

Mineral Industry Surveys

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TIN IN AUGUST 2002

Domestic consumption of primary tin in August was estimated by the U.S. Geological Survey to be slightly less than that in July and 6% less than that in August 2001. The Platts Metals Week average composite price for tin in August was \$2.80 per pound, a decrease of 9% from that of July, and slightly less than that of August 2001.

In recent years, Rio Tinto plc (formerly known as RTZ Corp.) faced charges that emissions from its former Capper Pass tin smelter in the United Kingdom caused a range of illnesses among former employees and local residents before the plant closed in 1991. An independent claims review board was formed in January 2002 following lengthy negotiations between Rio Tinto and former Capper Pass workers and area residents. The solicitor designated to coordinate the claims of injury has reported that hundreds of families have registered their intention to lodge a claim before the deadline for filing claims in 2003. As of August, however, no claims had been submitted. The Capper Pass smelter was acquired by Rio Tinto in 1967 and was demolished in 1993. After remediation work was completed in May 1995, the company was sold and all Capper Pass assets and liabilities passed to new owners, who changed the company's name to Melton Land Ltd. in 1998. At its peak, the smelter produced up to 15% of the Western World's refined tin requirements. The facility operated as a custom smelter, recovering tin and other metals (including copper, lead, antimony, and precious metals) from low-grade concentrates and residues (Platts Metals Week, 2002).

Malaysia Smelting Corp. (MSC) hopes to maintain steady refined tin production in 2002 at its Penang smelter, but it warned of a possible reduction in 2003 output if low tin prices and Indonesia's ban on ore exports continue. MSC expected to produce about 30,000 metric tons (t) of refined tin in 2002 (Metal Bulletin, 2002a).

China's second largest tin smelter, Liuzhou China Tin Group, expects to cut output by one-half this year. The reduction is in response to the prolonged closure of the group's Gaofeng Mine (Metal Bulletin, 2002b).

About 55% of steel packaging, including tinplate, used in the

European Union (EU) during 2001 was recycled. Recovery levels varied between a high of 88% in Belgium to a low of 25% in Finland. Total EU recovery reached 2.1 million metric tons (Mt), up 15% from the 2000 level (Container Recycling Report, 2002b).

Ball Corp. (Broomfield, CO) announced that it will pay \$885 million to purchase Schmalbach-Lubeca Corp. (Radingen, Germany), thus giving Ball a 33% share in the \$1 billion European can market. The purchase enables Ball to make about seven billion steel cans and 12 billion can ends primarily from tinplate at plants throughout Europe. This places Ball in second place, behind Rexam plc (London) with a 39% market share, and ahead of Crown, Cork and Seal Corp. (Philadelphia, PA) with a 19% market share. Ball also makes about 33 billion cans annually in the United States (Container Recycling Report, 2002b).

A German administrative court has ruled that the federal government exceeded its authority when it required deposits of 25 to 50 cents to be placed on nonreturnable bottles and cans. While the ruling applies to only one German State, the court decision has impeded plans to implement the program. The court said that deposits, which are opposed by German beverage distributors and retailers, could be used if the system were approved by Parliament (Container Recycling Report, 2002a).

NKK Corp. and Kawasaki Steel Corp., Japan's second and third largest steelmakers, respectively, will merge and thereby create the world's fourth largest steel producer. The merger, which will be completed on April 1, 2003, will create a company with the capacity to produce 25 Mt of steel annually. Both pre-merger firms produce tinplate. At present, four companies produce tinplate in Japan. Apart from NKK and Kawasaki, the other producers are Nippon Steel and Toyo Kohan, a subsidiary of Toyo Seikan, which is Japan's largest can maker and packaging company. Unlike the three other companies which supply tinplate to the open market, the tinplate that Toyo Kohan produces is supplied to the company's own domestic can manufacturing operations.

Following the NKK and Kawasaki merger, the new company,

known as JFE Steel, will have three tinplate and three tin-free steel (TFS) lines. Currently, NKK operates one 220,000-metric-ton-per-year (t/yr) electrolytic tinplate line and two 50,000-t/yr TFS lines, giving a combined capacity of 320,000 t/yr. Kawasaki has two tinplate lines and one TFS line. The two tinplate lines have a combined production capacity of 360,000 t/yr. In addition, Kawasaki's TFS production is believed to exceed 110,000 t/yr. In 2002, tinplate and TFS demand in Japan was 1.29 Mt, a drop of 10% from the 1.44 Mt in 2001, owing to the shift in consumption of fruit juices, coffee, and tea drinks in PET bottles replacing steel cans (Tin International, 2002b).

Marlborough Resources NL (Australia) announced an increase in the proven and probable reserves and resources of tin at its Ardlethan Tin Project in central New South Wales. The company found a higher grade of ore in the tailings area it is currently working. Thus, the firm is reporting an increase in proven and probable reserves from 4,400 t of tin as of July 2000 to 13,000 t currently. The company reports that there may be about \$130 million of tin remaining in the Ardlethan tailings

(Tin International, 2002a).

Update

On September 27, 2002, the Platts Metals Week composite price for tin was \$2.95 per pound.

