Eco-Friendly, Next-Generation Products

Throughout the product life cycle, from raw materials production, manufacturing and customer use to final disposal, we work to reduce the impact of products on the environment.

Eco-Products (Hitachi Eco-Products)

As part of our initiative to minimize the environmental burden of our products and services, the Group conducts "Assessment for Design for the Environment" at the design and development stage in order to manufacture products with superior power-saving and resource-saving characteristics as compared to existing products.

In providing products and services to customers, we try to contribute to creating a low-carbon society by proposing environmentally conscious products.

Major Eco-Products in fiscal 2015

Note : Specifications and appearance are subject to change for improvement purposes without notice.

Realizing high throughput

■ Batch Thermal Process System

To meet the market needs for lower Cost of Ownership (CoO)* and higher process quality for next-generation devices, a new eco-friendly batch thermal process system has been developed. The new system realizes high-quality batch thermal processing by further enhancing the already high productivity and high reliability, which are the major advantages of the vertical system, and by applying a new film-forming technology.

While maintaining a footprint (the area occupied by a machine) equal to that of the conventional vertical system, this new system has increased the throughput (number of wafers that the system can process within a given amount of time) by about 30% and has significantly reduced power consumption per wafer. It has done this by adopting a long, high-speed temperature control furnace and wafer buffer shelf to increase the maximum throughput as well as a high-speed wafer transfer robot to shorten the wafer transfer time.

Compared with the conventional vertical system (QUIXACE-Ultimate, released in fiscal 2010), this new system reduces CO_2 emissions by 21%.

* Cost of Ownership (CoO) : All costs necessary for introduction, operation and management of a system

Batch Thermal Process System

Realizing full HD with low power consumption

■ "HC-IP3100HD" Electric Network Dome Camera for Outdoor Use

The HC-IP3100HD is a surveillance camera equipped with an electric zoom lens, an electric camera platform, and a live full-HD image transmission function to meet the needs of the surveillance video market for image signal digitization and full HD (1920 x 1080) compatibility.

While maintaining the same size as the existing camera, the HC-IP3100HD achieves high resolution by digital image processing. Moreover, thanks to the power-saving technology incorporated in the electric camera platform, the HC-IP3100HD reduces power consumption so that it can be powered through a LAN cable with PoE+* technology (IEEE802.3at compliant).

Compared with the conventional dome camera (HC-350, released in 2005), the HC-IP3100HD reduces CO2 emissions by 58%.

* PoE+ : Standards for PoE (Power over Ethernet, a technology that uses the power inside the LAN cable to power up the device) set by the Institute of Electrical and Electronics Engineers (IEEE)

HC-IP3100HD

Proper Management of Chemical Substances Contained in Products at Overseas Production Site

To respond to global manufacturing needs, Hitachi Kokusai Linear Equipamentos Eletrônicos S/A (HKL) has established a manufacturing system fully compliant with the EU RoHS Directive ("RoHS").

Since HKL did not manufacture RoHS-compliant products in the past, the company had no know-how, so it built a RoHS-compliant manufacturing system from scratch.

The work done to establish a RoHS-compliant manufacturing system included: separating component storage areas for RoHS-compliant components and non-compliant components and work areas, establishing an RoHS-compliant supply chain, reviewing the manufacturing process, preparing dedicated RoHS-compliant production equipment including machine tools, making preparations for the use of lead-free solders, and providing training to workers.

A local leader giving training to a worker