

IX • Environmental stress data for each site

Kurobe plant

200 Yoshida Kurobe-city, Toyama 938-8601
Tel: 0765-54-8000

● Property area	1,017,000 m ²
● Total floor area of building	814,000 m ²
● Use district	Industrial area
● Type of business	Fastening products manufacturing, building material products manufacturing, manufacturing of precision machinery, equipment and dies
● No. of employees	4,548
● Energy management specified plant	Type I heat management, Type I electricity management
● Electrical power consumption	182,852,000 kWh/year
● Fuel consumption (crude conversion)	22,720 kℓ/year
● Water consumption	9,773,000 m ³ /year
● Wastewater discharge destination	River
● Leakage/outflow accidents	None

Kurobe Ekko plant

9425 Yoshida Kurobe-city, Toyama 938-8603
Tel: 0765-57-0815

● Property area	221,000 m ²
● Total floor area of building	154,000 m ²
● Use district	Industrial area
● Type of business	Manufacture of building material parts, Manufacture of rain shutters
● No. of employees	680
● Energy management specified plant	Type I heat management, Type I electricity management*1
● Electrical power consumption	30,851,000 kWh/year
● Fuel consumption (crude conversion)	933 kℓ/year
● Water consumption	719,000 m ³ /year
● Wastewater discharge destination	Sea
● Leakage/outflow accidents	None

*1: Based on Kurobe plant management, energy management designation plant designated as Kurobe plant because power received from Kurobe plant's power reception/transformer equipment.

Kurobe Makino plant

936 Makino Kurobe-city, Toyama 938-8602
Tel: 0765-54-1100

● Property area	104,000 m ²
● Total floor area of building	53,000 m ²
● Use district	Industrial area
● Type of business	Fastening products manufacturing, building material products extrusion die machining
● No. of employees	193
● Energy management specified plant	Type I electricity management
● Electrical power consumption	31,250,000 kWh/year
● Fuel consumption (crude conversion)	833 kℓ/year
● Water consumption	889,000 m ³ /year
● Wastewater discharge destination	River
● Leakage/outflow accidents	None

Kurobe Ogyu plant

1, Ogyu Kurobe-city, Toyama 938-8604
Tel: 0765-57-2051

● Property area	337,000 m ²
● Total floor area of building	126,000 m ²
● Use district	Not specified
● Type of business	Building material products machining/assembly
● No. of employees	685
● Energy management specified plant	Type I electricity management
● Electrical power consumption	12,125,000 kWh/year
● Fuel consumption (crude conversion)	402 kℓ/year
● Water consumption	206,000 m ³ /year
● Wastewater discharge destination	River
● Leakage/outflow accidents	None

Mini site report

In order to reduce discharge of volatile organic compounds (VOC), we introduced paint exhaust treatment equipment in November 2001. The equipment concentrates of 4 painting machines and burns organic compounds at a high temperature of 800(C.

Whereas exhaust capacity to the atmosphere is 20 mg-Nm³ (existing state law), our measurement value is 9.59 mg-Nm³, a good result.



YKK ITALIA SPA Vercelli plant

● Date of ISO14001 certification acquired	March 2002
● Property area	138,000 m ²
● Total floor area of building	53,000 m ²
● Type of business	Fastener manufacturing
● No. of employees	219
● Electrical power consumption	9,315,000 kWh/year
● Fuel consumption (crude conversion)	3,041 kℓ/year
● Water consumption	463,000 m ³ /year
● Wastewater discharge destination	Sewerage system
● Leakage/outflow accidents	None

Toyama Mizuhashi plant

15-21 Mizuhashiichidabukuro Toyama-city, Toyama 939-3555
Tel: 076-479-2110

● Property area	34,000 m ²
● Total floor area of building	20,000 m ²
● Use district	Semi-industrial area
● Type of business	Wooden building material products machining
● No. of employees	64
● Energy management specified plant	Does not apply
● Electrical power consumption	1,967,000 kWh/year
● Fuel consumption (crude conversion)	93 kℓ/year
● Water consumption	3,000 m ³ /year
● Wastewater discharge destination	Sewerage system
● Leakage/outflow accidents	None

YKK Sendai Institute of Material Science and Technology

9-5-1 Narita Tomiya-cho Kurokawa-gun, Miyagi 981-3341
Tel: 022-351-5500

● Property area	15,000 m ²
● Total floor area of building	4,000 m ²
● Use district	Industrial area
● Type of business	Research and development
● No. of employees	16
● Energy management specified plant	Does not apply
● Electrical power consumption	1,007,000 kWh/year
● Fuel consumption (crude conversion)	9 kℓ/year
● Water consumption	2,000 m ³ /year
● Wastewater discharge destination	Sewerage system
● Leakage/outflow accidents	None

