded to other plants and bases around the world, with the aim to achieve "location free," whereby the same quality can be achieved regardless of the actual production location.



Implement this innovation at new factories in Akita Prefecture Roll out to other factories around the world

POINT 4

Growth Investment and Achieving Management Target in Medium Term

We are actively pursuing facilities investments focused on strategic growth products and existing key products, and we have increased the budget announced in April 2015 by ¥80 billion, to ¥430–¥480 billion. We also have budgeted R&D expenditures at ¥250 billion, an increase of ¥20 billion. These increases both on the investment and the development side will boost our pioneering initiatives in building up various business opportunities.

Returns to shareholders are pursued through the growth of EPS (earnings per share) to achieve a stable increase in dividends. The target for the dividend payout ratio has been set at 30%. We are conducting business with a target of exceeding an operating income ratio of 10% and ROE of 10% by fiscal 2018.

	Total investment over the next 3 years (Medium-Term Plan) Announced in April 2015	Total investment over the next 3 years (Medium-Term Plan) Announced in April 2016		
Capital Expenditure	¥350–¥400 billion	¥430–¥480 billion		
R&D Investment	About ¥230 billion	About ¥250 billion		
Contents of Investment				

• Acceleration of Monozukuri Innovation

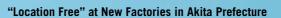
Achieving Management Target in Medium Term

Growth Investment	

- · Investment in new products, new businesses, and M&As
- Increase production capacity of existing businesses

- · Stabilize or increase dividends through EPS growth • Target a 30% dividend payout ratio

		Fiscal 2016 results	Fiscal 2018 target
•	Operating Income Ratio	8.1%	Over 10%
	ROE	9.2%	Over 10%





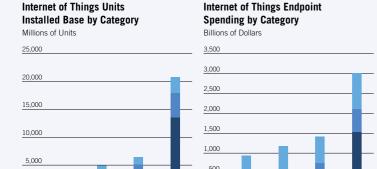
Opening Up the Future with TDK Technology

A Radical Transformation with an Eye to the IoT Market

The Internet of Things (IoT) is a structure that offers mutual control through the exchange of information via not only communication equipment, but also automobiles, infrastructure, industrial equipment, and all "things" connected to the Internet. Development of sensor technology designed to accumulate information, such as angles and humidity, on "things," as well as information and communication technology designed to exchange information through the Internet, is picking up steam in the hope that it may be applied to such technology as self-driving cars.

At TDK, we are striving to gain business opportunities in the IoT market by focusing on three priority sectors: "Automotive," "ICT," and "Industrial Equipment and Energy." Technology such as sensors, actuators, and thin-film components are products that exercise the strengths of TDK and will help to usher in future growth. In addition, we are proceeding with development of energy units that combine such features as batteries, power sources, and wireless power transfer systems.

In the approaching age of IoT, TDK aspires to be the company that is society's top choice and is thus pushing forward with bold reforms.



■ Consumer ■ Business: Cross-Industry ■ Business: Vertical-Specific

Source: Gartner Press Release

"Gartner Says 6.4 Billion Connected "Things" Will Be in Use in 2016, Up 30 Percent From 2015", November 10, 2015 http://www.gartner.com/newsroom/id/3165317

(Created all graphs/charts by TDK on the basis of the Gartner Research.)

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FOCUS

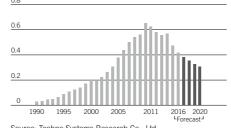
The reason behind such a bold transformation

The drivers of growth for TDK used to be magnetic heads for hard disk drives and electronic components for smartphones, especially high-frequency components. However, the worldwide demand for HDDs peaked in 2010 and the market is showing signs of contracting. The growth in shipping numbers of smartphones is also gradually slowing.

On the other hand, we are devoting more management resources to automotive products. Already more than 40 years ago, TDK took note of the increasing "electrification" of the automobile and expanded its range of products in this area. We are now concentrating on magnetic sensors that will be an important product category, and we also have the configuration of wireless power transfer systems in our sights.

HDD Market Shipments by Year

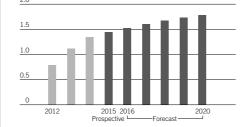
Billions of units



Source: Technio Systems Research Co., Etc.

