

Mineral Industry Surveys

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TIN IN JULY 2004

Domestic consumption of primary tin in July was estimated by the U.S. Geological Survey to be about 5% less than that in June and about 3% more than that in July 2003. Estimated domestic consumption of primary tin in the first 7 months of 2004, however, rose slightly from the comparable period of 2003. The Platts Metals Week average composite price for tin in July was \$5.76 per pound, 2% lower than that in June but 74% higher than that in July 2003. The leading tin importers to the United States in the first 6 months were, in descending order, Peru, Indonesia, Malaysia, Bolivia, and China.

In Indonesia, PT Timah, the country's major tin miner and smelter, announced that during the first half of 2004 refined tin production was 15,000 metric tons (t), down 36% from the comparable period of 2003. Timah officials noted that the decline was in line with a similar 37% comparable period decrease in its tin-in-concentrate production. Timah's "inland" production (as contrasted to its offshore production) remained the largest contributor to total production of tin-in-concentrate, comprising 84% of the total (Platts Metals Week, 2004b).

Crown Food Europe, an affiliate of Philadelphia, PA-based Crown Holdings Corp., a major canmaker, announced that it was installing a new can production line in Timashevsk, Russia, to produce 83-millimeter-diameter tinplated steel food cans for Bonduelle, a European leader in sales of processed vegetables. Cans were to be supplied to the new Bonduelle plant near Krasnodar, located 70 meters from Timashevsk. The tinplate was to be secured from Crown Hellas in Greece (Platts Metals Week, 2004a).

In China, an official from China's National Nonferrous Metal Import and Export Corp. (Minmetals) noted that even though tin prices were strong, China's tin metal output would not increase much in 2004 because feed sources were limited. China produced about 100,000 t of refined tin metal in 2003, including tin ingot, tin alloy ingot, and other tin products. Chinese officials expected tin metal output to possibly reach 110,000 t in 2004, of which about 80% to 90% would consist of tin ingot. Both major producers, Yunnan Tin Co. Ltd. and Liuzhou Tin Co. Ltd., echoed that projection (Platts Metals Week, 2004c).

In Thailand, the Bureau of Primary Industries of the Department of Primary Industries and Mines announced that first half 2004 refined tin metal production surged by almost one-third compared to that of the first half 2003. Thailand produced 9,000 t of tin metal in the first 6 months of this year, representing a 32% increase over that of the first 6 months of 2003. The sole domestic tin smelter, Thailand Smelting and Refining Co., with a capacity of 36,000 t annually, produced 16,000 t of tin metal in 2003 (Metal-Pages, 2004a§¹).

In Germany, statistics indicate that the market for steel packaging (most of which is tinplate) shrank by 16% in 2003, to about 600,000 t of material, mainly because of the mandatory deposit system on beverage cans. Recent market research shows that imports of beverages into Germany have fallen by about 20% because of the deposit law. The necessity to return empty containers for refunds has not been popular with consumers. Germany's other packaging segments remain stable, with food accounting for 30% of the tinplate market, pet food 12%, closures 16%, chemical products such as paints and lacquers 16%, and aerosols 8% (Metal Bulletin, 2004).

As a result of the European Union's End-of-Life Directive aimed at replacing toxic lead and antimony components currently used in brake pads, several firms have been working to find an environmentally acceptable substitute to lead sulfide or antimony trisulfide for friction stabilization in brake pads. Tin Technology Ltd. (United Kingdom) has developed a tin-base brake pad in collaboration with PBW Metal Products Ltd (United Kingdom). The new brake pads have been named "Tibrake" (Metal-Pages, 2004§b).

References Cited

- Metal Bulletin, 2004, German tinplate consumption shrinks by 16%: Metal Bulletin, no. 8851, July 13, p. 4.
- Platts Metals Week, 2004a, Crown installs new food can line in Russia: Platts Metals Week, v. 75, no. 35, August 30, p. 15.
- Platts Metals Week, 2004b, PT Timah H1 profit up, sales down: Platts Metals Week, v. 75, no. 35, August 30, p. 15.
- Platts Metals Week, 2004c, Rising prices won't boost Chinese tin output: Platts Metals Week, v. 75, no. 34, August 23, p. 6.

 $^{^{1}\}text{References}$ that include a section mark (§) are found in the Internet References Cited section.

