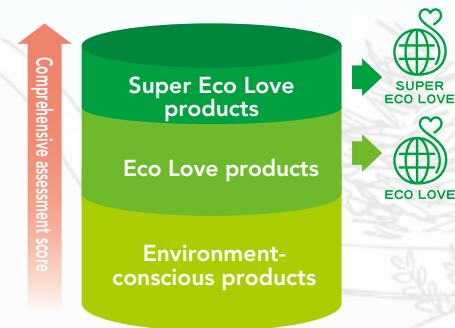


TDK Products with Future Vision

TDK is constantly improving the performance of its component products, while making them even smaller and lighter. This in turn widens the scope for their application in many kinds of set products and allows these to function better and explore new possibilities. In this way, the set products embody TDK's vision for the future.

What are Eco Love products?



Among its wide range of environment-conscious products, TDK has identified those that effectively reduce the environmental burden and take the lead in the industry. This is the "Eco Love" category. Items which realize environment-consciousness on an even higher level are certified as "Super Eco Love." Details about these categories can be found on our web site: http://www.tdk.co.jp/ecolove_en/index.htm

Symbols denoting reduced materials use

- Energy Savings
- Effective Use of Resources
- Restricted Chemical Substances
- New Energy

Magnetic Composite Sheets Flexield IFL Series

This magnetic shield is used for electromagnetic noise suppression and to improve antenna signal sensitivity for transmission and reception. Compared to existing TDK products, it delivers the same performance at only one fourth the thicknesses.



75% thinner
RoHS compliant

Main applications: Mobile phones

High Reliability AC-DC Switching Power Supplies HWS Series

These power supplies for converting AC into DC current feature compact dimensions, light weight, and reduced power consumption, greatly contributing to energy savings.



8% improved conversion efficiency
50% smaller volume
40% lighter weight

Reduced power consumption (in standby mode)
RoHS compliant

Main applications: Power supplies for industrial equipment

Ferrite Cores for Reactor in Solar/Wind Power System Inverters

These cores are used in components for inverter circuits which turn energy stored as DC into AC for household use. The new material developed by TDK significantly improves power conversion efficiency.



30% lower power loss
Solar power
RoHS compliant

Main applications: Solar power systems, fuel cells, wind power generation

High Performance Neodymium Iron Boron Sintered Magnets NEOREC55 Series

World's most powerful metallic magnets suitable for voice coil motors (VCM) that control head positioning in hard disk drives with high speed and outstanding accuracy.

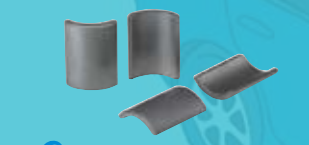


5% smaller volume and lighter weight
RoHS compliant

Main applications: Personal computers

High Performance Ferrite Magnets FB12 Series

These magnets are used for providing the force that makes motors rotate. While boasting the highest magnetic field intensity worldwide, they also are lightweight and retain their outstanding performance in low temperature environments.

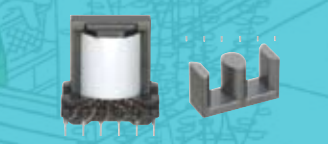


0.1% better fuel efficiency
40% lighter magnet weight
25% smaller motor volume
RoHS & ELV compliant

Main applications: Automobiles, home appliances, office equipment

Miniaturized Switching Transformers for Flyback Power Supplies ECO Series

Serve for AC voltage conversion. TDK technology results in optimized construction and brings out the capabilities of the material to the fullest, contributing to saving energy and resources.



45% lighter core weight
Varnish-free solvents
8% better DC superimposing characteristics
RoHS compliant

Main applications: Flat TVs, DVD recorders, home appliances

DC-DC Converters for Automotive Use (Air-Cooled)

Used in PCUs (Power Control Units) of HEV (hybrid electric vehicles). Provides high efficiency for turning the high voltage from the batteries into the lower voltage required to drive other electronic equipment.



EV/HEV
1% improved conversion efficiency for better fuel economy
45% lighter weight
RoHS & ELV compliant

Main applications: HEVs

NEOREC53 Series/High Residual Flux Density Type (45SH, 42UH, 38UX, 35NX, 40TH)

Used for main drive motors and power generators, these magnets enable the realization of high-efficiency drive systems. They offer excellent thermal characteristics, ensuring that motor power does not drop at high temperatures.



Reduced use of rare raw materials
Better fuel efficiency
EV/HEV
Improved corrosion resistance for long life
RoHS & ELV compliant

Main applications: HEVs, home appliances

Shielded SMD Power Coils VLS Series

Compact high performance power supply coil effectively stabilizes voltage. New design and materials result in improved efficiency and smaller dimensions.