Smartphone Market Shipments by Year Billions of units

Billions of un



Notes: 1. The market size is based on the shipment values at manufacturers.

The numerical values of 2015 are prospective and those of 2016 to 2020 are forecast.

Source: Yano Research Institute Ltd.
Global Smartphone Market: Key Research Findings 2015
Released June 23, 2015

Adaptive Strategy Responsive to the Business Environment

Strategy



History of withdrawing from non-core businesses

In the past, TDK has successfully implemented strategic withdrawals from non-core businesses in order to optimize its business portfolio. During the previous Medium-Term Plan (fiscal 2012 to fiscal 2015), we terminated operations in areas such as OLED displays, LTO (Linear Tape-Open) media for computers, and Blu-ray discs. This enabled a reorganization of our activities and products. We also closed down or merged some sites both in Japan and overseas, to strengthen our *Monozukuri* power through a return to integrated production. Organizational structures and business processes were streamlined to shorten lead times, and other reform measures were also successfully implemented.

Strategy



M&A to accelerate growth and complement products and technologies

With a view toward the IoT market where further growth is expected, TDK aggressively pursued a policy of M&A to complement its own range of products and technologies. For example, aiming to expand our presence in the automotive sensor market, we acquired Micronas, a Swiss manufacturer of Hall sensors. To further energize our SESUB business, we established a cooperative framework with ASE. We also agreed to take over the Tsuruoka Factory of Renesas Semiconductor Manufacturing Co., Ltd. as a production base for thin-film passive components.

Strategy



Business cooperation and joint venture with Qualcomm expected to boost future growth

Of particular importance for TDK's envisioned strong presence on the IoT market is the business alliance with Qualcomm, a global leader in next-generation wireless technology. By expanding cooperation to key technology areas including passive components, batteries, wireless power transfer, sensors, and MEMS, the competitive superiority of both sides is expected to gain a significant boost

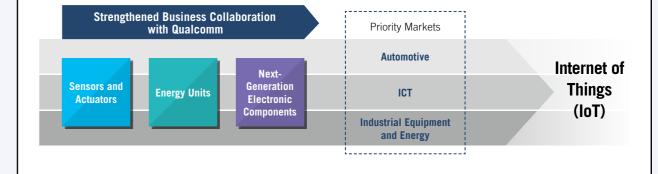
TDK and Qualcomm agreed to establish a joint venture called RF360 Holdings Singapore to supply high-frequency front-end modules and other high-frequency components for use in applications such as mobile devices, IoT products, drones, robots, and automobiles. The aim here is further improved performance and higher integration.

Strategy



Remaining an indispensable source in the shrinking market for HDD magnetic heads

We have also taken appropriate measures in the contracting HDD market. For one, we have consolidated the bases for the frontend process from two locations into a single base, and the back-end process in China has also been concentrated and restructured to achieve a reduction in costs. In the Philippines, we have started to manufacture passive components in addition to HDD magnetic heads. With regard to the industry as a whole, we are strengthening vertical collaboration in development and manufacturing, and we are supporting research into leading-edge technology, while promoting horizontal division of labor to avoid overlapping investments and cost increases. Within TDK, significant development efforts are under way, directed at new technology targets such as thermal assisted magnetic heads, two dimensional magnetic recording, and micro DSA.



22 TDK Corporation Annual Report 2016

Three Strategic Product Categories to Support Sustained Growth

Sensors and Actuators

The magnetic sensors that TDK is focusing on at the moment benefit greatly from thin-film process technology and know-how gained in the HDD magnetic heads sector. The sensors offer high accuracy and dramatically reduced errors, for example, in detecting the steering wheel angle in automobiles, thereby contributing to better fuel economy and lower power requirements. They truly represent the best of magnetics technology perfected over a period of many years.

Starting with automotive applications, we will aim to expand both the scope and our customer base in the magnetic sensor business. Relying on advantages such as high accuracy and low power draw, we plan to explore and develop demand for consumer applications. Integrating TMR elements from TDK and Hall elements from Micronas, we will combine the strengths of both to create sensors with even higher performance. Eventually, these will be offered as modular and system solutions that cover a range of customer needs.

