

EAST ASIA

SHANGHAI YKK ZIPPER CO., LTD.

Country:	CHINA
Location:	Shanghai
Business area(s):	Fastener manufacture
Number of employees:	2,500
Land area:	105,600 m ²
Total built area:	96,900 m ²
ISO 14001 certification date:	Jul. 3, 2002

< 2007 fiscal year environmental impact data >

Amount of electric power used	35,460,000 kWh
Amount of fossil fuel used	103,961 GJ
Amount of CO ₂ emitted	20,510 t
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Total amount of waste products emitted	2,435 t
Amount of recycled material	2,347 t
Recycling rate	96.4%
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Amount of copy paper used	49.2 t
Amount of water used	787,700 m ³

Water discharge standards	Unit	Legal standards	Applicable standards	Measured values
BOD	mg/l	30	30	4
COD	mg/l	100	80	33
SS	mg/l	150	50	31
Oil	mg/l	10	10	0.3
pH	-	6-9	6.5-8.5	7.3
Cyanide (CN)	mg/l	0.5	0.25	0.044
Hexavalent chromium (Cr VI)	mg/l	0.5	0.1	0.005
Copper (Cu)	mg/l	1	0.4	0.220
Nickel (Ni)	mg/l	1	0.5	0.073
Zinc (Zn)	mg/l	4	0.5	0.075
Water discharge destination	Sewers			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We recover 70% of the wastewater from fastener plating and reuse it in the plating process.
- As a signee of the Shanghai Economic and Technological Development Zone's Common Environmental Action Declaration, we actively participate in tours, training programs, environmental technology exchange meetings, obligatory tree-plantings and other activities sponsored by the development zone.

YKK HONG KONG LTD.

Country:	HONG KONG
Location:	Tuen Mun
Business area(s):	Fastener manufacture
Number of employees:	542
Land area:	14,400 m ²
Total built area:	143,000 m ²
ISO 14001 certification date:	Nov. 16, 2000

< 2007 fiscal year environmental impact data >

Amount of electric power used	12,300,000 kWh
Amount of fossil fuel used	40,191 GJ
Amount of CO ₂ emitted	7,339 t

Total amount of waste products emitted	1,028 t
Amount of recycled material	792 t
Recycling rate	77.1%

Amount of copy paper used	16.8 t
Amount of water used	170,100 m ³

Water discharge standards	Unit	Accepted standards	Measured values
BOD	mg/l	800	140
COD	mg/l	2000	668
SS	mg/l	800	9
pH	-	6-10	8.79
Water discharge destination	Public sewers		

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We installed a chemical recycling system and reduced the amount of chemicals used in the metal fastener process by 40%.
- By consolidating compressors, re-adjusting the lighting system, shortening the dyeing process and other such means, we were able to reduce the amount of energy used by 10%.
- Our employees participated in the Hong Kong-Shenzhen Western Corridor “Walk for Millions” to raise funds for the Community Chest of Hong Kong’s “Children and Youth Services.”

EAST ASIA

DALIAN YKK ZIPPER CO., LTD.

Country:	CHINA
Location:	Dalian
Business area(s):	Fastener manufacture
Number of employees:	1,165
Land area:	147,700 m ²
Total built area:	142,500 m ²
ISO 14001 certification date:	Jul. 11, 2001

< 2007 fiscal year environmental impact data >

Amount of electric power used	27,840,000 kWh
Amount of fossil fuel used	83,219 GJ
Amount of CO ₂ emitted	18,010 t
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Total amount of waste products emitted	899 t
Amount of recycled material	703 t
Recycling rate	78.1%
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Amount of copy paper used	17.8 t
Amount of water used	516,800 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
COD	mg/l	500	350	100
SS	mg/l	400	280	1
Oil	mg/l	100	70	2.3
pH	-	6.0-9.0	6.0-9.0	7.61
Cyanide (CN)	mg/l	0.5	0.5	Undetected
Nitrogen (N)	mg/l	35	25	6.3
Copper (Cu)	mg/l	2	1	Undetected
Nickel (Ni)	mg/l	1	1	0.03
Zinc (Zn)	mg/l	5	4	0.02
Water discharge destination	Sewers			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We installed a vacuum thermal recycling system which enabled us to recover 90% of the cleaning thinner used.
- We installed recepticals of different colors for the different types of waste to make it easier to separate the waste.