50% lower power consumption (in mass production stage)
5% improved voltage conversion efficiency (when integrated in set)
27% smaller volume
RoHS compliant

Main applications: Mobile phones, digital cameras, portable audio players

Flexible Film Solar Cells for Wristwatch

Solar cells for wristwatches is thinner and lighter than existing products. Can be adapted to a variety of shapes.



Solar power
No need for battery replacement
RoHS compliant

Main applications: Wristwatches

Inspirational TDK Products Worldwide and the People Who Make Them Possible

TDK operates on a worldwide scale. There are many ways in which members of TDK contribute to building a better society through products and services, cooperation with local communities, environment protection activities. Here is how some of them see their roles.

China (Shanghai)

EPCOS (Shanghai) Ltd.
Sales Dept.

Donald Tang

My field Sales of film capacitors



Film capacitors are used for example in wind power turbines and solar power systems. In China, the current rapid economic growth requires a sweeping response to rising energy needs. This must be accompanied by concentrated efforts to conserve energy in order to reduce greenhouse gas emissions. Improving energy efficiency and reducing power losses will help us achieve the goal defined by the Chinese government, namely a 20 percent reduction in energy consumption per GDP unit by 2010, compared to the 2005 level.

China (Dalian)

TDK Dalian Corporation
SCM Dept.

Xiao Han

My field CSR procurement



Good cooperation with suppliers is an important aspect that enables TDK to create high-quality products. Since February 2008, TDK Dalian Corporation has been conducting lectures for suppliers in various regions of China on CSR related topics. We implement quality control on an ongoing basis, and provide support for improvement measures. The aim is to ensure a full understanding of TDK's principles, and to build a good relationship based on trust through CSR procurement.

China (Suzhou)

TDK (Shanghai) International Trading Co., Ltd.
China Sales Supervision Dept.,
East China Block, Group E50

Cooper Hsu

My field Sales of chip capacitors, chip inductors, and transformers



Chip capacitors and inductors, as well as transformers from TDK are used in flat TVs and similar products. The need to develop new technologies for saving energy is getting ever more pronounced also in China, and TDK components have earned a high reputation in this regard. They enable customers to build thinner, more compact products that are highly efficient while keeping costs low.

Americas

TDK Corporation of America
Detroit Sales, Automotive Project

Rick Anderson

My field Marketing of power supplies for automobiles



DC to DC converters for use in HEVs (hybrid electric vehicles), EVs (electric vehicles), and fuel cell vehicles must feature high efficiency, low weight, and low cost. In the U.S., many consumers are currently buying HEVs because they want to reduce the load on the environment. DC to DC converters from TDK not only deliver excellent quality but also are priced very reasonably. This helps to make HEVs or EVs more affordable and contributes to their widespread acceptance.

Germany

EPCOS AG
Piezo Actuator Dept.

Georg Kuegerl

My field Development of piezo* actuators for automotive fuel injection systems



Piezo actuators for fuel injection systems in automobiles enable highly precise control of the amount of injected fuel. As we are moving towards a low carbon economy, the role of the automobile becomes even more important. Since we introduced this type of product to the market in the year 2000, it has found its way into 10 million vehicles all over the world, and is contributing to improved fuel efficiency, lower emissions, and increased engine power output.

* Piezo (electric) element: an element that can be made to expand or shrink in response to an applied control voltage

Malaysia

TDK (Malaysia) Sdn. Bhd.
Quality Assurance/Environment Dept.

Choon Chee Ming

My field Promotion of quality assurance and environment protection activities



In Malaysia, where concern for the environment and awareness of environmental problems are on the rise, we aim to assess the effect that our ISO 14001 certified organization has on the environment, and we endeavor to operate with a high sense of responsibility. We participate in monthly cleanup drives and support local activities as well as government initiatives with the aim of contributing to society. We encourage internal reviews and improvements, and aim to have all the staff members working towards a common goal within the social and environmental framework.

Japan

TDK Corporation, Power Systems B. Grp.,
EV Power Supply BU, Product Development Grp

Akira Ikezawa

My field Design and development of DC-DC converters for HEVs (in charge of structural design)



DC to DC converters for use in HEVs (hybrid electric vehicles) and fuel cell vehicles must have small dimensions, low weight, and low conversion losses to ensure high efficiency. The reduction of CO₂ emissions from automobiles and the move away from a petroleum-based society are important factors in mitigating global warming. HEVs are recognized as a key technology for achieving a more environmentally balanced society. The products we are developing contribute to this process and hopefully will enable the children of future generations to enjoy a better environment.