In the field of actuators as well, we will be creating new business opportunities by harnessing proprietary and new technologies to bring products with high accuracy and low power consumption to this market. Optical image stabilizers (OIS) are a strategic growth product mainly used in the camera modules of smartphones to prevent blurry photos. We have established mass production capacities aimed at the Chinese market, and are aiming for further expansion.



Expansion strategy of the magnetic sensors business

Expand automotive TMR sensors business

- Complete development of core product lineup (FY2017)
- Expand application and customer base



Expand business through initiatives to capture demand for consumer applications

• Expand new demand with high-precision, energy-saving characteristics



Maximize synergies with Micronas

 Hall and TMR-hybrid sensors for automotive market ASIC/ASSP technology development in TDK products



Expand module sensor system business

- Merge sensor assembly technologies
- Expand local business utilizing Chinese production bases



2 Energy Units

An energy unit is defined as a unit that comprises a combination of hardware and software for conversion, storage, and control of electrical energy. TDK plans to combine and link elements that so far have been developed separately, such as DC-DC converters with power conversion functionality, wireless power transfer systems, different types of lithium-ion batteries for storage, and various sensors for energy control applications. With the addition of dedicated software, these will become sophisticated energy units that operate as a system. This is expected to bring a number of advantages, including improved energy efficiency and safety, higher integration, and also lower cost. With regard to automotive inverters, an agreement has been reached with Toshiba Corporation to establish a joint venture.

Energy units will be particularly attractive for the automotive sector and for industrial equipment and energy applications. In the automotive market, vehicles adopting wireless power transfer systems are expected to become practical in the near future, and the number of automated guided vehicles (AGVs) is also expected to grow. In these new areas, we will be offering energy units

with sophisticated software technology,

destined to become a major pillar of

earnings in the future.

DC-DC converter for xEV

Bidirectional DC-DC converter

Expansion strategy of energy units

"From single products to systems"

Provide units that combine hardware and software with power conversion functions, energy storage functions, and energy control functions

Power Conversion Function

- AC-DC & DC-DC converters
 Inverters
 Chargers
 Bidirectional AC-DC and DC-DC converters (for regenerative energy applications)
- Wireless charging system

Electricity Storage Function

- Industrial lithium-ion batteries Automotive lithium-ion batteries
- Energy storage system (ESS) lithium-ion batteries • Electric double layer capacitors (EDLCs)

Energy Management System Function

- Battery management units (BMUs)
- Battery management systems (BMSs)
- Various sensors (Current sensors, Temperature sensors, etc.)

Gear tooth sensor





Next-Generation Electronic Components

TDK plans to introduce next-generation electronic components and modules through a fusion of SESUB technology, thin-film technology, and materials technology. Moving toward this aim, we have implemented a number of initiatives in fiscal 2016. First, we are taking over the Tsuruoka Factory of Renesas Semiconductor Manufacturing Co., Ltd., a company with extensive experience in automotive products and semiconductor manufacturing processes. The facility will be used as a manufacturing base for thin-film passive components, contributing to expanded production capacity and also providing a technology boost. We also established a joint venture with Taiwan's ASE for the fabrication of semiconductor embedded substrate products utilizing SESUB technology. The target here is expanded orders in the wearable and health care devices sector.

Bluetooth module

IC embedded hoard





MFMS

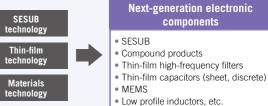
microphone

MEMS technology

MFMS pressure sensor

Expansion strategy of next-generation electronic components

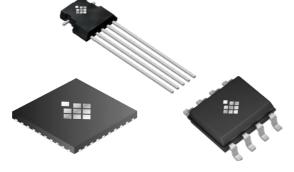
Combine SESUB technology, thin-film technology, and materials technology to provide high-value-added products that meet customers' diversifying needs going forward



PICK UP

Micronas and Hall elements

When a magnetic field is applied perpendicular to a flowing current, a force called electromotive force is generated in a direction perpendicular to both the current and the magnetic field. This is called the Hall effect, and an element using this effect to detect a magnetic field is called a Hall element. Micronas, a major Swiss sensor manufacturer also renowned for its circuit design and packaging technology, manufactures Hall sensors used in the power transmissions of automobiles, for engine control, and various other applications. The objective for the future is further business expansion in the automotive sector.



