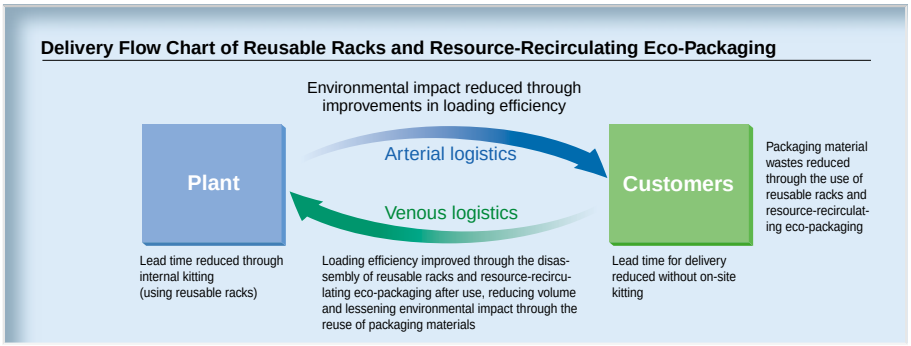
Logistics

Logistics was traditionally separated into arterial logistics, i.e., delivering products to customers, and venous logistics, i.e., collecting packages and products disposed of by customers. To reduce lead-time—from order placement through delivery—the Ricoh Group established a supply chain management (SCM) system, for which it developed and promoted reusable packaging materials to improve the efficiency of collection logistics. The Ricoh Group strives to improve the efficiency of its logistics as a whole and reduce environmental impact by integrating arterial and venous logistics. Ricoh Logistics, a logistics company for the Group, acquired ISO 14001 certification in December 2000.



Strength Test of Products and Packaging Materials

To reduce the consumption of packaging materials, it is important to ensure that the products themselves are strong enough to withstand damage during shipping. Based on Ricoh's recyclable design policies*, product strength tests are mandatory. Such tests are conducted at the Product Resistance Evaluation (P.R.E.) Laboratory, which is equipped with the latest test devices, such as a horizontal shock tester and a vibration tester. Ricoh's P.R.E. Laboratory was the first facility built by a Japanese manufacturer to have been officially recognized by the International Safe Transit Association (ISTA). Measurements obtained here are internationally recognized.

* See page 39.

A product's strength is being tested against shock.

Development of Reusable Packaging Materials

To reduce the environmental impact of packaging materials, Ricoh developed eco-packaging, which consists mainly of laminated cardboard that is 98% recyclable, in 1994. Furthermore, in 2000 we developed reusable, recycled eco-packaging that contains recycled plastic. Reusable racks with pipe frames are used to deliver large printers. Similar efforts are being made by Group companies all over the world. For example, less bulky packaging is used for toner cartridges to reduce environmental impact at delivery as well as collection.

Eco-packaging (left) developed in 1994 and recycled eco-packaging developed in 2000

Reusable pipe-framed racks

Comprehensive Improvement in Logistics through Reusable Racks

In the past, Ricoh would ship and deliver printers and optional equipment separately and assemble them at each delivery. However, the Company developed pipe-framed reusable racks that can be adjusted in size to accommodate the dimensions of whatever machine is to be delivered. The largest benefit of these reusable racks is that they produce no waste. Ricoh established a database that enables kitting at plants, including the attachment and arrangement of optional equipment; the calculation of estimates; and production planning at the plant according to data entered by sales companies. Thus, Ricoh succeeded in significantly reducing lead time, from order placement through delivery, and environmental impact.

Environmental Impact Reduction during Transportation

Ricoh Logistics, a core company that works on arterial and venous logistics for the Ricoh Group, uses 16 low-polluting natural gas vehicles*. Three of them are equipped with unique turntables to improve efficiency in delivery and collection.

The company is developing activities to promote energy conservation, such as training drivers to improve their awareness of environmental conservation and improve their driving ability, reviewing transportation routes, and preparing rooms so that drivers can rest there instead of in their vehicles with their engines idling.

* As of May 18, 2001. More is scheduled to be introduced in conjunction with improvements in the social infrastructure.

A natural gas vehicle