Hokkaido plant

1-22-33 Shinko-minami Ishikari-city, Hokkaido 061-3296
Tel: 0133-64-4134

● Property area	63,000 m ²
● Total floor area of building	22,000 m ²
● Use district	Industrial area
● Type of business	Building material products
● No. of employees	141
● Energy management specified plant	Does not apply
● Electrical power consumption	3,079,000 kWh/year
● Fuel consumption (crude conversion)	160 kℓ/year
● Water consumption	8,000 m ³ /year
● Wastewater discharge destination	Sewerage system
● Leakage/outflow accidents	None

Tohoku plant

1, Sanbongiyoshida Sanbongi-cho Shida-gun, Miyagi 989-6392
Tel: 0229-52-3500

● Property area	729,000 m ²
● Total floor area of building	324,000 m ²
● Use district	Industrial area
● Type of business	Building material products
● No. of employees	1,438
● Energy management specified plant	Type I electricity management, Type I heat management
● Electrical power consumption	75,968,000 kWh/year
● Fuel consumption (crude conversion)	6,887 kℓ/year
● Water consumption	3,836,000 m ³ /year
● Wastewater discharge destination	River
● Leakage/outflow accidents	None

Mini site report

Approximately 95 percent of Egypt is desert. The population of approximately 70 million people are concentrated in the remaining 5 percent along the Nile River. The Egyptian government is actively promoting desert reclamation projects to distribute the population and increase production of food.

YKK Egypt is working on growing trees and plants on the plant grounds and is maintaining the green zone outside the plant provided by the municipal authorities and is giving a lot of attention to management. YKK Egypt is one of the plants in the Terrace of Ramadan Industrial Park with the most greenery.

The company will continue to plan tree-planting tours for employees so we can help out Egypt with its desert reclamation project.



YKK Egypt Terrace of Ramadan

● Date of ISO14001 certification acquired	December 2001
● Property area	17,000 m ²
● Total floor area of building	6,000 m ²
● Type of business	Faster manufacturing
● No. of employees	76
● Electrical power consumption	859,000 kWh/year
● Fuel consumption (crude conversion)	1,301 kℓ/year
● Water consumption	55,000 m ³ /year
● Wastewater discharge destination	Sewerage system
● Leakage/outflow accidents	None

Shikoku plant

4000 Yoshida Utazu-cho Ayauta-gun, Kagawa 769-0293

Tel: 0877-46-8014

●Property area	330,000 m ²
●Total floor area of building	152,000 m ²
●Use district	Industrial area
●Type of business	Building material products
●No. of employees	806
●Energy management specified plant	Type I electricity management, Type I heat management
●Electrical power consumption	57,246,000 kWh/year
●Fuel consumption (crude conversion)	12,103 kℓ/year
●Water consumption	1,485,000 m ³ /year
●Wastewater discharge destination	Sea
●Leakage/outflow accidents	None

Kyushu plant

1-10 Shinminato-cho Yatsushiro-city, Kumamoto 866-8511

Tel: 0965-37-1111

●Property area	342,000 m ²
●Total floor area of building	205,000 m ²
●Use district	Industrial area
●Type of business	Building material products
●No. of employees	927
●Energy management specified plant	Type I electricity management, Type I heat management
●Electrical power consumption	60,675,000 kWh/year
●Fuel consumption (crude conversion)	13,554 kℓ/year
●Water consumption	2,081,000 m ³ /year
●Wastewater discharge destination	Sea
●Leakage/outflow accidents	None

Namerikawa plant

TEL:076-477-2300

3003 Sugimoto Namerikawa-city,
Toyama 936-8520

YKK AP Namerikawa plant

TEL:076-477-2000

●Property area	667,000 m ²	●Property area	667,000 m ²
●Total floor area of building	189,000 m ²	●Total floor area of building	189,000 m ²
●Use district	Unspecified	●Use district	Unspecified
●Waste water discharge destination	River	●Waste water discharge destination	River
●Type of business	Building material product machining/assembly	●Type of business	Manufacturing group support management, order receiving management, building materials manufacturing
●No. of employee	350	●No. of employee	538
●Energy management specified plant	Type II electricity management	●Energy management specified plant	Type II electricity management
●Electric power consumption	8,457,000 kWh/year	●Electric power consumption	5,536,000 kWh/year
●Fuel consumption (crude conversion)	340 kℓ/year	●Fuel consumption (crude conversion)	390 kℓ/year
●Water consumption	123,000 m ³ /year	●Water consumption	130,000 m ³ /year
●Leakage /outflow accidents	None	●Leakage /outflow accidents	None

Mini site report

We have installed a new spray booth to prevent toxic substances (organic solvents) from contaminating the environment outside the booth.

Installation of oil pan in paint storage and mixing rooms

Introduction of exhaust equipment and antistatic floor treatment

Installation of control BOX via explosion-proof wall

Installation of thinner recovery equipment

These measures have been taken to avoid environmental risk, implement management

by voluntary standards stricter than the environmental regulations in effect in

Germany, and to improve the working environment for workers.