Various sensors developed by Micronas

24 TDK Corporation Annual Report 2016

SPECIAL FEATURE 2

TDK's Technology Strategy Explained by the CTO (chief technology officer)



Dai MatsuokaGeneral Manager of Technology HQ (CTO)

The technological building blocks for the conquering of the IoT market are in place. Using a rich arsenal of technology accumulated over a period of 80 years, we will bring value to society.

Strengthening the bond between engineers, along with the outside appeal of technology

TDK is home to some of the best engineering talent around the globe. However, rather than having our engineers work individually on projects, we believe we can energize their potential even further through organization-wide cooperation. This in turn will further enhance the value we provide to customers. One of my roles is acting as a facilitating link for engineers around the world, in order to create various synergy effects. The aim is to establish a framework that fosters innovation and makes it possible to design and offer devices and system solutions of direct merit to the customer.

Until now, former President Kamigama served concurrently as CTO, and the focus of information tended to be more oriented toward a management point of view. I on the other hand intend to convey TDK's competitive superiority from a more technical perspective.

With magnetics technology always at the core of our expertise, we will be enhancing the value provided to customers

TDK's product portfolio has greatly changed in keeping with the times and with customers' needs, and as the age of IoT arrives, there will certainly be further changes. However, we have always maintained continuity in the strong technological basis that supports our operations. In a word, that basis is magnetism. Since the company's inception, we have cultivated magnetics technology, pursuing the characteristics of product materials from the atomic level, achieving the required characteristics through combinations on the order of nanometers.

We also have gained mastery of the art of imparting additives to materials to achieve a targeted functionality, and we possess process technology that enables complete control over thickness or size, again as measured in nanometers. Our arsenal of many different but complementary technologies makes it possible to create just what the customer is seeking. Furthermore, we also develop production equipment in-house to realize mass production of designed products with high quality. This kind of technical resourcefulness is something that companies from emerging countries or other competitors cannot simply copy. We often get requests from customers for next-generation products and are always involved in various research projects aimed at a range of different characteristics.

We therefore believe that by increasing the speed of the cycle from idea to production, we can maximize the value that we provide to customers. To achieve this aim and reduce the distance between the customer and the development base, we are going to establish four new R&D centers around the globe, focused on different product aspects and operating in close proximity to their respective markets.

The founder's spirit inspires engineers to create new things of value

Big strides are currently being made in areas such as sensor technology for obtaining sophisticated information about the state of objects, communication technology for sharing such information, and energy technology for powering them. Other exciting developments as a result of these technologies are automobiles that can drive themselves and wearable devices for health monitoring and management.

TDK is harnessing magnetics technology gained while developing high-precision HDD magnetic heads, along with thin-film technology, sensing technology utilizing fine processing technology, and other advanced methods to create sensors with various characteristics for automotive use, and also for medical and industrial equipment applications. The resulting highly compact and highly capable sensors cannot easily be rivaled by competitors using only standard materials. Within TDK, the building blocks for bringing high added value to the IoT market are in place. Extending to sensors and beyond, we will be creating original high-value-added products for this market.

The pursuit of originality with a strong technological foundation is at the root of all our R&D activities. TDK's founder who formed the company in 1935 to produce ferrite cores believed in creating new products of value with a hands-on approach, and this spirit is still alive in the engineers working here today. I am convinced that this will remain so in the company's future as well.

Next-Generation *Monozukuri*

Building State-of-the-Art Manufacturing Sites to Drive Growth Strategies

In October 2016, TDK completed a building on the site of its Honjo Factory in Akita Prefecture as a new production site for electronic components and a new building at the site of its Inakura Factory in Nikaho City, Akita Prefecture.

Previously, TDK reinforced its business sites in the Akita region as electronic component production sites for global markets, but going forward, we will establish new strategic production sites in Akita to conduct more intensive and efficient production of electronic components as a part of our growth strategy for achieving success in the highly competitive global market. These production sites will encourage the sharing of core technologies, such as magnetic materials technologies, which are part of TDK's DNA, as well as improvements in processes so that we can increase the speed of customer response even further and quickly launch new businesses and new products in the future.

The new plants are also production sites that achieve "TDK Industry 4.5." "Industry 4.0" is a movement promoted through collaboration among German industry, government, and academia with the aim of minimizing costs by greatly raising the levels of digitization, automatization, and virtualization of production processes much higher than those of today.

