

Accelerating Activities and Placing Maximum Priority on the Natural and Social Environments

Looking to Coexistence in the Future, with Focusing on Five Concepts

The Vending Systems Division is working to develop products based on five key development themes: "Creating environment-friendly products," "Creating products that meet consumer needs," "Creating products that are easy to use," and "Reducing life cycle cost" and "contributing to society." At present, our top priority is to accelerate various environmental activities to ensure the continued coexistence in the future of vending machines on the one hand and the natural and social environments on the other and to deliver products that will delight customers.

An overview of key activities and environmental accomplishments follows.

■ Activities to Reduce Substances Having an Adverse Impact on the Environment

Sanden was the first in the vending machine industry to take steps to reduce the use of hazardous substances, pushing forward with the development of substitutes for insulation and refrigerants containing CFCs, the complete elimination of the use of packing materials that contain polyvinyl chloride (PVC), and other activities.

In fiscal 2006, specific activities included an aggressive response to meeting requirements under RoHS restrictions, the development of volume production technology for non-CFC refrigerant vending machines making use of a safe CO₂ coolant and its application in the production of large and medium-sized soft drinking vending machines, the product zone where demand is highest.

Among other noteworthy developments, we moved to volume manufacture of products incorporating LED light sources, reduced the use and disposal of mercury, and succeeded in reducing energy use (by approximately 10% across all lines of general-purpose products).

■ Energy Saving Activities (Heat Pump Systems)

Thus far, the technologies we have drawn on to reduce energy consumption in vending machines have focused on systems capable of self-instruction to control the internal fans depending on the number of products sold from the vending machines; improvements in insulation, including vacuum insulation materials; and reduction in electric power use through the installation of electric power saving parts.

As a consequence of the use of these technologies, equipment produced in 2003 used about one-half the electric power of that used by 1998 equipment. In fiscal 2006, we set goals for a further major reduction in electric power. To meet these objectives, we developed heat pump technology making use of a CO₂ coolant and introduced it to the market.

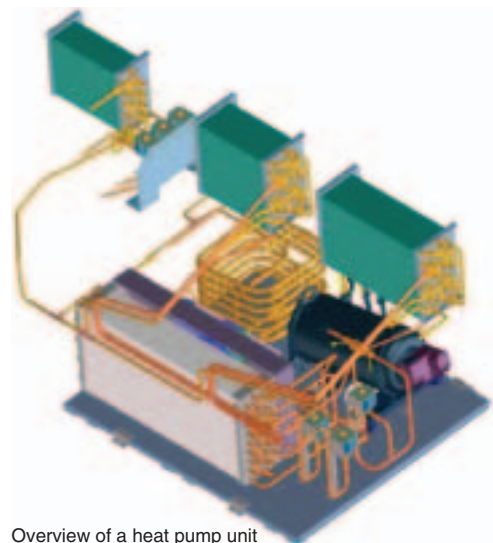
Some of the features of products incorporating this heat pump technology are

- (1) All heated sections of vending machines benefit from the use of heat pump technology, and it is relatively easy to gain benefits in the form of energy saving over the full course of the year.
- (2) Since these systems use heat efficiently, the loss of heat is relatively small
- (3) Since these systems make use of a CO₂ coolant, they are environmentally friendly (helping to limit global warming and reducing emissions of ozone-depleting substances).
- (4) Since they use CO₂ as a refrigerant, there is no danger of explosion.

Through the application of this technology, the vending machines developed in fiscal 2006 that incorporate heat pumps used less than one-third of the electric power that comparable 1998 units consumed.

Looking ahead, we plan to strengthen and expand the lineup of products incorporating heat pump systems, reduce energy consumption across all our product lines, thereby helping to prevent global warming and reduce the cost burden on our customers.

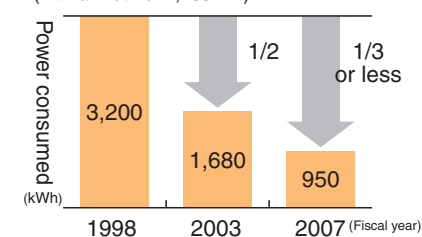
In addition, going forward, we will combine heat pump systems with LED and other technologies to take further steps toward reducing energy consumption in our products.



Overview of a heat pump unit

Reduction in Power Consumption

● Trends in power consumed by 30 sere (with a width of 1,159mm)



The "25th National Urban Greenery Fair" is scheduled to be held from March 29, 2008, to June 8, 2008, and the "Flower and Green Symphony Gunma 2008" will be held in Gunma Prefecture. Also, since the Sanden Forest will be one of the satellite locations for this event, we have created vending machines for this occasion that incorporate environmentally friendly heat pump systems. The fair's logo and image character have been incorporated into the design of the vending machines.