EAST ASIA

YKK TAIWAN CO., LTD.

Country: TAIWAN
 Location: Chung Li
 Business area(s): Fastener manufacture
 Number of employees: 1,065
 Land area: 79,100 m²
 Total built area: 121,500 m²
 ISO 14001 certification date: Jan. 7, 2002

< 2007 fiscal year environmental impact data >

Amount of electric power used	37,498,000 kWh
Amount of fossil fuel used	123,633 GJ
Amount of CO ₂ emitted	34,270 t
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Total amount of waste products emitted	3,669 t
Amount of recycled material	3,131 t
Recycling rate	85.3%
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Amount of copy paper used	36.3 t
Amount of water used	1,100,000 m ³

Water discharge standards	Unit	Legal standards	Applicable standards	Measured values
BOD	mg/l	30	30	8.3
COD	mg/l	100	100	78.0
SS	mg/l	30	30	1.7
pH	-	6.0-9.0	6.0-9.0	6.9
Water discharge destination	1st plant: river; 2nd plant: wastewater treatment plant			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We put sludge through chemical and high temperature mixed fermentation processes to recycle it into a garden fertilizer.

EAST ASIA

YKK KOREA CO., LTD.

Country: KOREA
 Location: Pyongtaek
 Business area(s): Fastener manufacture
 Number of employees: 293
 Land area: 45,100 m²
 Total built area: 47,700 m²
 ISO 14001 certification date: Oct. 16, 2002

< 2007 fiscal year environmental impact data >

Amount of electric power used	11,907,000 kWh
Amount of fossil fuel used	39,998 GJ
Amount of CO ₂ emitted	6,562 t
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Total amount of waste products emitted	745 t
Amount of recycled material	664 t
Recycling rate	89.1 %
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Amount of copy paper used	7.5 t
Amount of water used	137,300 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
BOD	mg/l	80	20	11.8
COD	mg/l	90	30	19.3
SS	mg/l	80	20	4.6
pH	-	5.8-8.6	5.8-8.6	7.09
Nitrogen (N)	mg/l	60	60	12.9
Phosphorus (P)	mg/l	8	8	1.24
Water discharge destination	River			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- By installing a wastewater recycling system and reusing it in the dyeing process, we reduced the amount of water used during the dry season. We also cut the amount of final effluents in half.
- We received a commendation from the South Korea Fire and Disaster Chief.
- We conduct ongoing volunteer activities at facilities for handicapped children.
- We participated in cleaning activities at parks and rivers in the region.

EAST ASIA

YKK ZIPPER SHENZHEN CO., LTD. Fuyong Plant

Country: CHINA
 Location: Shenzhen
 Business area(s): Fastener manufacture
 Number of employees: 1,096
 Land area: 105,100 m²
 Total built area: 103,600 m²
 ISO 14001 certification date: Feb. 1, 2003

< 2007 fiscal year environmental impact data >

Amount of electric power used	22,268,000 kWh
Amount of fossil fuel used	155,431 GJ
Amount of CO ₂ emitted	19,039 t
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Total amount of waste products emitted	2,015 t
Amount of recycled material	2,001 t
Recycling rate	99.3%
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Amount of copy paper used	4.4 t
Amount of water used	432,200 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
COD	mg/l	110	90	58.6
SS	mg/l	100	100	1.7
pH	-	6-9	6-9	7.76
Cyanide (CN)	mg/l	0.4	0.4	0.03
Copper (Cu)	mg/l	1.0	0.5	0.11
Nickel (Ni)	mg/l	1.0	1.0	0.03
Zinc (Zn)	mg/l	3.0	2.0	0.06
Water discharge destination	River			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We participated in tree-planting activities at Dashaha Park (April 22, 2007) and Phoenix Mountain (May 27, 2007).

