

## Plants that have completed ISO 14001 certification abroad

		Property area (1000 m <sup>2</sup> )	Total floor area of building (1000 m <sup>2</sup> )	Type of business	No. of employees
[1] North and Central America	YKK (U.S.A.) Inc.	1,226	223	Fasteners, S&B, T&P manufacture	927
	YKK Canada Inc.	57	29	Fasteners, S&B manufacture	175
	YKK AP America Inc.	809	72	Architectural products manufacture	390
[2] South America	YKK Do Brazil Ltda.	247	51	Fasteners, S&B, T&P manufacture	431
[3] East Asia	Shanghai YKK Zipper Co.,Ltd.	61	45	Fasteners manufacture	556
	YKK Hong Kong Ltd.	14	143	Fasteners manufacture	654
	Dalian YKK Zipper Co.,Ltd.	148	69	Fasteners manufacture	408
	YKK Taiwan Co.,Ltd.(Fastening Products Division)	79	111	Fasteners manufacture	871
	YKK Korea Co.,Ltd.	43	31	Fasteners manufacture	304
	YKK Zipper Shenzhen Co.,Ltd.	105	74	Fasteners manufacture	746
	YKK Taiwan Co.,Ltd.(Architectural Products Division)	12	7	Architectural products manufacture	78
[4] South Asia	P.T. YKK Zipper Indonesia	84	33	Fasteners manufacture	864
	P.T. YKK Zipper Indonesia Cibitung PPD plant	11	8	Fabric material for fasteners manufacture	86
	P.T. Zipco Indonesia	159	76	Fasteners and fastener parts manufacture	690
	YKK Singapore Pte. Ltd.	14	12	Fasteners manufacture	218
	YKK (Thailand) Co.,Ltd.	146	30	Fasteners, S&B manufacture	435
	YKK Zipper Philippines Inc.	60	12	Fasteners manufacture	233
	YKK India Pvt.Ltd.	105	28	Fasteners manufacture	319
	P.T. YKK Alumico Indonesia	164	64	Architectural products manufacture	1,137
[5] Europe	YKK (U.K.) Ltd.	74	38	Fasteners manufacture	215
	YKK Stocko Fasteners GmbH.	49	23	S&B manufacture	271
	YKK Deutschland GmbH.	56	20	Fasteners manufacture	180
	YKK France SARL	62	25	Fasteners, T&P manufacture	182
	YKK Italia S.p.A.	138	33	Fasteners manufacture	206
	YKK Espana S.A.	49	10	Fasteners manufacture	252
	YKK Hellas A.E.B.E.	30	3	Fasteners manufacture	36
	YKK Metal ve Plastik Urunleri Sanayi ve Ticaret A.S.	67	23	Fasteners, S&B manufacture	204
	YKK Egypt S.A.E.	17	6	Fasteners manufacture	82
	YKK Southern Africa (Pty) Ltd.	33	18	Fasteners, S&B manufacture	201

S&B manufacture: snaps, buttons, rivets and other metal parts manufacture

T&P manufacture: Hook and Loop Fasteners, fabric tape, buckles and other resin products manufacture

## Site Mini Report

### YKK (U.S.A.) Inc. Macon Plant: Efforts to reduce risks from chemical substances

#### [1] Incorporation of a web-based management system for MSDS

Since 2001, this plant has contracted with an MSDS (material safety data sheet) management company and conducted MSDS management and updating via a web site. With on-site terminals, as well as 24-hour telephone support, employees can get the latest information about harmful substances as soon as they need it and receive emergency support if necessary. Furthermore, organization of troublesome papers is unnecessary.

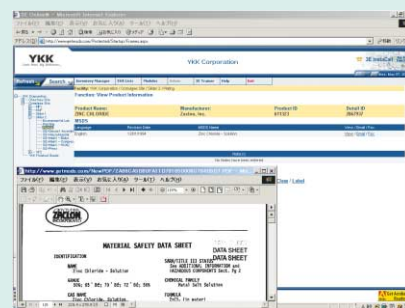
#### [2] Waste minimization plan

The law requires that every year a plan to reduce harmful substances be made and implemented. There are no requirements about the amount of the effect of these plans, but the community expects that businesses will make continuous efforts to reduce the amounts of harmful materials they use.

The Macon Plant has succeeded in reducing the amount of harmful substance discharge, by reducing VOC (volatile organic compounds) use, including discontinuing the use of kerosene in die casting, switching to low mercury fluorescent lights and reusing ethylene glycol, among other efforts.

