Promoting the Creation of Environment-Conscious Products

Corporate Profile➡CSR Activities➡Promoting the Creation of Environment-Conscious Products http://www.tdk.co.jp/csr_e/csr03900.htm

Preventing Product Related Exposure to Harmful Substances through Proper Management

TDK defines the term "product environmental consideration" as referring to products that are designed in an environment-conscious manner (or to environmentconscious design specifications). This involves preventive management of products so that they do not cause pollution. We believe that protecting the environment ensures sustainability for the company and is directly linked to product quality.

Our activities will be focused on the following four aspects:

1. Climate change
2. Environment and health
3. Sustainable use of natural resources and sustainable management of waste
4. Nature and Biodiversity

Our environmental strategy with regard to products will also be oriented along these lines.

In concrete terms, product environmental consideration can be classified into the following three categories:

(1) Free of regulated chemical substances
(2) Effective use of resources (resource recycling/resource saving)
(3) Energy-saving design (lower energy consumption in the production process/lower power consumption, etc.)

At TDK, we regard it as a given that our products will not contain any banned substances, and we also give priority to reducing CO_2 emissions. Products are developed under the following four key aspects:

- Explore new sources of energy — "Create Energy"
- Store electrical energy — "Store Energy"
- Convert electrical energy efficiently — "Convert Energy"
- Reduce electrical energy consumption — "Save Energy"

Consistently Creating Environment-Conscious Products

In 1997, TDK introduced a product assessment system that takes the environmental impact of a product over its entire life cycle into account, from the design and development stage right through to the final stage.

Even minute amounts of chemical substances in all parts that make up a product are recorded. The energy expended during manufacturing, the energy consumption reducing effect of the product, both on its own and when used in another end product are carefully assessed, and only such products that pass strict evaluation criteria and are approved by the General Manager of the Quality Assurance Department can proceed to the manufacturing and marketing stage.

In September 2008, we implemented another important framework aimed at ensuring the consistent creation of environment-conscious products by defining the "Eco Love" and "Super Eco Love" certification categories.

The energy expended during manufacturing, the energy consumption reducing effect of the product, both on its own and when used in another end product are carefully assessed, and only such products that pass strict evaluation criteria can proceed to the manufacturing and marketing stage.

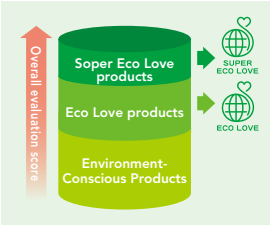
Out of the products approved in the product assessment process, this certification framework selects products that effectively reduce the environmental burden and take the lead in the industry (Eco Love). Among Eco Love items, those which are particularly effective in reducing the environmental burden and that integrate top-class technology, function and form are certified as "Super Eco Love." These products are introduced on our website.

The products may lose their certification if they no longer conform to current requirements. This is aimed at constantly providing incentives for development and improvement.

Currently, the main focus is on climate change (preventing global warming). Products whose manufacture, distribution, and usage in the end product contribute to saving energy or to the utilization of alternative energy sources will receive the Eco Love or Super Eco Love certification.

The ratio of Eco Love products within the total sales for FY2010 is about 15 percent*. The target for FY2012 is to at least double that to 30 percent or more.

What are Eco Love products?



*Sales volume excluding magnetic head products and batteries

Note: Also see the special feature "TDK Products with Future Vision." in page 9-10.

Quantifying Environmental Loads and Designing for the Environment from the Outset

TDK uses LCA to calculate the environmental impact of a product over its entire life cycle, based on standard values. We also provide an ecological profile compliant with the requirements of the ErP Directive, and indicate the carbon footprint through CO_2 load levels. This is achieved by quantification of measurable physical quantities (input and output analysis). By tackling all environmental aspects, we are able to design and develop products whose overall impact on the environment has been

minimized as far as possible.

In coordination with the rest of the industry, we are currently developing optimized LCA methods for input and output analysis (first stage) and inventory analysis* for background data assessment (second stage).

*Inventory analysis: Detailed analysis of energy and materials input and output in all processes over the life cycle of a product

Preventing Product Related Exposure to Harmful Substances through Proper Management

In 2004, TDK introduced the "product environmental management" framework to effectively prevent the possibility of product related exposure to substances harmful to human health and the environment. Currently, this has been integrated into our Quality Management System (QMS).

As a component manufacturer positioned within the supply chain, we are concerned with proper prevention and management at the "Purchasing," "Manufacturing," and "Selling" stages.

Compliance with REACH Regulation

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) is a binding EU regulation for manufacturers which came into force in June 2007.

The regulation comprises the following requirements for chemical substances, preparations, and molded products:

1. Registration (chemical substances, preparations, molded products)
2. Notification (molded products)
3. Compulsory application for permission (chemical substances, preparations)
4. Usage limitations (chemical substances, preparations, molded products)
5. Communication of information (chemical substances, preparations, molded products)

As a components manufacturer, TDK considers the communication of information our most important duty. Based on the assumption that all products may be used in the EU region, we communicate information on SVHC* disclosure requirements to our upstream suppliers and partners, in line with our Green Procurement Standard.

We also have established procedures to convey appropriate information to our customers and partners downstream in the supply chain, as required by the REACH regulation.

During FY2010, in January 2010, a list of 14 additional substances of very high concern was released, so that we now provide information about a total of 29 substances for products to be delivered to the EU region. For general products, we have registered about 2,000 items on JAMP-GP* and are devising individual measures for their reduction. We are committed to continue providing product environment related information also in future.

*SVHC: generally used as acronym for "Substances of Very High Concern", but specifically referring to substances covered by the requirements of the REACH regulation.

*JAMP-GP: Global Portal site with chemical information operated by the Joint Article Management Promotion-consortium (JAMP).

FY2010 Excellent Environment-Conscious Products

Excellent Environment-Conscious Product (1)

Wound Type SMD Inductors for Power Line (Magnetic Shielded) CLF10040 Type

SUPER ECO LOVE

A simple structure that does not use a resin base or solder was developed while maintaining high performance to achieve an environmentally friendly, low-profile, 10 mm × 10 mm size power supply coil that is easy to disassemble.

Excellent Environment-Conscious Product (2)

Compact Low-Profile (10mm Height) Choke Transformers (Power Factor Correction) for Flat TV PFC Series

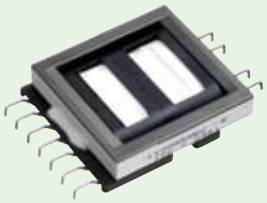
SUPER ECO LOVE

A newly developed ferrite material with high magnetic flux density is used in the core to create a PFC choke that maintains excellent DC superposition characteristics in a low profile package (total thickness just 10 mm). Raised productivity during manufacturing contributes to energy and resource savings.

Excellent Environment-Conscious Product (3)

Low Profile (10mm Height) LLC Resonance Power Transformers for Flat Panel TV

SUPER ECO LOVE



A newly developed low-loss ferrite material is used in the core of this power supply transformer to maintain high performance while achieving a low profile configuration (total thickness just 10 mm). Energy and resource use are lower than the existing SRX series and the use of solder has been reduced substantially.