

Mineral Industry Surveys

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TIN IN JUNE 2006

Domestic consumption of primary tin in June was estimated by the U.S. Geological Survey to be about 2% higher than that in May and about 11% lower than that in June 2005. Estimated domestic consumption of primary tin in the first 6 months of 2006 was about 9% lower than that in the comparable period of 2005. During the first 5 months of 2006, Peru remained the leading exporter of refined tin metal to the United States, followed by Bolivia, Indonesia, and China.

The Platts Metals Week average composite price for tin in June was \$5.16 per pound, about 10% lower than that in May and about 4% higher than that in June 2005.

Singapore Tin Industries Pte Ltd. (STI) (Singapore), a company specializing in the refining of tin, officially opened a new tin refinery on June 23, 2006, although the facility actually started some production in March. STI was incorporated in January 2005 through a joint venture between KJP International Pte Ltd. (KJPI) (Singapore) and the Yunnan Tin Company Ltd., (YTCL) (China). STI's tin refinery is the first of its kind in Singapore, though it has been the home of many tin ventures over the years. Production capacity from STI's twin production lines is 36,000 metric tons per year (t/yr) of refined tin, or about 10% of the world's total refined tin capacity, placing STI among the world's top 10 producers of refined tin. The STI refinery uses the crystallization method of refining whereby crude tin is heated and crystallized, leaving the remaining metallic impurities behind and producing 99.99%-pure tin. The ownership partnership was designed to be synergistic, with KJPI sourcing and supplying the facility with crude tin and YTCL contributing their advanced crystallization technology for the refining process (TIN World, 2006b).

STI is also constructing a smelting plant in Bangka, Indonesia, in collaboration with PT Bangka Global Mandiri International (Indonesia). Construction started in August 2005, and completion is targeted for September 2006. The output capacity for this smelter is about 12,000 t/yr. Indonesia, which produces about 80,000 t/yr of refined tin, is the world's second ranked tin producer after China, supplying about 30% of the world's refined tin in 2005. STI hopes to achieve a vertically integrated operation by acquiring mining rights for tin concentrate. STI is seeking a trademark for its refined tin so

that its ingots can be traded on the London Metal Exchange (TIN World, 2006b).

PT Tambang Timah Tbk (Bangka, Indonesia), one of the world's leading tin miners and smelters, announced that it planned to reduce its 2006 tin output to 38,400 t, an 8% cut compared with that in 2005. Officials stated that the purpose of the reduction was to reduce the company's stockpiles and to lift prices. Timah also announced that it desired to increase the transparency of Indonesian tin supplies by better publicizing its future tin production plans. About 80% of Timah's tin-in-concentrate supply comes from illegal tin mining operations. The Indonesian government has a 65% interest in Timah (Platts Metals Week, 2006).

BlueScope Steel Ltd. (Melbourne, Victoria, Australia) announced a restructuring program and the closure of its tin mill at Port Kembla. The facility, which reportedly operated at a loss, was Australia's only tin mill. The operation has two electroplating tinning lines with a capacity of 500,000 t/yr of tin plate. Officials also noted that demand for BlueScope's tin mill products had been eroding in recent years (TIN World, 2006a).

Two of the world's leading steel producers —Arcelor S.A. (Luxembourg) and Mittal Steel Corp. N.V. (Rotterdam, the Netherlands) announced that they had agreed to a merger creating the world's leading steel producer having annual steel production of about 120 million metric tons of steel (Mt), which comprises about 10% of world steel production. The merged company will be called Arcelor-Mittal and will be about three times larger than the next leading producer, Nippon Steel Corp. (Japan). Both Arcelor and Mittal have long been leading producers of tinplate. Arcelor has a tin mill capacity of 1.9 Mt of tin plate at five plants in Belgium, France, and Spain. Mittal has an estimated capacity of 2.5 Mt of tinplate at its tin mills in Algeria, Kazakhstan, South Africa, and the United States (The Canmaker, 2006).

In Thailand, Sea Minerals Corp. completed a technical feasibility study on deep offshore mining of tin ore resources estimated to contain more than 50,000 t of tin. The majority shareholder in Sea Minerals, with an 83.7% stake, is Tongkah Harbour PLC (Bangkok, Thailand) which suspended its tin production in April 2005 (CRU Tin Monitor, 2006).