References Cited

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- Metal Bulletin, 2002a, Malaysia Smelting maintains tin production levels: Metal Bulletin, no. 8711, September 30, p. 5.
- Metal Bulletin, 2002b, Mine shortfall halves tin output at Liuzhou: Metal Bulletin, no. 8707, September 16, p. 5.
- Platts Metals Week, 2002, Capper Pass tin review board awaits first claims: Platts Metals Week, v. 73, no. 37, September 16, p. 8.
- Tin International, 2002a, Marlborough ups Ardlethan reserves: Tin International, v. 75, no. 8, October, p. 4.
- Tin International, 2002b, NKK and Kawasaki Steel merger: Tin International, v. 75, no. 8, October, p. 5-8.

TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	2002			
	2001 p/	July	August	January- August
Production, secondary e/ 2/	10,800	900	900	7,200
Consumption:				
Primary	39,300	3,100 r/	3,080	24,800
Secondary	10,500	787	799	6,430
Imports for consumption, metal	37,500	4,060	NA	NA
Exports, metal	4,350	195	NA	NA
Stocks at end of period	7,700	6,590 r/	6,670	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	314.88	308.64	279.74	XX
Metals Week New York dealer	211.48	207.88 r/	185.44	XX
London, standard grade, cash	200.00	196.00 r/	174.00	XX
Kuala Lumpur	200.77	197.98 r/	175.44	XX

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to no more than three significant digits, except prices.

2/ Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

3/ Source: Platts Metals Week.

4/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges, and a risk factor. It is normally substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

Period	High	Low	Average
2001:			
August	285.47	270.73	280.33
September	278.39	262.81	268.50
October	275.81	264.30	270.42
November	301.03	272.87	287.17
December	297.98	283.04	289.64
Year	359.89	262.81	314.88
2002:			
January	287.97	277.20	280.68
February	280.03	267.12	273.15
March	283.34	276.69	278.81
April	291.33	283.90	288.55
May	299.15	290.78	296.72
June	311.49	299.48	304.92
July	316.83	290.53	308.64
August	286.95	272.37	279.74

1/ The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges, and a risk factor. It is normally substantially higher than other tin prices.

Source: Platts Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
2001p/	77,500	1,710,000	8,130	4.8	2,010,000
2001:					
December	3,880	136,000	668	4.9	130,000
2002:					
January	W	187,000	683	3.6	191,000
February	5,330	191,000	640	3.3	152,000
March	4,440	188,000	588	3.1	163,000
April	5,310 r/	173,000 r/	535 r/	3.1 r/	173,000
May	5,290 r/	204,000 r/	757 r/	3.7 r/	178,000
June	5,080 r/	207,000 r/	615 r/	3.0 r/	178,000
July	5,430 r/	210,000 r/	572 r/	2.7 r/	189,000
August	4,980	208,000	598	2.9	NA

p/ Preliminary. r/ Revised. NA Not available. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to no more than three significant digits.

2/ Source: American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS 1/

(Metric tons)

Country or product	2001	2002		
		June	July	January- July
Imports:				
Metal (unwrought tin):				
Bolivia	6,040	301	105	3,300
Brazil	5,510	340	486	2,730
Chile	122	--	--	--
China	6,360	843	1,050	4,340
Hong Kong	20	--	--	--
Indonesia	3,880	80	560	1,180
Malaysia	674	4	40	85
Peru	14,000	1,650	1,790	11,300
Russia	143	20	--	21
Singapore	145	--	--	--
United Kingdom	118	--	--	--
Other	434	28	25	149
Total	37,500	3,270	4,060	23,100
Other (gross weight):				
Alloys	3,830	238	155	2,170
Bars and rods	539	25	11	110
Foil, tubes, pipes	1	--	(2/)	(2/)
Plates, sheets, strip	529	8	20	117
Waste and scrap	3,700	48	81	319
Miscellaneous	13,900	328	420	6,410
Total	22,500	647	687	9,130
Exports (metal)	4,350	221	195	1,620

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1/

(Metric tons of contained tin)

Product	2001 p/	2002							January- August
		July			August				
		Primary	Secondary	Total	Primary	Secondary	Total		
Alloys (miscellaneous) 2/	1,500	131	W	131	133	W	133	962	
Babbitt	316	19	22	41	20	22	42	342	
Bar tin and anodes	248	13	W	13	14	W	14	128	
Bronze and brass	2,640	73	115	188	101	127	228	1,460	
Chemicals	8,020	630	W	630	630	W	630	4,430	
Collapsible tubes and foil	W	W	W	W	W	W	W	W	
Solder	15,700	954	341	1,300	871	341	1,210	8,470	
Tinning	906	34	--	34	34	--	34	239	
Tinplate 3/	8,130	572 r/	--	572 r/	598	--	598	4,370	
Tin powder	W	W	W	W	W	W	W	W	
White metal 4/	W	W	W	W	W	W	W	W	
Other	1,530	78	9	87	78	9	87	669	
Total reported	38,900	2,500 r/	487	2,990	2,480	499	2,980	21,100	
Estimated undistributed consumption 5/	10,800	600	300	900	600	300	900	6,300	
Grand total	49,700	3,100 r/	787	3,890	3,080	799	3,880	27,400	

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes terne metal.

3/ Includes secondary pig tin and tin components of tinplating chemical solutions.

4/ Includes pewter, britannia metal, and jewelers' metal.

5/ Estimated consumption of plants reporting on an annual basis.