TDK added "0.5" to this concept to represent the pursuit of zero defect quality based on advanced technological capabilities to create "TDK Industry 4.5," an original TDK initiative. In addition, the two new factories in Akita will support the realization of "location free" production, which will enable TDK to achieve uniform quality on a global level.



▲ Inakura Factory East Site

Location: 4-3 Tateishi Kisakata-machi, Nikaho City, Akita Prefecture, Japan

Floor space: Approximately 15,000 m²

Building structure: Two stories in part of the structure

Development, design, and manufacture of ferrite materials and ferrite cores

Start of production: Scheduled for 2016

 ✓ Honjo Factory East Site

 Location:
 1-6 Manganji, Yurihonjo City, Aktla Prefecture, Japan

 Floor space:
 Approximately 50,000 m²

 Building structure:
 Two-story building

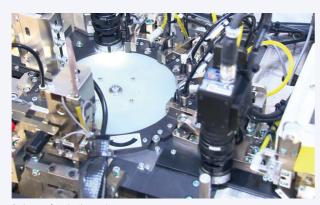
 Main business:
 Development, design, and manufacture of high-frequency components, jezoelectric components, and other electronic components

 Start of production:
 Scheduled for 2016

Features of the New Akita Factories

1 Deploying New Technologies from "Industry 4.0"

Monitoring system networks made up of cameras and sensors in the factories autonomously detect process problems on the manufacturing line in real time and, if a problem occurs, stop the line to prevent products from being released. The system allows for automatic normalization using feedback from analysis conducted through cloud computing. Innovations are also being implemented in inventory management and energy efficiency.



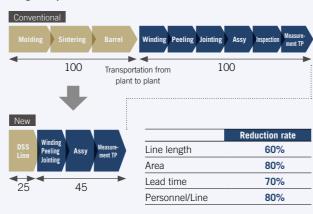
An image of production equipment

2 Achieving Zero Defect Quality through *Monozukuri* Innovation

The key to achieving zero defect quality is establishing upstream control. The aim is to attain zero defect in all areas, including design, materials, processes, and management. To do this, robots and sensors are used, and feedback derived from data is comprehensively applied. Information collected by sensors is utilized as Big data. The information is extensively analyzed and used for temperature, air pressure, and humidity control to link everything for integrated operation.

The use of robots is also important for conducting manufacturing with minimal operations by personnel. This will make it possible to achieve location free production that can maintain uniform quality regardless of the production site. TDK is not simply pursuing full automation or unmanned production but is building ideal lines in all areas, including lead times, production, and logistics, through the optimal placement of people and robots.

Integrated production and location free



3 Designs for Raising Energy Efficiency

The new buildings were designed to raise energy efficiency through such innovations as storing accumulated snow that falls in the winter to support cold recovery. Solar panels installed on the roof of the Honjo Factory East Site can generate up to 70% of the electric power used for lighting the entire site. In addition, the two buildings were designed with an awareness of creating an employee-friendly environment, such as snowmelting equipment in parking areas and on-site arcades, and the buildings are also expected to play a role as next-generation model environment-adapted factories.



Next-Generation *Monozukuri* for a New Age



Hiroyuki Uemura

Senior Executive Vice President Electronic Components Business Company CEO, in charge of Magnet Products

TDK will create a world-leading factory as a platform for state-of-the-art *Monozukuri*

New Akita factories to dramatically change the concept of *Monozukuri*

Strengthening of *Monozukuri* was a major topic for TDK. The concept for the new Akita factories has its roots in the structural reform period that began in fiscal 2012. At the time, the competitiveness of our multilayer ceramic capacitors, which were one of our major products, decreased and the business became unprofitable. This was due to the fact that we were trailing competitors in terms of quality, lead time, and production costs, among other factors. Our factories in the Akita area were aging, and the need to move products between factories at scattered locations was hurting efficiency.

There was discussion whether production should be moved overseas, where costs were more competitive. One possibility would have been to avoid China with its rising labor costs and go to Southeast Asia or a similar location, but we realized that this would eventually lead to a dead end. Furthermore, developments such as the increasing use of electronics in automobiles and the onset of the IoT society are creating a world where electronic components are ever more intricately linked with daily life, and their quality therefore is an increasingly important factor. With the intent to create a vibrant place where the latest techniques could flourish and where products that are competitive in many aspects could be manufactured, construction of two new factories was completed in October 2016.

