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Mineral Industry Surveys

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TIN IN JUNE 2004

Domestic consumption of primary tin in June was estimated by the U.S. Geological Survey to have increased by 3% as compared with revised May consumption data. June 2004 consumption was 10% greater than that in June 2003. Consumption of primary tin for the first half of 2004 was estimated to have increased 3% over that in the first half of 2003.

The Platts Metals Week average composite price for tin in May was $5.89 per pound, slightly below that in May and 79% above that in June 2003. Prior to June, the tin price had increased significantly in each month of 2004.

Peru remained the dominant source of imports to the United States. Imports of primary tin in the January-May period increased by 4% compared with those for the same period in 2003. This was, in part, caused by a large increase in imports from Indonesia in May.

Tin prices in the second quarter were sustained at the highest levels since 1989, when tin trading resumed on the London Metal Exchange following the "tin crash" that had led to the suspension of the tin contract. Historically, higher tin prices have not always led to outstanding results for tin producers, because few of them have been in a position to take full advantage of higher prices. This has occurred because of production difficulties, competition for raw materials, and the time lag involved in restarting idle capacity. Currently, the most notable exception to this pattern is the Peruvian tin producer, Minsur SA, the world's second largest producer and reportedly the world's lowest-cost tin producer. Minsur has the highest grade tin mine in the world, grading about 5% tin. Minsur has invested heavily in new technology to reduce costs and expand capacity and as a result has greatly benefited from strong tin prices (TIN World, 2004d).

In Bolivia, at the San Bartolome project owned by Coeur d'Alene Mines Corp. (USA), work continued on the final updated feasibility studies, which were scheduled to be completed this summer. Gold and silver products are the primary initial interest. Later, the addition of the tin circuit would allow for the recovery of tin as a significant byproduct. Based on current reserves, the firm estimates that annual mine production could be as high as 900 metric tons per year (t/yr), with 13,600 metric tons of tin recovery possible over the life of the mine. The company believes the project could commence during 2004, with gold and silver production starting in 2006 (TIN World, 2004a).

In Australia, Marlborough Resources NL announced that it had been expanding its exploration at historical tin production sites in New South Wales. Drilling programs were being conducted at the White Crystal deposit at Ardlethan and at North Road. Other work was proceeding in the New England area of New South Wales, especially in Emmaville and Tingha (TIN World, 2004b).

In India, production of tinplate was expected to expand over the next few years as the nation's two tinplate manufacturers attempt to increase output to supply the domestic can making industry. Although consumption of canned goods has remained stable for a number of years, India still imports about 35% of its tinplate requirements, presenting the tinplate producers with an opportunity to increase their domestic sales. The Tinplate Company of India Ltd. (TCIL) had the larger output of India's two tinplate producers, even though the company's installed tinplate production capacity was less than that of the other tinplate plant. Established in 1928, the plant is located near Calcutta in West Bengal and is now part of the diversified Tata business group. TCIL has the capacity to produce about 100,000 t/yr of tinplate and was believed to produce close to that amount. The tinplating line of the State-run Steel Authority of India Ltd. (SAIL), the other tinplate maker, at its Rourkela works in eastern Orissa State had the capacity to produce 150,000 t/yr of tinplate, but owing to black plate supply problems, was only able to produce about 80,000 t/yr of tinplate (TIN World, 2004c).

In Thailand, Thai Tinplate Manufacturing Co. Ltd. (TTP) announced plans to spend $42 million over the next 2 years to add 150,000 t/yr to its capacity in order to capitalize on strong demand. TTP operated three tinning lines at its plant in Samutprakarn, south of Bangkok, and was to begin installing a fourth line to increase the plant's total capacity to 510,000 t/yr, thus making it one of Asia's largest tinplate producers (Metal Bulletin, 2004b).

Arcelor Packaging International (API), headquartered in Brussels, Belgium, is one of the world's largest tinplate producers and was planning a series of investments at its tinplate mill in Florange, France, totaling €30 million ($36 million), coincident with the closure of its tinplate line in Mardyck, France (Metal Bulletin, 2004a).

In China, the Guangzhou Tin Smelter permanently ended its refined tin production owing to State environmental policies that restricted smelting in the Guangzhou region. The smelter had a 4,000-t/yr tin metal production capacity and had been shut since early 2003 owing to weak demand (Platts Metals Week, 2004a).

Hitachi Ltd. (Japan) is the latest Japanese consumer electronics maker to cease using lead-based solder ahead of environmental regulations. Scheduled to be implemented in the European Union by 2006, the regulations will ban the use of toxic materials. Company officials noted that by adding indium to the commonly used tin-silver-copper solder, they achieved satisfactory reliability and workability. Hitachi was to cease using lead-base solders at all of its overseas plants and in procured parts by March 2005. Japan's Mitsui Chemical Inc., Casio Computer Co., and Matsushita Electric Industrial Co. had stopped using lead-based solder by July 2002 (Platts Metals Week, 2004b).

Update

On July 23, 2004, the Platts Metals Week composite price for tin was $5.66 per pound.

