

IV. Environmental management system

Acquisition and utilization of ISO 14001 certification

Environmental action targets

- Acquisition of ISO 14001 certification at all domestic YKK Group companies by the end of fiscal 2003
- Acquisition of ISO 14001 certification completed at major production bases of the world by the end of fiscal 2003

◆ Targets and results for fiscal 2000

Targets		Results (year/month acquired)
Acquisition of certification	● YKK Corporation Tohoku plant	June 2000
	● YKK Corporation Research and Development Dept.	April 2001
	● YKK Corporation Kurobe plant 50 Building, pilot building	December 2000
	● YKK Architectural Products, Inc. R&D Center	December 2000
	● YKK Hong Kong company Tuen Mun plant	October 2000
	● YKK Germany Wenkbach plant	January 2001
	● YKK U.K. Runcorn plant	February 2001
	● YKK Indonesia Cibitung PPD plant	March 2001
	● Indonesia YKK Zipper Co., Ltd.	April 2001
Expanded range of certification acquisition	● YKK Corporation Fastening Kurobe plant	August 2000

○ Philosophy of ISO 14001 certification acquisition

ISO 14001 (environmental management system) certification is an absolute requirement for global businesses. We are working on acquiring certification to reach our targets through environment improvement activities in our business operations.

○ Results for fiscal 2000

In fiscal 2000, we acquired certification at a further 10 bases (including 5 overseas plants) more or less according to plan, giving a total of 15 bases to date. In that year, we also acquired certification for offices and development bases.

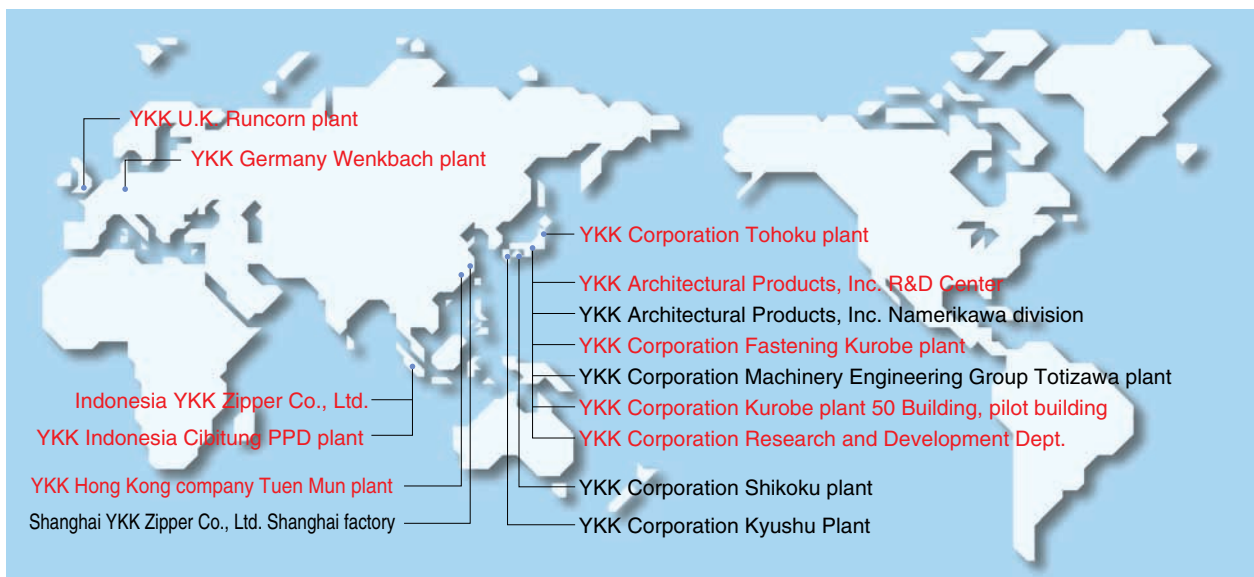
Employee's awareness of the environment was enhanced

at the sites acquiring certification, and the environment was improved with the participation of the entire staff.