YKK ZIPPER SHENZHEN CO., LTD. Gongming Plant

Country:	CHINA
Location:	Shenzhen
Business area(s):	Fastener manufacture
Number of employees:	1,260
Land area:	94,000 m ²
Total built area:	109,800 m ²
ISO 14001 certification date:	—

< 2007 fiscal year environmental impact data >

Amount of electric power used	22,532,000 kWh
Amount of fossil fuel used	67,950 GJ
Amount of CO ₂ emitted	12,708 t
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Total amount of waste products emitted	535 t
Amount of recycled material	514 t
Recycling rate	96.0%
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Amount of copy paper used	3.0 t
Amount of water used	444,300 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
COD	mg/l	110	90	76.4
Oil	mg/l	8	5	0.4
pH	-	6-9	6-9	7.71
Cyanide (CN)	mg/l	0.4	0.3	0.006
Phosphorus (P)	mg/l	1	1	1.64
Copper (Cu)	mg/l	1	0.5	0.50
Nickel (Ni)	mg/l	1	1	0.15
Zinc (Zn)	mg/l	3	2	0.11
Water discharge destination	River			

● Leaks, discharge accidents, legal violations, etc.

The amount of phosphorus in the wastewater exceeded the standard value in April and May, but it is currently stable.

● Topics

- We participated in “Macau, Hong Kong and Guangdong Safety Awareness” activities in the Bao’an District in June representing the Gongming subdistrict.
- We held the 1st Fire Prevention Athletic Meet at the Gongming plant in November.

EAST ASIA

YKK SNAP FASTENERS ASIA LTD.

Country: CHINA
 Location: Shenzhen
 Business area(s): S&B manufacture
 Number of employees: 360
 Land area: 15,600 m²
 Total built area: 17,400 m²
 ISO 14001 certification date: Aug. 1, 2004

< 2007 fiscal year environmental impact data >

Amount of electric power used	3,811,000 kWh
Amount of fossil fuel used	10,406 GJ
Amount of CO ₂ emitted	2,152 t
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Total amount of waste products emitted	14 t
Amount of recycled material	14 t
Recycling rate	0.0%
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Amount of copy paper used	0.4 t
Amount of water used	57,000 m ³

Water discharge standards	Unit	Legal standards	Applicable standards	Measured values
COD	mg/l	110	110	31
SS	mg/l	100	100	10.4
pH	-	6-9	6-9	8.12
Phosphorus (P)	mg/l	1	1	0.09
Water discharge destination	River			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We switched to energy-saving fluorescent bulbs within the plant.

EAST ASIA

YKK SNAP FASTENERS WUXI CO., LTD.

Country: CHINA
 Location: Wuxi
 Business area(s): S&B manufacture
 Number of employees: 489
 Land area: 59,900 m²
 Total built area: 15,500 m²
 ISO 14001 certification date: Dec. 27, 2006

< 2007 fiscal year environmental impact data >

Amount of electric power used	5,884,000 kWh
Amount of fossil fuel used	10,680 GJ
Amount of CO ₂ emitted	3,186 t
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Total amount of waste products emitted	984 t
Amount of recycled material	22 t
Recycling rate	2.2%
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Amount of copy paper used	4.2 t
Amount of water used	55,500 m ³

Water discharge standards	Unit	Legal standards	Applicable standards	Measured values
COD	mg/l	100	100	54.9
SS	mg/l	70	70	13.5
pH	-	6-9	6-9	6.83
Phosphorus (P)	mg/l	0.5	0.5	0.17
Copper (Cu)	mg/l	0.5	0.5	0.27
Water discharge destination	River			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

We passed the final inspections of the Wuxi Environmental Protection Bureau and the Wuxi New District Environmental Protection Bureau in November 2007 and acquired clean production certification.

(Clean production certification is awarded to businesses that set out to reduce risks in their processes, products and workplaces and are deemed to meet the standards established with respect to management and results.)

EAST ASIA

DALIAN YKK AP CO., LTD.

Country: CHINA
 Location: Dalian
 Business area(s): Resin architectural materials manufacture
 Number of employees: 270
 Land area: 60,000 m²
 Total built area: 25,600 m²
 ISO 14001 certification date: Jun. 2, 2003

< 2007 fiscal year environmental impact data >

Amount of electric power used	7,250,000 kWh
Amount of fossil fuel used	1,950 GJ
Amount of CO ₂ emitted	2,858 t
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Total amount of waste products emitted	1,133 t
Amount of recycled material	1,121 t
Recycling rate	98.9%
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Amount of copy paper used	2.1 t
Amount of water used	37,500 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
COD	mg/l	500	500	220
Oil	mg/l	100	80	3
Phosphorus (P)	mg/l	15	12	1.7
Water discharge destination	Public sewage processing plant			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- Environmental activities were carried out under a different theme every month to raise awareness of environmental issues among employees.