Update

On August 4, 2006, the Platts Metals Week composite price for tin was \$5.38 per pound.

References Cited

CRU Tin Monitor, 2006, Industry news: CRU International Ltd., June, p. 8.

Platts Metals Week, 2006, Indonesia's Timah to cut output 8% in 2006: Platts Metals Week, v. 77, no. 29, July 17, p. 5.
The Canmaker, 2006, In brief: The Canmaker, v. 19, July, p. 6.
TIN World, 2006a, BlueScope axes Port Kembla tin mill: TIN World, no. 14, Summer, p. 16.
TIN World, 2006b, First tin refinery plant opens in Singapore: TIN World, no. 14, Summer, p. 4.

TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2005	2006		
	January- December ^p	May	June	January- June
Production, secondary ^{e,2}	10,800	900	900	5,400
Consumption:				
Primary	35,900	2,750 ^r	2,810	17,300
Secondary	10,800	697 ^r	749	4,200
Imports for consumption, metal	37,500	3,800	NA	NA
Exports, metal	4,330	508	NA	NA
Stocks at end of period	5,400	5,380 ^r	5,580	XX
Prices (average cents per pound): ³				
Metals Week composite ⁴	443.03	572.77	516.34	XX
Metals Week New York dealer	329.69	421.27	380.66	XX
London, standard grade, cash	304.00	400.00	358.00	XX
Kuala Lumpur	301.83	405.65	360.41	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.

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
2005	496.08	469.82	483.04
2006:			
January	521.70	492.15	503.78
February	517.39	499.65	507.70
March	533.89	508.89	517.91
April	605.47	508.89	569.88
May	609.29	527.83	572.77
June	533.94	504.15	516.34

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)	
2005 ^P	W	2,270,000	7,670	3.4	1,860,000
2006:					
January	4,890	183,000	584	3.2	166,000
February	4,640	174,000	591	3.4	138,000
March	4,870	185,000	626	3.4	166,000
April	4,640	169,000	602	3.6	144,000
May	4,860 ^r	179,000	604 ^r	3.4	166,000
June	4,860	180,000	617	3.4	NA

^PPreliminary. ^rRevised. 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)

Country or product	2005	2006		January- May
		April	May	
Imports:				
Metal (unwrought tin):				
Bolivia	5,400	692	642	3,340
Brazil	2,150	75	25	351
Chile	20	--	--	--
China	4,510	508	374	1,710
Indonesia	5,220	114	269	2,640
Malaysia	1,530	--	--	169
Peru	18,300	1,750	1,960	7,350
Thailand	45	--	15	40
United Kingdom	67	--	373	397
Other	264	235	149	662
Total	37,500	3,370	3,800	16,700
Other (gross weight):				
Alloys	7,460	418	726	4,080
Bars and rods	1,030	137	161	647
Foil, tubes, pipes	8	(2)	(2)	1
Plates, sheets, strip	324	43	19	129
Waste and scrap	3,530	53	14	915
Miscellaneous	3,310	178	349	1,150
Total	15,700	829	1,270	6,920
Exports (metal)	4,330	232	508	1,960

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2005	2006						
	January	May			June			January-
	December ^p	Primary	Secondary	Total	Primary	Secondary	Total	June
Alloys (miscellaneous) ²	1,240	147	--	147	178	--	178	854
Babbitt	276	20	W	20	16	W	16	126
Bar tin and anodes	275	26	W	26	26	W	26	155
Bronze and brass	3,700	108	138	246	106	191	297	1,600
Chemicals	8,680	616	W	616	616	W	616	3,980
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,200	564	250	814	499	250	749	5,170
Tinning	740	37	--	37	118	--	118	341
Tinplate ³	7,670	604 ^r	--	604 ^r	617	--	617	3,610
Tin powder	W	W	--	W	W	--	W	W
White metal ⁴	W	W	--	W	W	--	W	W
Other	1,070	31	9	40	32	8	40	303
Total reported	35,900	2,150 ^r	397	2,550 ^r	2,210	449	2,660	16,100
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	5,400
Grand total	46,700	2,750 ^r	697	3,450 ^r	2,810	749	3,560	21,500

^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.