YKK Germany Wenkbach plant

●Date of ISO14001 certification acquired	January 2001
●Property area	56,000 m ²
●Total floor area of building	20,000 m ²
●Type of business	Faster manufacturing
●No. of employees	171
●Electrical power consumption	4,621,000 kWh/year
●Fuel consumption (crude conversion)	744 kℓ/year
●Water consumption	87,000 m ³ /year
●Wastewater discharge destination	Sewerage system
●Leakage/outflow accidents	None

History of environmental conservation efforts

YKK Group	Events
1970 ● Pollution Council established	1967 ● Basic Law Concerning Measures to Cope with Pollution
1972 ● Introduction of low-sulfur content fuel started Alkaline recovery equipment goes into operation	1971 ● Environment Agency established
1974 ● Sulfuric acid recovery equipment goes into operation Production of sulfuric acid banned from aluminum sludge started	1972 ● Club of Rome "The limit to point" published United Nations Conference on the Human Environment held (Stockholm) Declaration on the Human Environment adopted
1984 ● Award for plant with best energy management (Kurobe plant)	1987 ● Montreal Protocol (on Substances that Deplete the Ozone Layer) adopted
1988 ● Co-generation goes into operation	1988 ● Vienna Convention (for the Protection of the Ozone Layer) goes into effect in Japan
1991 ● Environmental department established	1989 ● Basel Convention (on the Control of Transboundary Movements of Hazardous Wastes and their Disposal) adopted
1992 ● Used paper collection started Yoshida Kogyo Co.,Ltd. environmental charter established Environment Council Seven working group established Production of PET banned from waste plastic started	1990 ● Action plan for prevention of global warming settled upon
1993 ● YKK environmental action plan study started Switch from certain CFCs and trichloroethane started Clean initiative started (cleanup around plant) YKK Group Environmental Facilities Committee established	1991 ● Keidanren Global Environment Charter settled upon Law for Promotion of Use and Recycling of Resources enacted
1994 ● YKK Group Environment Council established YKK Corporation internal environmental inspection started YKK Group Environmental Declaration (group charter established) YKK Group environmental action targets set	1992 ● The Earth Summit held (Rio de Janeiro)
1996 ● Voluntary plan submitted to the Ministry of International Trade and Industry	1993 ● The Basic Environment Law enacted
1997 ● Green purchase started Recycled slide fastener (NATULON®) "eco mark" acquired	1995 ● Containers and Packaging Recycling Law enacted The 1st Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP1, Berlin) held
1998 ● ISO14001 certification acquired	1996 ● ISO14000 series issued JISQ14000 series issued The 2nd Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP2, Geneva) held
1999 ● Name changed to YKK Group Environmental Policy Committee Environmental leaflet published ISO14001 certification acquired (2 domestic bases, 1 overseas base) Recyclable uniform "eco mark" acquired	1997 ● Waste Management Law revised The 3rd Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP3, Kyoto) held
2000 ● Environmental report published Building Materials Environmental Committee established ISO 14001 certification acquired (4 domestic bases, 1 range expansion base, 1 overseas base) Solar products (Street light) "eco mark" acquired Garbage recycling begun Product assessment carries out Environmental label established Environmental accounting system devised and implemented Kyushu plant achieves zero emission Shikoku plant achieves zero emission of ordinary waste	1998 ● Law Concerning the Rational Use of Energy revised Law for Recycling of Specified Kinds of Home Appliances enacted Law Concerning the Promotion of the Measures to Cope with Global Warming enacted The 4th Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP4, Buenos Aires) held
2001 ● Kurobe Manufacturing Center achieves zero emission of ordinary waste LCA assessment carried out ISO 14001 certification acquired (1 domestic base, 2 range expansion bases, 12 overseas bases)	1999 ● ISO/TC207 7th Seoul General Assembly Law Concerning Special Measures against Dioxins enacted Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management (PRTR Law) enacted The 5th Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP5, Bonn) held
2002 ● Architectural Products division publishes "Eco Message 2002" PVC sash material label ISO14001 certification acquired (2 overseas bases)	2000 ● Range of application of Law for Promotion of Sorted Collection and Recycling of Containers and Packaging Law on Promoting Green Purchasing enacted Building Materials Recycling Law enacted Basic Law for Promoting Formation of Recycling-Oriented Society enacted Law for Promoting Effective Use of Resources (Revised Recycling Law) enacted Food Waste Recycling Law enacted The 6th Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP6, Hague) held Wastes Disposal Law revised
	2001 ● Ministry of the Environment inaugurated Sash Industry Voluntary Environmental Action Plan published CFCs Recovery and Destruction Law enacted PCB Law enacted The 7th Session of the United Nations Framework Convention on Climate Change Conference of the Parties (COP7, Marrakech) held
	2002 ● New global warming network decided