EAST ASIA

YKK TAIWAN CO., LTD. (AP Division)

Country: TAIWAN
 Location: Yangmei
 Business area(s): Aluminum architectural materials manufacture
 Number of employees: 136
 Land area: 11,800 m²
 Total built area: 6,500 m²
 ISO 14001 certification date: Dec. 17, 2002

< 2007 fiscal year environmental impact data >

Amount of electric power used	858,000 kWh
Amount of fossil fuel used	120 GJ
Amount of CO ₂ emitted	330 t
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Total amount of waste products emitted	52 t
Amount of recycled material	33 t
Recycling rate	62.5%
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Amount of copy paper used	0.3 t
Amount of water used	6,100 m ³

Water discharge standards	
	Discharge of only daily use water
Water discharge destination	River

● Leaks, discharge accidents, legal violations, etc.

None

YKK AP SHENZHEN CO., LTD.

Country:	CHINA
Location:	Shenzhen
Business area(s):	Aluminum architectural materials manufacture
Number of employees:	530
Land area:	112,200 m ²
Total built area:	36,300 m ²
ISO 14001 certification date:	Feb. 16, 2005

< 2007 fiscal year environmental impact data >

Amount of electric power used	18,336,000 kWh
Amount of fossil fuel used	81,679 GJ
Amount of CO ₂ emitted	11,845 t
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Total amount of waste products emitted	1,796 t
Amount of recycled material	1,777 t
Recycling rate	98.9%
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Amount of copy paper used	2.6 t
Amount of water used	185,900 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
BOD	mg/l	30	20	5.0
COD	mg/l	150	100	52.2
Oil	mg/l	10	5	0.6
pH	-	6-9	6-9	7.30
Hexavalent chromium (Cr VI)	mg/l	0.5	0.5	0.002
Nickel (Ni)	mg/l	1	1	0.02
Water discharge destination	Industrial water discharge: river; daily use water discharge: industrial park shared water discharge channel			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We have begun 24-hour monitoring of wastewater discharged outside the plant and are 100% compliant with wastewater restrictions.
- In April, we participated in a tree-planting festival in Shenzhen.

EAST ASIA

YKK AP (SUZHOU) CO., LTD.

Country:	CHINA
Location:	Suzhou
Business area(s):	Manufacture of aluminum architectural materials and architectural parts
Number of employees:	1,544
Land area:	396,300 m ²
Total built area:	77,900 m ²
ISO 14001 certification date:	Jun. 30, 2007

< 2007 fiscal year environmental impact data >

Amount of electric power used	12,286,000 kWh
Amount of fossil fuel used	22,052 GJ
Amount of CO ₂ emitted	5,695 t
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Total amount of waste products emitted	1,511 t
Amount of recycled material	1,403 t
Recycling rate	92.9%
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Amount of copy paper used	14.6 t
Amount of water used	129,900 m ³

Water discharge standards	Unit	Legal standards	Voluntary management standards	Measured values
COD	mg/l	500	100	54.3
SS	mg/l	400	70	36.7
Oil	mg/l	20	20	0.9
pH	-	6-9	6-9	7.76
Total chromium (Cr)	mg/l	1.5	1.5	0.07
Nitrogen (N)	mg/l	35	35	1.3
Phosphorus (P)	mg/l	-	8	0.16
Nickel (Ni)	mg/l	1	1	0.11
Water discharge destination	Sewage processing plant in the industrial park			

● Leaks, discharge accidents, legal violations, etc.

None

● Topics

- We acquired ISO 14001 certification in June.
- We participated in the Global Environmental Day event held by the Environmental Protection Bureau of the Suzhou Industrial Park and donated the proceeds from sales of recycled products.
- We were recognized by Suzhou City as a 2007 Recycling-Oriented Economy Experimental Promotion Enterprise.