

Mineral Industry Surveys

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TIN IN OCTOBER 2004

Domestic consumption of primary tin in October was estimated by the U.S. Geological Survey to be slightly higher than that in September 2004 and October 2003.

The Platts Metals Week average composite price for tin in October was \$5.78 per pound, just slightly above that in September and 61% higher than that in October 2003.

Tin imports of unwrought tin metal during the first 9 months of 2004 totalled 35,600 metric tons (t), an increase of 22% over that of the comparable period of 2003.

In Australia, Malachite Resources NL announced that recent field work on its wholly owned Elsmore exploration project, located 20 kilometers east of Inverell in northern New South Wales, produced very encouraging results. According to the company, good grade tin mineralization was discovered in a wide area at Sheep Station Hill, and the tin was accompanied by higher than expected values of molybdenum, copper, and silver. The average tin grade of the 66 samples assayed of outcropping greisen from Sheep Station Hill was 0.2% tin. Malachite officials believed that tin grades would improve with depth (TIN World, 2004a).

Over the past decade, Asia led the global increase in tin consumption owing to the emergence of China as a major industrial power and its growing use of lead-free solder. Asia was expected to consume over half of the 320,000 t of tin forecast to be used worldwide in 2004 and accounted for most of the estimated 17% increase in global tin consumption since 2000. Asia was also the major source of global tin supplies and was expected to produce about 75% of the forecasted 290,000 t of world refined tin production in 2004. The shortfall would be made up by scrap recovery and drawing down tin stocks. Indonesia and Peru accounted for most of the estimated 8% increase in world refined tin production since 2000, while production by China, Malaysia, and Thailand was likely to dip below 2000 levels owing to a limited tin concentrates supply situation.

During the past 3 years, Malaysia Smelting Corp. (MSC), Penang, Malaysia, made two major acquisitions outside of Malaysia, buying a 75% stake in PT Kobe Tin (Indonesia) in 2001 and a 30% share in Marlborough Resources (Australia) in

2003 as part of a proactive upstream integration business strategy. MSC was one of several tin smelters that had decreased tin ingot production because of the shrinking world market for tin concentrates. One of the main reasons for the shrinkage has been the expansion of tin refining capacity in Peru and the resulting drop in Peruvian tin concentrate exports, which used to account for 20% of MSC's supplies. Other reasons include the decline of the Renison Mine in Australia and Indonesia's ban on tin concentrate exports announced in June 2002 to protect the domestic industry. Incorporated in 1982 to absorb the Straits Trading Company Ltd.'s tin smelting business, MSC was listed on the main board of the Kuala Lumpur Stock Exchange in 1994. Employing about 500 staff, MSC's smelter was located on a 12-acre seashore site in Butterworth, Penang State, Malaysia, where smelting has been carried out since 1902. MSC managed a medium grade smelter with five blast furnaces, of which two were in operation at the same time. The smelter had the capacity to produce 27,000 metric tons per year (t/yr) of tin ingots. Concentrate accounted for 90% of MSC's materials supply. The rest was secondary recycled materials from the chemical, electronics, and tinplate industries (TIN World, 2004b).

In China, Baoshan Iron & Steel Co. Ltd. announced that Chinese tinplate demand was expected to almost double by 2012 to 3 million metric tons (Mt) from 1.7 Mt in 2003. Baoshan aimed to retain its 30% share of the domestic market by expanding its capacity in parallel with this growing demand. Baoshan was operating at its tinplate production capacity of 550,000 t/yr. The company has ordered a new tin-free steel (TFS) line, which should be completed by 2007. China currently has no TFS production (Metal Bulletin, 2004c).

The Chinese Government announced that it would cut its tin export quotas for 2005 by 5%. Tin and tin products, which included alloys, forgings, and tin metal, were given export quotas of 57,000 t for 2005. The cut in export quotas stemmed from greater demand for the materials in the domestic market (Metal Bulletin, 2004b).

In Australia, the Malaysia Smelting Corp. secured tin concentrates from Bluestone Tin's Renison Bell Mine in

Tasmania until June 30, 2005. The large Thaisarco tin smelter (Thailand) was the competing facility (Metal Bulletin, 2004d).