We were also able to improve communication with the government and our suppliers.

○ Future initiatives

YKK hopes to acquire certification for all domestic operations in the YKK Group sphere, including sales and service operations, by the end of fiscal 2003. We shall continue to work toward acquiring certification for our overseas operations according to plan.



Sites acquiring certification in fiscal 2000 appear in red.

Group internal environmental inspection

Environmental action targets

● Internal environmental auditing at all major bases the world over

◆ Targets and results for fiscal 2000

Targets	Results
Internal environmental auditing	Domestic: Implemented at Fastening Products division of Kurobe plant Overseas: Implemented at plants in Taiwan, Spain and Turkey
Addition of environmental risk to environmental auditing items	Added

○ Philosophy of internal auditing

Group internal auditing has been conducted since 1994, and is now approaching its seventh year. Conducted by in-house experts, internal environmental auditing is carried out to provide advice, counsel and support to bolster adherence to regulations and improve environmental performance for the group as a whole.

Voluntary internal environmental auditing is conducted at major plants and places of business in accordance with group internal environmental auditing items.

Internal environmental auditing has been conducted at overseas plants as well since 1997. Experts from Japan conduct the same type of auditing as is used in Japan at overseas plants to improve environmental performance of the group as a whole.

○ Results for fiscal 2000

In fiscal 2000, items for determining and coping with environmental risk were added, and auditing is conducted to prevent accidents involving the environment. The results are reported to the environmental policy committee, and the information is used for reviewing group environmental activities.

○ Future initiatives

Internal environmental auditing has so far been conducted at 11 plants in 8 countries: Indonesia, Germany, the United States, China, Italy, Taiwan, Spain and Turkey. The company plans to continue to improve the group's environmental performance by carrying out internal auditing at bases all over the world.



Internal auditing at plant in Spain

◆ Group internal environmental inspection items

Activities concerning group environmental direction, environmental action targets, and environmental policy	● Environmental direction ● Items based on YKK Group environmental action targets			
	Ozone layer protection Energy conservation Reduction and recycling of industrial waste Reduction and recycling of common waste Reduction of packaging materials Transportation measures	Social activities Environmental conservation Disaster prevention Environmental ISO Environmental business Green purchase		
Observation of environmental laws and regulations	Complaints Pollution Makeup Law Water pollution laws /regulations Air pollution laws /regulations Noise regulations	Vibration regulations Foul odor prevention laws/regulations Waste disposal laws Law Concerning the Rational Use of Energy Factory Grounds Law	Septic Tank Law High Pressure Gas Safety Law Fire prevention laws/regulations (dangerous substances) Fire prevention laws/regulations (fire-fighting equipment) Poisonous and Deleterious Substances Control Law	
	Environmental risk management	Recognition and coping with environmental risk		

Environmental accounting

Environmental action targets

● Environmental accounting system

◆ Targets and results for fiscal 2000

Targets	Results
Implementation of environmental accounting	Start determining results of environmental accounting
Construction of environmental accounting system	Construction of environmental accounting system using purchasing system

○ Significance of implementing environmental accounting

Significance of implementing YKK Group environmental accounting is in the following 2 points:

① Internal function

Functions as environmental management tool for clarifying amount of money invested in environmental activities to make more efficient and effective environmental investments.

② External function

Functions as an environmental communication tool to demonstrate the company's attitude by disclosing environmental accounting data to interested parties.

(From Guidelines for Implementing and Environmental Accounting System [2000 version]).

○ Results for fiscal 2000

Environmental equipment investment, environmental conservation cost and short-term effect have been calculated. Environmental accounting standards conform to Guidelines for Implementing and Environmental Accounting System [2000 version] put out by the Japanese Ministry of the Environment, May 2000.

We also constructed an environmental accounting system that uses a purchasing system and automatically totals environmental equipment investment and environmental conservation cost.

