

Mineral Industry Surveys

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TIN IN MARCH 2007

Domestic consumption of primary tin in March was estimated to be 6% above that in February 2007 and 8% below that in March 2006. Consumption for the first 3 months of 2007 was 12% lower than in the comparable period of 2006. For the first quarter of 2007, solder remained the leading consumption category, followed by chemicals and tinplate.

The Platts Metals Week average composite price for tin in March 2007 was \$8.45 per pound, 5% above that for February 2007, and 63% above that in March 2006.

Worldwide, more than 5 million metric tons (Mt) of steel cans, which were mostly made from tinplate, were recycled in 2005, representing an average recycling rate of 65%, according to the International Iron & Steel Institute's Committee on Packaging (Packco). This rate has increased every year for 5 years, and by a total of 7.4% since 2006 (Canmaker, The, 2007a).

Tata Iron and Steel Co. Ltd. (Jamshedpur, India) won the competition to absorb Corus Steel Group (London, England) at an auction held in London, England. The deal creates the world's fifth leading steel producer with crude steel output of 23.5 Mt annually, of which 1.65 Mt are tin mill products. Tata's offer exceeded a competing offer from Companhia Siderúrgica Nacional (CSN) (Rio de Janeiro, Brazil). Corus currently produces 1.5 Mt of tin mill products annually at its three tin mills: IJmuiden in the Netherlands, Trostre in the United Kingdom, and Bergen in Norway. Tata announced plans to double annual capacity at its Jamshedpur tin mill to 320,000 metric tons (t) by early 2008. A longer term target is to increase capacity to 550,000 t by 2010 (Canmaker, The, 2007b).

In Bolivia, the President fulfilled industry expectations by renationalizing the Vinto tin smelter near Oruro in February. The smelter had been owned by Glencore International AG (Baar, Switzerland) since 2004. The nationalization was a first step towards the President's declared goal of winning his Government a larger share of Bolivia's mineral wealth (TIN World, 2007c).

In Australia, tin specialist Bluestone Tin Limited and nickel specialist Metals Exploration Corp. merged to form Metals X Limited. The merged organization began trading on the Australian Stock Exchange. The company has four projects

focused on tin mining. The Renison tin mine in Tasmania was scheduled to restart production in late 2007 and was completing a feasibility study on the retreatment of 18 Mt of historic tailings from the Renison Mine. The Mount Bischoff tin project, located 80 kilometers north of Renison, will be integrated into the Renison operation. The Collingwood project was the only one of the four currently in production. Full production there did not start until August 2006 and by December 2006 had produced only 600 t (TIN World, 2007a).

In Thailand, Thai Tinplate Manufacturing Co. opened a new electrolytic tinning line at its plant in Samut Prakan. This new fourth line will increase the company's tinplate production capacity by 150,000 metric tons per year (t/yr), raising its total capacity of tinplate and tin-free steel to 516,000 t/yr, which represents about 86% of Thailand's total annual demand of 600,000 t (TIN World, 2007b).

In China, Yunnan Tin Co., Ltd. (Kunming, Yunnan, China) announced that it had signed a deal to purchase a 67% stake in Gejiu Zili Metallurgy Co., Ltd. Yunnan Tin is the world's leading producer of refined tin, including 2006 output from its Singapore Tin Industries joint venture. Gejiu is based in the same city as Yunnan Tin and ranked fourth in China and tenth in the world in refined tin production in 2006, with output of 9,000 t (CRU International, 2007).

Yunnan Tin was reported to be involved with a new joint venture with partner Singapore Tin to set up a 36,000-t/yr integrated tin mining, smelting, refining, and end products operation on Bangka Island in Indonesia. The two firms plan to formulate the new producer, PT Indo Yunnan Mineral Utama, by acquiring and consolidating existing plants in Bangka (CRU International, 2007).

Yunnan Tin announced its association with a joint venture explorer in Australia, YTC Resources. The New South Wales-based firm sought to raise money to explore tin and copper-gold projects near its Orange, New South Wales, base. Tin exploration will be focused around old mining areas where tin and associated metals like silver and tungsten were mined into the 1970s (CRU International, 2007).

