

Effort to Reduce Packaging Materials

By comprehensively reviewing the flow from packaging to distribution, we are able to reduce the environmental impacts of our operations through such means as reducing the amount of packaging materials used and utilizing recycled resources.

Measures for Packaging Materials

As a result of reviews on the composition and forms of packaging, and the strength of the products themselves, the use of inner packaging boxes was discontinued. Individual packaging and outer packaging were also made smaller and lighter for reducing the use of packaging materials and the amount of wasted packaging materials. Also, we promote the use of recycled materials such as recycled paper and resin.

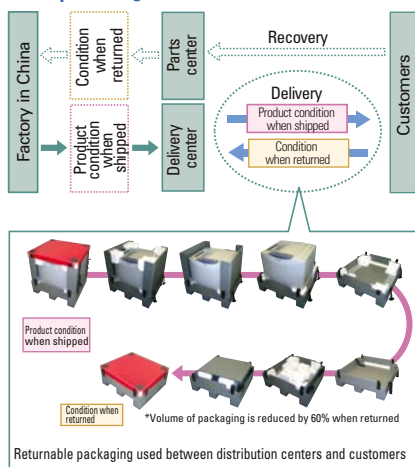
Reducing the total use of packaging materials: 1%
Reduction remained at 1% against the target to reduce the total use of packaging materials by 20% of the fiscal 2000 level by fiscal 2003. This was due to the production increase of 21.6% compared to fiscal 2000, but a reduction of 16% was achieved per unit of sales.

Introduction of Returnable Packages

Most packaging materials are eventually disposed of as waste. It is therefore effective for environmental conservation to use returnable packaging that can be used repeatedly. Targeting large-sized products, we are making preparations for the use of returnable packaging boxes.

First, we introduced returnable packaging for office-use printer samples. The returnable packaging is repeatedly used between distribution centers and customers, and is currently introduced in Tokyo, Nagoya and Osaka areas.

Conceptual diagram

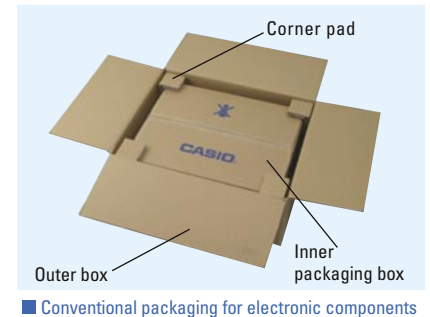


(1) Reducing the use of polystyrene foam: 18.2%
A reduction of 18.2% was achieved against the target to replace polystyrene foam with paper-based materials and reduce the total use of polystyrene foam by 30% of the fiscal 2000 level by fiscal 2003. This equals a reduction of 30.7% per unit of sales.

(2) Reducing the use of cardboard: 1% increase
As a result of having to replace resin-based packaging materials with cardboard, the total use of cardboard increased by 1% against the target to reduce the total use of cardboard by 20% of the fiscal 2000 level by fiscal 2003. This equals a reduction of 14.3% per unit of sales.

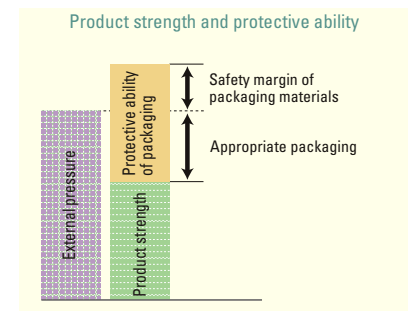
Excessive packaging for electronic

components using both an outer box and corner pads was discontinued after reviewing the distribution method.



Future Measures

In order to pursue appropriate packaging (protective ability of packaging), it will be important to know exact external pressures and the level of product strength that can sustain such pressures. The external pressure the packaging receives during the distribution process includes shocks caused by falls during freight handling, vibration of the transport vehicle, and stacking load during storage. Once the exact product strength is known and appropriate packaging is achieved, we will make efforts to reduce packaging materials and reduce the volume with the aim of reducing environmental impact. We will promote these measures by setting a new goal to reduce the packaging materials by 30% per unit of sales, compared to fiscal 2000, by fiscal 2007.

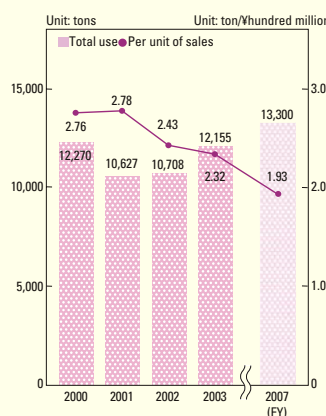


Specific measures

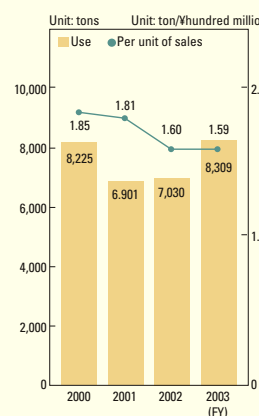
- To know the exact product strength:
 - Understanding product strength in terms of numerical values
 - Feedback to the product design division (to improve strength)
 - Resetting regulations, standards, evaluation processes, and product testing methods without packaging
- To know exact external pressures:
 - Resurvey of transport, storage and freight handling environments
 - Resetting the quality standard for packaging used in distribution
 - Pursuit of more efficient packaging methods based on SCM (supply chain management)

Change in Use of Packaging Materials

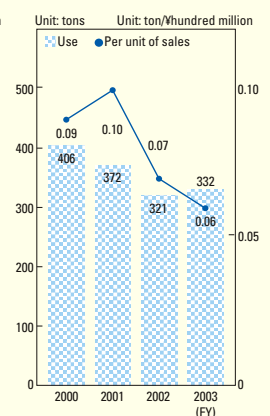
Total use of packaging materials and per unit of sales



Use of cardboard and per unit of sales



Use of polystyrene foam and per unit of sales



Glossary

SCM (Supply Chain Management):

To manage the process flow among manufacturers, distributors and sales companies from material supply to product delivery to customers, aiming at meeting customers' needs for quick delivery.