

# Mineral Industry Surveys

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## TIN IN OCTOBER 2003

Domestic consumption of primary tin in October was estimated by the U.S. Geological Survey to be almost the same as that in September and 3% below that in October 2002.

The Platts Metals Week average composite price for tin in October was \$3.59 per pound, 5% above that in September and 19% above that in October 2002.

In Australia, Malachite Resources NL announced that it had acquired a 12-month option to purchase the Elsmore alluvial tin mine in northern New South Wales. Malachite paid \$45,000 for the option. Elsmore, which was Australia's first commercial tin mine, is about 25 kilometers (16 miles) from Malachite's Conrad silver project and thus offers significant geographic and geologic synergies. The exercise price is \$3 million, payable in four annual installments. Company officials indicated that substantial resources at Elsmore remain as alluvial, colluvial, and eluvial deposits; and as tailings from earlier production. The processing plant remains on site, and the company believes it could be recommissioned at low cost. Malachite plans to conduct drilling and bulk sampling of the various surface deposits to delineate resources to a level sufficient to support a limited period of pilot scale production. The firm hopes to develop an operation producing 1,000 metric tons per year of tin-in-concentrate over a mine life of more than 5 years (Metal-*Pages*, 2003d§<sup>1</sup>).

Also in Australia, the administrator of the shuttered Renison Bell tin mine announced that the mine (on Tasmania's west coast) will remain closed; no offers have been received to purchase the mine. Renison, once the country's largest tin mine, closed in May, putting 200 people out of work. The administrator indicated that potential investors were not confident about the mine's future after a due diligence review. Many felt that the remaining proven reserves at Renison were not sufficient to justify the significant capital expenditure required to reopen the mine (Metal-*Pages*, 2003b§).

Australia-based tantalum explorer Gippsland Limited is attempting to raise \$300,000 through a sale of common stock. The company plans to use most of the funds raised by the sale to

finance its Abu Dabbab tantalum-tin-feldspar project in Egypt. Some of the cash would be used to fund a bankable feasibility study currently underway at the 40-million-metric-ton Abu Dabbab deposit. Gippsland has a 50% economic interest in the deposit through an incorporated joint venture with the Egyptian government. The remainder of the \$300,000 raised would be used to list the company's securities on the London Stock Exchange's Alternative Investment Market (Metal-*Pages*, 2003a§).

Liuzhou China Tin Group Co. Ltd., the second largest tin producer in China, resumed mining at its Gaofeng tin mine, which is one of the five mines in the Nandan area of Guangxi province closed by the government in early September. Gaofeng is the largest mine in the area, and the other four smaller mines, which do not belong to Liuzhou China Tin, remain closed. The government of Nandan reopened the five mines between June and August, 2003, after closing them and most local mines in July 2001 because of a flooding accident that killed over 80 miners. However, the five mines were closed again on September 4, as local authorities investigated an illegal mining case. Nandan is China's major producing area for lead, zinc, tin, antimony, and indium. The mine closures have resulted in reduced supplies of these metals, contributing to rising prices (Metal-*Pages*, 2003c§).

Weirton Steel Corp. (Weirton, WV), a major domestic tinplate producer, received conditional permission to participate in the Emergency Steel Loan Guarantee (ESLG) program, which would enable the company to secure a \$145 million Federal loan to help it emerge from bankruptcy. Under the terms of the approval, the ESLG program would guarantee 88% or \$128 million of Weirton's bankruptcy emergence loan from Fleet Capital Corp.; Fleet will close on the loan if a Federal bankruptcy judge approves Weirton's reorganization plan before December 31. Weirton, which has operated under Chapter 11 protection since May 19, plans to use the loan to offset the cost of emergence from bankruptcy and to upgrade mill equipment. The company is the fifth largest domestic integrated steel producer and ranks as a major tin user (Platts Metals Week, 2003).

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<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

## **Update**

On November 27, 2003, the Platts Metals Week composite price for tin was \$3.74 per pound.

## **Reference Cited**

Platts Metals Week, 2003, Weirton Steel wins OK for loan guarantee: Platts Metals Week, v. 74, no. 46, November 17, p. 2.

## **Internet References Cited**

Metal-Pages, 2003a (December 3), Gippsland seeks to raise \$300,000 through placement, accessed December 4, 2003, at URL <http://www.metal-pages.com>.

Metal-Pages, 2003b (December 3), Little hope of saving Renison Bell Tin Mine, accessed December 4, 2003, at URL <http://www.metal-pages.com>.

Metal-Pages, 2003c (November 4), Liuzhou China Tin reopens Gaogeng [sic] Mine in Nandan, accessed November 5, 2003, at URL <http://www.metal-pages.com>.

Metal-Pages, 2003d (November 12), Malachite acquires option to mine Elsmore tin mine, accessed November 14, 2003, at URL <http://www.metal-pages.com>.

