

# **Environmentally Conscious Design**



Murata manufactures products with reduced environmental impact throughout their life cycle, including design, production, use, disposal, and recycling.

# **Eco-Friendly Product**

#### **Implementation of Product Assessment**

Murata is developing environmentally conscious design, in which it promotes reduction of the use of environmentally hazardous substance and effective use of resources by designing compact, energy-saving products.

To ensure environmentally conscious design, in November 2004 we began product assessment throughout the Group in which we evaluate environmental impacts in advance and incorporate changes to reduce these impacts. Product assessment takes place prior to Design Review, which takes place in the development stage. The evaluation is then repeated during the prototype stage and at market launch.

#### Product Assessment Category

Classification	Category
Product	Environmentally hazardous substance
	Downsizing
	Reduction of main raw materials
Production process	Environmentally hazardous substance
	Energy saving
	Electricity saving and waste reduction

#### **Life Cycle Assessment (LCA)**

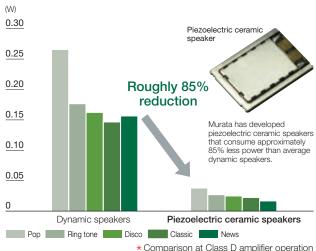
Murata conducts product assessment that place priority on the reduction of the environmental impact over the lifecycle of a product.

In 1995, Murata established the LCA Subcommittee, which analyzes CO<sub>2</sub> emission and the consumption of major raw materials in the production of representative products such as monolithic ceramic capacitors and chip ferrite beads, which make up roughly 50% of sales. We also conduct LCAs for production equipment at the design stage, and for products.

In fiscal 2006, we collected data on the CO<sub>2</sub> emission factor for various parts and materials and for transportation. With this data, we were able in fiscal 2007 to calculate CO<sub>2</sub> emissions for purchased parts and materials, and our own products, as well as for CO<sub>2</sub> emissions related to packaging and transport of products.

We are currently developing a system with which to efficiently compile the LCA basic unit from plant data in order to increase LCA effectiveness.

#### ▼ Energy Saving with Piezoelectric Ceramic Speakers



### Managing Chemicals with Environmental Impact

# **Promoting a New Chemical Management System through Industry Alliances**

The Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation in European Community, which enter into force in June 2007, requires the registration of several tens of thousands of types of chemical substances. In addition to individual company management systems, creation of an industry wide standard management system is also an effective means of maintaining strict compliance with this regulation.

Murata therefore established the Joint Article Management Promotion consortium (JAMP) together with other endorsing companies in September 2006. Murata sends members to the steering committees and to working teams. We plan to provide the know-how and information that can only be furnished by a midstream component maker, in the process facilitating the establishment of a standardized system for the smooth transmission of information regarding chemical substances in parts and materials, from upstream industries that produce chemical materials to downstream industries that produce end products.

# WI

### What Is JAMP?

An active cross-industrial organization to formulate and spread concrete measures to facilitate proper management and smooth disclosure and communications throughout the supply chain of data on chemical substances contained in articles (parts and molded components)

# **▼** Chemical Substance Management System