Giving shape to the "TDK Industry 4.5" concept to realize zero defect quality

The essential ideas behind the "Industry 4.0" concept promoted by the German government in cooperation with industry and academia are the reduction of personnel requirements and lower costs. Making efforts to keep investments of people and capital as low as possible while increasing production efficiency is an approach that does not differ significantly from the direction in which we are headed. But our new plants are adding "0.5" to the equation by aiming to ensure that no defective product is shipped to the customer, thereby providing added value and resulting in "TDK Industry 4.5."

The keywords for creating a framework that does not produce defective goods are "Materials" × "Processes" × "Optimization." In concrete terms, this means that the design already reflects the way the customer's end product will be used, and the material is developed to elevate the quality of the finished product to the ultimate level. Within each process, the conditions for creating a conforming product are clarified and thorough process step design reflecting the methods and intended outcome is harnessed for strengthened quality management. This will enable the realization of zero defect quality.

"Location free" approach to producing the same quality anywhere in the world

Reduction of lead time is also a major factor in creating value for customers. To name one example, the Direct Sintering System (DSS) used in our ferrite production lines results in shorter pressing and firing processes. Stated in simple terms, the ideal is to "insert powder and get a finished coil." We are also increasingly using robots, and we are not limiting ourselves to single-purpose types. Rather, we aim to utilize versatile robots that can perform multiple functions. Combining these efficiently with human labor is the key for increased productivity. By configuring integrated material + product lines, we will be creating a *Monozukuri* paradigm that results in consistent product output that is completely independent of the production location.

28 TDK Corporation 296

Boosting Earning Power through Speed

Major Reforms Aimed at Sustainable Growth

In anticipation of the long-term market environment, and with the aim of aggressively expanding the portfolio of strategic growth products for the IoT market and achieving Monozukuri reform. TDK is making concerted efforts to speed up development and operations in many areas, including development work to be carried out in close proximity to the customer. We are also aiming for optimization on a global basis by establishing specific KPIs for all processes including sales, manufacturing, and development to enable effective target management. The question of how to turn technological superiority into revenue used to be a challenge for TDK. We are currently building an optimized framework designed for higher profitability to enhance our competitive edge in the electronic components sector worldwide.

1 Speeding Up the Business Cycle through KPI-based Target Management



Important indicators

- Accounts receivable turnover
- Information network utilization count



Important indicators

- Shortening of lead time.
- · Cost management
- · Manufacturing process review
- Optimal inventory management

Information utilization count



Important indicators

- Number of R&D themes
- Number of patents
- · Number of submitted sample prototypes to customers
- · Citations of technologies or products, including newspaper articles

Our main R&D and technical support base

Akita Prefecture Turning "TDK Industry 4.5" into a tangible reality

and creating state-of-the-art Monozukuri bases

Germany (Munich)

High awareness of the environment and energy. Technology research and development in areas such as automobiles nd industrial equipment

Israel (Tel Aviv)

Located in the same city as the TDKutilizing technology are concentrated Research and development of new

China (Shanghai)

EMC support and

optimized parts

proposals, etc.

China (Xiamen)

Medium- to long-term oriented new processes, new products)

Technology development covering all types of applications such as automotive, ICT, and industrial equipment in an expanding market

2 "TDK Industry 4.5" to Speed Up the *Monozukuri* Cycle

TDK, while pursuing value for its customers, is of course a business operation. Being able to provide customers with a stable supply of high-quality products is important, but having to keep a large inventory is not a desirable situation. In order to increase the speed of inventory turnover, it is essential to create a framework for getting manufactured products to the customer without delay.

"TDK Industry 4.5" is a revolutionary concept intended to solve such issues. Reducing the lead time of products is a key factor for increasing productivity. With the Monozukuri approach, an optimized inventory makes it possible to build

a highly effective framework that keeps manufacturing processes as short as possible. This will speed up the overall business cycle and determine how quickly we are able to supply the customer with products. Establishing such a framework is a major step toward the intended increase in profitability.