#### [3] Reducing industrial waste in accordance with ISO 14001

This plant has been following a plan to reduce industrial waste adopted with the introduction of ISO 14001. Achievements to date, include reducing the use of cyanide by eliminating it in zinc plating and introducing a new plating line, reducing the amount of cyanide sludge (about 8 tons per year reduction), eliminating selenium in black dyeing, and reduction of paint booth sludge (booth sludge successfully converted to normal waste through the use of a non-methyl ethyl ketone thinner for washing).



MSDS web-based management system

Power (1000 kWh)	Fuel (kL)	CO <sub>2</sub> (t)	Amount recycled (t)	Amount disposed of (t)	Recycling rate (%)	Amount of paper used (t)	Water consumption (1000 m <sup>3</sup> )	Exhaust water discharge destination	Leakage/outflow accidents
134,155	4,476	57,371	635	245	72	24.7	786	Sewerage system	None
8,539	782	4,672	170	98	63	3.6	78	Sewerage system	None
24,741	3,314	15,729	1,505	568	73	6	241	Sewerage system	None
12,718	1,107	7,612	536	519	51	2.6	248	River	None
13,083	955	7,217	679	19	97	9.5	297	Sewerage system	None
24,190	1,089	11,476	249	23	92	13.3	213	Sewerage system	None
11,758	1,298	7,658	195	32	86	8.7	326	Sewerage system	None
58,242	3,030	29,223	404	1,071	27	19.9	1,000	River	None
6,714	640	4,102	110	169	39	5.2	102	River	None
21,078	1,302	10,978	644	367	64	6.6	369	River	None
422	0	151	5	2	75	0.6	3	River	None
14,392	2,142	9,864	—	—	—	11	301	River	None
6,461	4,937	15,846	0	67	0	1.7	66	River	None
32,652	977	13,684	0	12	0	1.7	279	River	None
5,009	329	2,665	63	19	77	3.7	112	Sewerage system	None
8,233	640	4,689	8	68	11	4.3	223	Sea	None
3,310	292	1,997	62	63	50	2.2	77	River	None
7,753	3,058	10,923	99	75	57	1.9	207	Sewerage system	None
30,672	5,263	21,873	2,680	53	98	6.8	285	River	None
5,003	1,504	5,871	68	347	16	2.4	80	Sewerage system	None
3,837	5,507	12,573	345	110	76	7.7	34	Sewerage system	None
4,380	797	3,442	189	0	100	3.1	86	Sewerage system	None
4,124	861	3,259	52	136	28	3.3	61	Sewerage system	None
8,230	3,125	9,449	480	59	89	—	404	River	None
10,060	638	4,916	261	345	43	6.6	120	River	None
556	105	443	—	—	—	—	5	Sewerage, underground	None
4,235	485	2,523	8	43	17	2.8	219	Sewerage system	None
701	131	610	9	—	—	1.1	44	Sewerage system	None
2,932	495	2,808	37	17	69	1.7	—	Sewerage system	None

\* In fiscal 2002 there were no accidents of leakage or outflow outside these plants.

## Site Mini Report

### Shanghai YKK Zipper Co., Ltd.

#### [1] Installation of die casting zinc dust filtering equipment

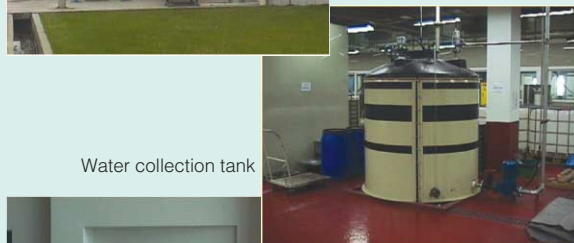
To prevent the emission of zinc dust from die casting chimneys, we installed particle removal equipment with highly effective filters. This system not only improves the work environment of the plant, but also the environment of the area around the plant by reducing the amount of zinc soot and smoke in the air.



Particle filtration equipment

#### [2] Reuse of exhaust water from plating purified water equipment

In the past, water used in the plating process was simply expelled, but now by collecting this water in a tank, it can be reused in the grinding and the degreasing lines. (30 - 50 m<sup>3</sup>/day)



Water collection tank

#### [3] Awarded prize for environmental reliability

In recognition for its environmental improvement efforts, including strictly following all laws and regulations, causing no environmental disasters and reducing waste, the Shanghai Minhang Environmental Protection Agency awarded Shanghai YKK Zipper with a commendation as a business that reliably protects the environment.