○ Results of environmental accounting for fiscal 2000

◆ Fiscal 2000 environmental conservation cost (limited to domestic YKK Group) (Unit: ¥1 million/year)

Item	Equipment investment	Cost
Cost within business area	Prevention of pollution	961
	Conservation of the global environment	676
	Recycling of resources	849
	Subtotal	2,486
Upstream/downstream cost	241	136
Management activities cost	628	0
R&D cost	663	0
Social activities cost	10	0
Environmental damage cost	0	0
Other costs	2	0
Total	1,345	4,030

Environmental equipment investment			Environmental expenses		Sales (Unit: ¥100 million)	Total equipment- investment (Unit: ¥100 million)
(Unit: ¥100 million)	Sales ratio (%)	Equipment investment ratio (%)	(Unit: ¥100 million)	Sales ratio (%)		
13.5	0.3	4.4	40.3	1.0	4,056	307

○ Effect

◆ Substantial effect of major domestic environmental activities for fiscal 2000

Environmental-investment items	Environmental investment (unit: ¥1 million)	Effective amount (unit: ¥1 million/year)	Description (Countermeasures, comparison with current status, calculated effect, etc.)
Energy conservation	347	109	Production process improvement, introduction of high-efficiency equipment, effect of switching computer server, etc.
Used paper collection	0	18	Effect is calculated from expense of incinerating recovery increase.
Measures for coping with waste	119	8	Effect of thermal recycling of waste plastic for cement.
Transportation measures	0	568	Effect of reducing the amount of trucks used by using regional ports and joint transportation.
Reduction of packaging materials	4	52	No frame packaging

◆ Effect of environmental conservation for fiscal 2000

Items	Stress on the environment (tons/year)					Environmental performance improvement rate (EE value) *2 (tons/¥100 million)
	Results for 1999 (tons/year)	2000 conversion *1 (tons/year)	Results for 2000 (tons/year)	Increase/decrease (tons/year)	Increase/decrease rate (%)	
CO ₂	321,454	324,154	322,432	-1,722	-0.5	-43.055
NO _x	387	390	386	-4	-1.0	-0.100
SO _x	160	161	173	+12	+7.5	+0.306
BOD	58	58	50	-8	-13.8	-0.212
COD	20	20	21	+1	+5.0	+0.021
Waste landfill	5,378	5,423	5,297	-126	-2.3	-3.154
Substances applicable to PRTR	2,158	2,176	2,026	-150	-6.9	-3.753

※1. 2000 conversion: Calculated by taking sales results of fiscal 1999 and 2000 into account based on results of stress placed on the environment for fiscal 1999.

2000 conversion = results of stress placed on the environment for fiscal 1999 multiplied by sales results of fiscal 2000 divided by sales results of fiscal 1999.

※2. Environmental performance improvement rate (EE value): Expresses whether or not stress placed on the environment is reduced (or increased) per ¥100 million of environmental conservation cost.

EE value = increase/decrease divided by environmental conservation cost (4 billion for fiscal 2000)
The larger the negative number is, the greater environmental performance was improved.

○ Future initiatives

◆ Start using environmental accounting system

We began using the environmental accounting system in April 2001, thus enabling automatic totaling of environmental conservation cost. In the future, we will begin working on a method of totaling personnel cost and depreciation that cannot be automatically totaled by the system..

◆ Complete internal function (environmental management tool)

Improved environmental performance rate (EE value) is indicated for several items herein. It cannot be determined whether this is favorable or not by looking at the figures for a single year only, so we must continue to track change over the years in the future as well.

◆ Complete external function (communication tool)

According to the Environmental Accounting Guidebook II put out by the Japanese Ministry of the Environment in March 2001, calculating economic effect of environmental investment currently calculated independently by each company (estimated effect of profit contribution, estimated effect of avoiding risk) needs to be changed to a method of calculating effect of a uniform monetary unit from the standpoint of possibility of comparison with other companies.

The YKK Group does not currently calculate these estimated effects, but will begin working on this in order to continue effective environmental activities.