Also in Australia, the administrator of the bankrupt Ardlethan Mine in New South Wales proceeded with the facility's dismemberment by auctioning off all the mine's plant and equipment. The only remaining assets were the land, water rights, and mining rights, which will soon be sold (Metal Bulletin, 2004a).

Update

On December 17, the Platts Metals Week composite price for tin was \$5.65 per pound.

References Cited

- Metal Bulletin, 2004a, Administrator auctions off Ardlethan Tin plant and equipment: Metal Bulletin, no. 8867, November 8, p. 17.
- Metal Bulletin, 2004b, China opts to cut zinc and tin export quotas for 2005: Metal Bulletin, no. 8867, November 8, p. 17.
- Metal Bulletin, 2004c, China to double tinplate demand: Metal Bulletin, no. 8866, November 1, p. 23.
- Metal Bulletin, 2004d, Malaysia Smelting Corp. wins Renison Bell tin off-take: Metal Bulletin, no. 8868, November 15, p. 12.
- TIN World, 2004a, Encouraging results at Elsmore tin project: TIN World, no. 7, October/November, p. 6.
- TIN World, 2004b, Malaysia Smelting Corporation (MSC)—Tin market profile: TIN World, no. 7, October/November, p. 7-9.

TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2003 ^P	2004		
		September	October	January- October
Production, secondary ^{6, 2}	10,800	900	900	9,000
Consumption:				
Primary	35,200	3,150	3,170	31,700
Secondary	10,800	700	680	6,850
Imports for consumption, metal	37,100	3620	NA	NA
Exports, metal	3,690	248	NA	NA
Stocks at end of period	6,520	6,030 ^r	5,970	XX
Prices (average cents per pound): ³				
Metals Week composite ⁴	339.84	576.55	578.10	XX
Metals Week New York dealer	218.06	435.94	436.62	XX
London, standard grade, cash	207.00	410.00	410.00	XX
Kuala Lumpur	209.62	405.41	407.30	XX

⁶Estimated. ^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
2003:			
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
August	590.50	563.04	573.74
September	585.04	566.00	576.55
October	586.56	568.98	578.10

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)	
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	193,000 ^r	612 ^r	3.2	148,000
June	W	188,000 ^r	607 ^r	3.2	188,000
July	W	191,000 ^r	902 ^r	4.7	174,000
August	W	193,000 ^r	597 ^r	3.1 ^r	168,000
September	W	192,000 ^r	595 ^r	3.1 ^r	154,000
October	W	197,000	600	3.0	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	2003 ^p	2004		
		August	September	January- September
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	236	396	3,930
Brazil	3,000	243	519	3,010
Chile	636	--	--	200
China	4,340	850	513	4,170
Indonesia	3,070	201	621	4,400
Japan	136	--	360	540
Malaysia	490	375	--	4,080
Peru	19,100	2,210	1,060	14,200
Switzerland	(2)	--	--	178
Thailand	--	20	40	360
United Kingdom	143	20	2	77
Other	426	66	111	469
Total	37,100	4,220	3,620	35,600
Other (gross weight):				
Alloys	3,820	431	441	3,950
Bars and rods	338	55	50	469
Foil, tubes, pipes	4	(2)	(2)	3
Plates, sheets, strip	270	10	42	396
Waste and scrap	921	33	91	729
Miscellaneous	2,670	421	578	2,420
Total	8,030	950	1,200	7,960
Exports (metal)	3,690	114	248	2,740

^pPreliminary. -- Zero.

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

²Less than 1/2 unit.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2004							
	2003 ^p	September			October			January- October
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) ²	1,820	248	W	248	255	W	255	2,300
Babbitt	235	18	W	18	36	W	36	173
Bar tin and anodes	278	12	W	12	12	W	12	120
Bronze and brass	2,800	96	125	221	99	105	204	2,090
Chemicals	8,410	704	W	704	704	W	704	7,040
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	761	265	1,030	741	265	1,010	10,500
Tinning	450	42	--	42	40	--	40	395
Tinplate ³	7,800	595 ^r	--	595 ^r	600	--	600	6,070
Tin powder	W	W	--	W	W	--	W	W
White metal ⁴	W	W	--	W	W	--	W	W
Other	843	78	10	88	79	10	89	766
Total reported	35,200	2,550	400	2,950	2,570	380	2,950	29,500
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	9,000
Grand total	46,000	3,150	700	3,850	3,170	680	3,850	38,500

^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.