At two new factories in Akita Prefecture, production lines with extremely short lead times are being introduced which will transform the *Monozukuri* process. In order to be successful, many modifications and improvements must come together. TDK intends to turn "TDK Industry 4.5" into a tangible reality without delay to gain the trust of customers.

3 Accelerating the Development Cycle to Bring New Products to Market Faster

We believe that a sense of speed is important in developing products and bringing them to the market-ready stage. In November 2014, the Technology HQ opened the ICT Devices Development Center tasked with developing high-frequency components and similar products for smartphones, and the Energy Devices Development Center for power-related products intended for automobiles, industrial equipment, and the like. The new facilities are contributing to increased development speed in their respective areas. Furthermore, the newly established Materials Development Center is conducting long-term intensive research aimed at the development of new materials and bringing out the properties of materials.



Development is now structured into three centers. for enhanced specialization

R&D at Global Bases Taking Advantage of Different Regional Characteristics

The requirements of customers for electronic components differ greatly depending on the location. In some areas, the pursuit of cutting-edge technology is a top priority, while customers in other areas are more interested in stable supply and available quantities. TDK has established R&D bases in various parts of the globe and is carrying out R&D activities that are matched to local conditions. We rapidly develop new technologies where customers need them, thereby shortening

the time until delivery. At the same time, our sales staff is also in close contact with customers, working together with the R&D side to identify emerging needs as early as possible and provide input and feedback. In Japan, research with a medium- and long-term perspective is being carried out, aimed at new structures and new processes that will benefit the entire TDK Group.

The United States (San Jose) Close to Silicon Valley with many semiconductor and related companies nearby. Cutting-edge ICT research, joint development of technology and products

TDK Corporation Annual Report 2016



Now that TDK's growth strategy has made its way toward the transformative phase, we are going to apply our finance and capital strategies toward giving that growth strategy a formidable push.

Tetsuji Yamanishi

Director
Corporate Officer
General Manager of
Finance & Accounting Group

Belief as director

Fulfilling duties based on the dual aspects of "setting the stage for dynamic attack strategy" and "practicing restraint"

One of my duties as I perceive them is setting the stage for various "dynamic attacking" measures by TDK that steer us in the direction of our growth strategy through such means as verifying investment recovery plans and procuring capital. At the same time, my approach is to look squarely at the act of voluntarily assuming risk amid growing levels of uncertainty, carefully verify the nature of our businesses, and make sure to apply the brakes when reaching the conclusion that we should come to a halt. There are a

considerable number of TDK shareholders and investors who expect that our corporate value will grow over the long term. Over time, I have taken the liberty of reflecting the valuable feedback that they have imparted to us in our various strategies. Going forward as well, I intend to continue viewing the act of keeping a dialogue with our shareholders and investors as a key role of mine, listening earnestly to what they say and tying their opinions into the growth of our corporate value.

Finance strategy during business structure transformative phase

Allocating management resources to new growth fields with a view to sustainable growth

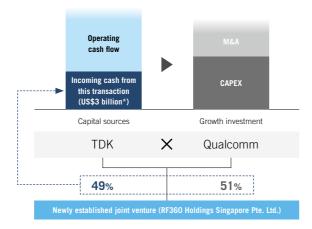
Under our Medium-Term Plan (from the fiscal year ended March 2016 to the fiscal year ending March 2018; see pages 20–21 for details), we are aggressively conducting growth investment that includes between ¥430 billion and ¥480 billion in planned capital expenditure and approximately ¥250 billion in planned research and development expenses. The size of this investment is the amount we anticipate to be necessary in order to achieve an operating income ratio of over 10%, one of our medium-term management targets, without sacrificing our operating income ratio in the immediate term.

Originally, TDK did not undergo any major changes in its business domains. Apart from the case of EPCOS Group, which we acquired in 2008, by and large we kept all the investments that we made, M&As or otherwise, within the limits of our operating cash flow. Conversely, given the large-scale rearrangement of our business structure that we are currently advancing, TDK's policy today is to fund our investments not only through our operating cash flow but also by taking cash that we will acquire through the transfer of our high-frequency components business to Qualcomm and allocate it to our growth businesses.