References Cited

Metal Bulletin, 2000a, Arcelor Packaging readies customers for 20% price rise: Metal Bulletin, no. 8850, July 12, p. 21.

Metal Bulletin, 2004b, Thai Tinplate to boost capacity: Metal Bulletin, no. 8852, July 22, p. 4.

Platts Metals Week, 2004a, Guangzhou Smelter closes permanently: Platts Metals Week, v.75, no. 28, July 12, p. 2.

Platts Metals Week, 2004b, Hitachi abandons lead-based solders: Platts Metals Week, v. 75, no. 23, June 7, p. 13.

TIN World, 2004a, Feasibility studies at San Bartolome nearing completion: TIN World, no. 5, June/July, p. 4.

TIN World, 2004b, Marlborough expands exploration: TIN World, no. 5, June/July, p. 4.

TIN World, 2004c, The Indian tinplate market: TIN World, no. 5, June/July, p. 8.

TIN World, 2004d, Tin prices sustained at 15 year highs: TIN World, no. 5, June/July, p. 3.

TABLE 1
SALIENT TIN STATISTICS[1]

(Metric tons, unless otherwise noted)

		2004		
	2003[p]	May	June	January-June
Production, secondary[e, 2]	10,800	900	900	5,400
Consumption:				
Primary	35,200	3,190 [r]	3,320	19,000
Secondary	10,800	684	681	4,110
Imports for consumption, metal	37,100	4,820	NA	NA
Exports, metal	3,690	370	NA	NA
Stocks at end of period	6,520	6,000 [r]	5,900	XX
Prices (average cents per pound):[3]				
Metals Week composite[4]	339.84	592.12	589.38	XX
Metals Week New York dealer	218.06	455.12	453.39	XX
London, standard grade, cash	207.00	428.00	417.00	XX
Kuala Lumpur	209.62	420.53	423.82	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
2003:			
June	335.08	324.38	329.44
July	335.48	324.04	331.38
August	339.23	332.37	335.84
September	347.80	336.59	340.70
October	366.28	346.47	359.21
November	373.73	356.40	364.20
December	437.61	378.77	404.65
Year	437.61	303.14	339.84
2004:			
January	439.98	424.94	432.53
February	456.45	429.49	442.15
March	549.13	459.43	495.71
April	596.03	561.93	575.65
May	624.98	575.07	592.12
June	622.44	568.24	589.38

[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, cobbles, etc.) (gross weight)	Tinplate (all forms) Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments[2]
2003p	W	2,500,000	7,750	3.1	2,100,000
2004:					
January	W	210,000	663	3.2	167,000
February	W	200,000	615	3.1	169,000
March	2,720	186,000	558	3.0	188,000
April	W	186,000	614	3.3	168,000
May	W	189,000 r	613 r	3.3	148,000
June	W	186,000	610	3.3	NA

pPreliminary. rRevised. 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	2003p	2004 April	2004 May	2004 January-May
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	124	201	1,860
Brazil	3,000	540	75	1,390
Chile	636	--	100	100
China	4,340	340	253	1,410
Indonesia	3,070	140	2,090	2,590
Japan	136	--	--	180
Malaysia	490	991	792	2,080
Peru	19,100	1,580	940	7,330
Switzerland	(2)	1	--	178
Thailand	--	300	300	300
United Kingdom	143	19	--	40
Other	426 r	16	65	142
Total	37,100	3,750	4,820	17,600
Other (gross weight):				
Alloys	3,820	253	343	1,420
Bars and rods	338	67	67	238
Foil, tubes, pipes	4	1	(2)	2
Plates, sheets, strip	270	38	62	266
Waste and scrap	921	256	42	413
Miscellaneous	2,670	160	213	973
Total	8,030	775	727	3,310
Exports (metal)	3,690	340	370	1,630

pPreliminary. rRevised. -- 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)

		2004						
		May			June			January-
Product	2003[p]	Primary	Secondary	Total	Primary	Secondary	Total	June
Alloys (miscellaneous)[2]	1,820	247	W	247	283	W	283	1,300
Babbitt	235	13	W	13	13	W	13	83
Bar tin and anodes	278	12	W	12	13	W	13	73
Bronze and brass	2,800	102	109	211	103	106	209	1,290
Chemicals	8,410	704	W	704	704	W	704	4,220
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	806	265	1,070	872	265	1,140	6,400
Tinning	450	41	--	41	41	--	41	236
Tinplate[3]	7,800	613 [r]	--	613 [r]	610	--	610	3,670
Tin powder	W	W	--	W	W	--	W	W
White metal[4]	W	W	--	W	W	--	W	W
Other	843	53 [r]	10	63 [r]	79	10	89	399
Total reported	35,200	2,590 [r]	384	2,980 [r]	2,720	381	3,100	17,700
Estimated undistributed consumption[5]	10,800	600	300	900	600	300	900	5,400
Grand total	46,000	3,190 [r]	684	3,880 [r]	3,320	681	4,000	23,100

[p]Preliminary. [r]Revised. W Withheld to avoid disclosing 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.