TABLE 1  
SALIENT TIN STATISTICS<sup>1</sup>

(Metric tons, unless otherwise noted)

	2003			
	2002	September	October	January- October
Production, secondary <sup>6,2</sup>	10,000	900	900	9,000
Consumption:				
Primary	34,000	3,090	3,100	31,200
Secondary	5,830	713	716	7,030
Imports for consumption, metal	42,200	2,260	NA	NA
Exports, metal	2,940	362	NA	NA
Stocks at end of period	9,100	6,180 <sup>f</sup>	6,190	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	291.97	340.70	359.21	XX
Metals Week New York dealer	194.75	233.67	248.33	XX
London, standard grade, cash	184.00	223.00	237.00	XX
Kuala Lumpur	184.35	221.02	236.42	XX

<sup>6</sup>Estimated. <sup>f</sup>Revised. NA Not available. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices.

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

<sup>3</sup>Source: Platts Metals Week.

<sup>4</sup>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<sup>1</sup>

(Cents per pound)

Period	High	Low	Average
2002:			
October	308.99	294.63	302.39
November	306.01	297.88	301.54
December	306.94	298.78	302.37
Year	316.83	267.12	291.97
2003:			
January	320.43	303.14	313.84
February	333.87	310.69	322.82
March	330.75	318.70	323.84
April	326.53	317.74	321.54
May	333.80	325.19	330.58
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

<sup>1</sup>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<sup>1</sup>

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments <sup>2</sup>
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2002	45,900	2,450,000	7,750	3.2	2,100,000
2003:					
January	2,790	216,000	642	3.0	180,000
February	2,510	214,000	640	3.0	156,000
March	W	225,000	686	3.1	156,000
April	W	217,000	704	3.2	165,000
May	1,780	215,000	536	2.5	158,000
June	W	208,000	732	3.5	173,000
July	W	205,000	659	3.2	176,000
August	W	199,000	692	3.5	170,000
September	W	198,000 <sup>r</sup>	625 <sup>r</sup>	3.2	169,000
October	W	203,000	635	3.1	NA

<sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Source: American Iron and Steel Institute monthly publication.

TABLE 4  
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS<sup>1</sup>

(Metric tons)

Country or product	2003			
	2002	August	September	January- September
<b>Imports:</b>				
<b>Metal (unwrought tin):</b>				
Bolivia	6,150	826	375	5,150
Brazil	4,840	125	200	2,440
China	7,600	235	233	3,310
Indonesia	3,340	620	210	2,630
Malaysia	122	--	40	365
Peru	19,900	1,430	1,040	14,600
Russia	21	--	--	--
United Kingdom	2	41	--	104
Other	264	65	165	712
<b>Total</b>	<b>42,200</b>	<b>3,340</b>	<b>2,260</b>	<b>29,300</b>
<b>Other (gross weight):</b>				
Alloys	3,530	349	423	2,710
Bars and rods	224	16	23	265
Foil, tubes, pipes	1	(2)	(2)	4
Plates, sheets, strip	128	28	38	158
Waste and scrap	561	2	51	736
Miscellaneous	7,810	247	214	1,900
<b>Total</b>	<b>12,300</b>	<b>642</b>	<b>749</b>	<b>5,770</b>
Exports (metal)	2,940	366	362	2,710

-- Zero.

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

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5  
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT<sup>1</sup>

(Metric tons of contained tin)

Product	2003							
	2002	September			October			January- October
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) <sup>2</sup>	W	141	W	141	140	W	140	1,500
Babbitt	1,310	14	W	14	11	W	11	180
Bar tin and anodes	617	16	W	16	16	W	16	213
Bronze and brass	3,040	105	136	241	112	139	251	2,040
Chemicals	8,400	697	W	697	697	W	697	6,970
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	13,800	772	265	1,040	767	265	1,030	10,500
Tinning	679	42 <sup>r</sup>	--	42 <sup>r</sup>	39	--	39	367
Tinplate <sup>3</sup>	7,750	625 <sup>r</sup>	--	625 <sup>r</sup>	635	--	635	6,480
Tin powder	W	W	--	W	W	--	W	W
White metal <sup>4</sup>	1,320	W	--	W	W	--	W	W
Other	2,920	79	12	91	86	12	98	984
Total reported	39,800	2,490	413	2,900 <sup>r</sup>	2,500	416	2,920	29,200
Estimated undistributed consumption <sup>5</sup>	--	600	300	900	600	300	900	9,000
Grand total	39,800	3,090	713	3,800 <sup>r</sup>	3,100	716	3,820	38,200

<sup>r</sup>Revised. W Withheld to avoid disclosing proprietary data; included with "Other." -- Zero.

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

<sup>2</sup>Includes terne metal.

<sup>3</sup>Includes secondary pig tin and tin components of tinplating chemical solutions.

<sup>4</sup>Includes pewter, britannia metal, and jewelers' metal.

<sup>5</sup>Estimated consumption of plants reporting on an annual basis.