TDK has the option of selling 49% of its stake in the joint venture that it has with Qualcomm 30 months after the date on which we concluded our agreement with that company. Should this right be exercised, we anticipate that the total value of the resulting gains to us will come to approximately US\$3 billion in the end. Based

on this, we are in the process of conducting certain investments, such as the corporate acquisition of Micronas, and capital expenditure ahead of schedule to elevate our management speed.

Growth Investment and Capital Sources



* Estimated total value of gains by TDK should the option be exercised. Includes payment upon conclusion of the agreement between TDK and Qualcomm, agreements concerning the sale of high-frequency filters by the JV and mutual cooperation between Qualcomm, QTI, and TDK, and future additional payments to be made to TDK, such as the exercise price of the option

Optimum capital structure for realizing our long-term strategies

Designing our capital structure while keeping sustainable and stable investment in mind

In the electronic components industry where we base ourselves, the rate of technological innovation is extremely rapid.

Additionally, the industry is affected by currency exchange rates and other market conditions, as well as macro-environmental shifts. In order to sustainably elevate our competitiveness amid such a situation, we need to continually make growth investments, particularly those in new products and technologies within key fields, based on long-term prospects. For that reason, TDK designs both its growth strategy and its optimum capital structure around a long-term timeline. Based on the idea that a certain degree of solidity in our shareholders' equity is absolutely necessary in order for us to make stable research and development investments and capital expenditure even as our business performance fluctuates in the short term, we seek to continue maintaining a shareholders' equity ratio in the range of 50%. At present, we are aggressively

conducting advance investment in our leading businesses while implementing a structural rearrangement on a business level. For that reason, our debt-to-equity ratio following the resulting increase in the procurement of funds through borrowings reached approximately 0.5 in fiscal 2016. However, our policy is to build a formidable financial constitution over the medium to long term by both expanding the earnings of our existing businesses and ensuring returns on our M&As and other investments.

With regard to dividends, we have set a dividend payout ratio target of 30%. As we endeavor to steadily increase dividends through growth in profit per share, we also recognize the acquisition of treasury stock as one of our policies for returning profits to shareholders. We intend to meet the expectations of shareholders who have supported our long-term strategies.

Improving capital efficiency in tandem with control indicators

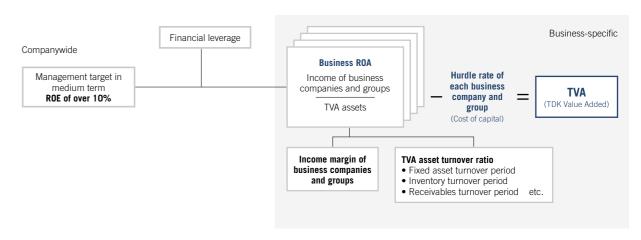
Managing and controlling "Business ROA" as a KPI and realizing improved ROE

In formulating our Medium-Term Plan, after affirming our awareness of the cost of capital, TDK set its ROE target value at "over 10%." To ensure that we realize improved capital efficiency going forward, we manage control indicators in tandem with ROE that can serve as targets under the business activities of each business group that are responsible for generating earnings.

Starting in 1999, TDK set forth an indicator that we call "TVA," or "TDK Value-Added." This indicator serves to compare return (income margin before interest and after taxes) versus the cost of capital (shareholders' equity plus interest-bearing liabilities). From there, we controlled that indicator on a companywide level while remaining mindful of the cost of capital. TVA has also served as the basis for computations of discount cash flow versus capital expenditure, terms of ROI when conducting M&As, and so forth. As an indicator, however, TVA was difficult to manage on a business level due largely to the fact that the concept of "capital" does not tie into business departments directly. As such, under our

existing plan, we have elected to manage and control "Business ROA" as a KPI instead. Business ROA represents our profit margin versus inventory, fixed assets, and other assets under each business, which we collectively call "TVA assets." Subtracting the cost of capital from Business ROA yields the added value generated by each business, or TVA. In other words, under this system, pursuing inventory turnover periods, accounts receivable collection periods, and other relatively familiar indicators along with operating income and investment profit ratios causes capital efficiency across our entire organization to go up even without our people on the front lines being directly mindful of ROE. Going forward as well, we will bring together the total capability of the TDK Group and strive to achieve improved Business ROA, and we intend to gradually elevate our companywide ROE by realizing the maximization of the added value of each business.

Companywide and Business-specific Control Indicators



32 TDK Corporation 3