Internet References Cited

- Metal-Pages, 2004a (July 27), Thailand tin surge, accessed August 16, 2004, via URL http://www.metal-pages.com.
 Metal-Pages, 2004b (August 12), Tin to put the brakes on, accessed August 13, 2004, via URL http://www.metal-pages.com.

TABLE 1 SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

			January-
2003 ^p	June	July	July
10,800	900	900	6,300
35,200	3,320	3,170	22,100
10,800	681	674	4,790
37,100	5,320	NA	NA
3,690	427	NA	NA
6,520	5,900	6,300	XX
339.84	589.38	576.07	XX
218.06	453.39	440.88	XX
207.00	417.00	410.00	XX
209.62	423.82	407.67	XX
	10,800 35,200 10,800 37,100 3,690 6,520 339.84 218.06 207.00	10,800 900	10,800 900 900 35,200 3,320 3,170 10,800 681 674 37,100 5,320 NA 3,690 427 NA 6,520 5,900 6,300

^eEstimated. ^pPreliminary. NA Not available. XX Not applicable.

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

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

³Source: Platts Metals Week.

⁴The 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 PRICE¹

(Cents per pound)

Period	High	Low	Average	
2003:				
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	
July	583.13	565.64	576.07	

¹The 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 STATES¹

		Tinplate (all forms)					
	Tinplate waste			Tin per			
	(waste, strips,			metric ton			
	cobbles, etc.)	Gross	Tin	of plate			
Period	(gross weight)	weight	content	(kilograms)	Shipments ²		
2003 ^p	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	613	3.3	148,000		
June	W	186,000	610	3.3	188,000		
July	W	250,000	610	2.4	NA		

(Metric tons, unless otherwise noted)

^pPreliminary. NA Not available. W Withheld to avoid disclosing company proprietary data.

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

²Source: American Iron and Steel Institute monthly publication.

TABLE 4

U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS¹

(Metric tons)

	2004					
				January-		
Country or product	2003 ^p	May	June	June		
Imports:						
Metal (unwrought tin):						
Bolivia	5,720	201	1,000	2,860		
Brazil	3,000	75	311	1,700		
Chile	636	100	101	200		
China	4,340	253	412	1,820		
Indonesia	3,070	2,090	490	3,080		
Japan	136			180		
Malaysia	490	792	945	3,030		
Peru	19,100	940	1,990	9,320		
Switzerland	(2)			178		
Thailand		300		300		
United Kingdom	143		1	41		
Other	426	65	70	211		
Total	37,100	4,820	5,320	22,900		
Other (gross weight):						
Alloys	3,820	343	535	1,960		
Bars and rods	338	67	104	343		
Foil, tubes, pipes	4	(2)	(2)	2		
Plates, sheets, strip	270	62	30	296		
Waste and scrap	921	42	136	549		
Miscellaneous	2,670	213	149	1,120		
Total	8,030	727	954	4,270		
Exports (metal)	3,690	370	427	2,060		

^pPreliminary. -- 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 PRODUCT¹

		2004						
Product	2003 ^p	June			July			January-
		Primary	Secondary	Total	Primary	Secondary	Total	July
Alloys (miscellaneous) ²	1,820	283	W	283	249	W	249	1,550
Babbitt	235	15 ^r	W	15 ^r	16	W	16	101
Bar tin and anodes	278	12 ^r	W	12 ^r	12	W	12	84
Bronze and brass	2,800	99 ^r	101 ^r	200 r	87	95	181	1,460
Chemicals	8,410	704	W	704	704	W	704	4,930
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	875 ^r	266 ^r	1,140	775	261	1,040	7,440
Tinning	450	41		41	41		41	277
Tinplate ³	7,800	610		610 ^r	610		610	4,280
Tin powder	W	W		W	W		W	W
White metal ⁴	W	W		W	W		W	W
Other	843	79	14 ^r	93 ^r	77	18	95	499
Total reported	35,200	2,720	381	3,100 ^r	2,570	374	2,950	20,600
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	6,300
Grand total	46,000	3,320	681	4,000 ^r	3,170	674	3,850	26,900

(Metric tons of contained tin)

^rRevised. ^pPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

²Includes terne metal.

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

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

⁵Estimated consumption of plants reporting on an annual basis.