At the University of Wisconsin (Madison, WI), researchers developed a composite material said to be harder than diamond.

It was a barium titanate crystal in a tin material (Advanced Materials & Processes, 2007).

Update

On August 17, 2007, the Platts Metals Week composite price for tin was \$8.53 per pound.

References Cited

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TIN World, 2007a, Bluestone and Metals Exploration merge: TIN World, no. 17, Spring, p. 4.
TIN World, 2007b, New Thai ETP line: TIN World, no. 17, Spring, p. 12.
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TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2006 ^p	2007		
	January- December	February	March	January- March
Production, secondary ^{e, 2}	10,800	900	900	2,700
Consumption:				
Primary	33,200	2,640 ^r	2,790	8,100
Secondary	8,370	702 ^r	711	2,100
Imports for consumption, metal	43,300	3,250	NA	6,850 ³
Exports, metal	5,490	614	NA	946 ³
Stocks at end of period	5,700	6,030	6,030	XX
Prices (average cents per pound): ⁴				
Metals Week composite ⁵	565.11	800.69	858.90	XX
Metals Week New York dealer	329.69	606.31	649.08	XX
London, standard grade, cash	304.00	586.10	630.00	XX
Kuala Lumpur	301.83	580.50	625.81	XX

^eEstimated. ^pPreliminary. ^rRevised. 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.

³Includes January and February 2007 only.

⁴Source: Platts Metals Week.

⁵The 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
2006:			
December	748.50	676.50	699.98
Year	589.35	526.32	565.11
2007:			
January	773.61	655.02	712.88
February	869.47	744.44	800.69
March	899.99	827.03	858.90

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

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments ²
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2006 ^P	56,400	2,130,000	6,810	3.2	168,000
2007:					
January	2,920	157,000	508	3.5	150,000
February	2,920	133,000	508	3.8	127,000
March	2,920	135,000	566	4.2	143,000

^PPreliminary.

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)

Country or product	2006	2007		January- February
		January	February	
Imports:				
Metal (unwrought tin):				
Bolivia	8,160	268	411	680
Brazil	1,300	450	421	872
Chile	20	--	--	--
China	4,440	186	223	408
Hong Kong	99	--	--	--
Indonesia	4,600	500	--	500
Malaysia	245	12	--	12
Peru	21,600	2,080	1,790	3,860
Singapore	1,090	--	--	--
Thailand	210	--	--	--
United Kingdom	1,370	100	380	480
Other	139	10	28	38
Total	43,300	3,600	3,250	6,850
Other (gross weight):				
Alloys	6,280	164	117	281
Bars and rods	2,740	271	322	593
Foil, tubes, pipes	39	--	--	--
Plates, sheets, strip	287	--	--	--
Waste and scrap	2,490	109	205	314
Miscellaneous	3,460	257	260	517
Total	15,300	801	904	1,710
Exports (metal)	5,490	332	614	946

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT¹

(Metric tons of contained tin)

Product	2006		2007					
	January- December ^p	February			March			January- March
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) ²	1,920	139 ^r	--	139 ^r	137	--	137	452
Babbitt	287	18	3	22	18	3	21	62
Bar tin and anodes	316	26	W	27 ^r	25	--	25	78
Bronze and brass	2,910	65 ^r	127 ^r	192 ^r	110	137	247	630
Chemicals	7,440	617	W	617 ^r	755	W	755	2,000
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	10,200	587 ^r	266	854 ^r	510	W	510	2,460
Tinning	444	47 ^r	--	47 ^r	38	--	38	118
Tinplate ³	6,810	508	--	508	566	W	566	1,610
Tin powder	231	W	--	W	W	W	W	60
White metal ⁴	26	W	--	W	W	--	W	W
Other	207	31	6	34 ^r	33	271	302	41
Total reported	30,800	2,040 ^r	402 ^r	2,440 ^r	2,190	411	2,600	7,510
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	2,700
Grand total	41,600	2,640 ^r	702 ^r	3,340 ^r	2,790	711	3,500	10,200

^pPreliminary. ^rRevised. 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.