



# Mineral Industry Surveys

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## **TIN IN MAY 2004**

Domestic consumption of primary tin in May was estimated by the U.S. Geological Survey to be 1% more than that in April and 7% greater than that in May 2003.

The Platts Metals Week average composite price for tin in May was \$5.92 per pound, 3% above that in April and 79% above that in May 2003. The tin price has continued its remarkable rise, increasing significantly in each month of 2004.

Peru remains the dominant source of imports to the United States. Imports of primary tin in the January-April period declined 5% compared with that for the same period in 2003.

A new report by Barclay's Capital Research observes that tin has outperformed the other base metals through the general price correction that took place during the second quarter. The report attributes tin's remarkable price strength to a genuine world supply tightness and buoyant demand in a market with low inventories. Barclay's believes that tin can maintain its price strength until early 2005. The report lists production problems that have contributed to the supply tightness. Three tin mines in Bolivia have been closed since the beginning of May, which has affected about 35% of the country's total tin production [or about 4,000 metric tons per year (t/yr)], and Australian tin mine output was down more than 80% in the first quarter of 2004 versus the first quarter of 2003 owing to the closure of the Renison Bell Tin Mine (Tasmania) and production problems at Marlborough Resources NL (New South Wales) and the Sons of Gwalia Ltd. (Western Australia). Increased Chinese production is unlikely to relieve the tightness in world supply because higher domestic output is being consumed internally. China has now surpassed Western Europe as the world's largest tin-consuming region. Chinese tin consumption is estimated to be about 81,000 metric tons (t) in 2004, a 10% increase over that of 2003. European consumption is forecast to be 76,000 t in 2004, a rise of 2% (Platts Metals Week, 2004c).

In China, Yunnan Tin Corp. announced that it did not plan to raise production despite higher world tin prices and rising domestic demand. Yunnan has an annual capacity of 26,000 t of refined tin. Officials announced that Yunnan had taken strategic steps in planning for future development, including investing large amounts of money in exploration and downstream

production. Seventy-five percent of Yunnan's tin concentrates are now supplied by its own mines (Platts Metals Week, 2004e). Speakers at the recent Metal Events International Tin Conference in Cologne, Germany, struck a decidedly bullish note. Among some of the points:

- a) The global tin market has moved away from the recent 20-year crisis period of low tin prices and is now moving into territory last seen before the great "tin crash" of 1985.
- b) Tin is likely to be the "hottest" metal on the London Metal Exchange (LME) going into 2004; with low stocks at LME-registered warehouses forecast to fall further, tin has the strongest fundamentals on the entire LME.
- c) Tin's "intensity of use" is rising for the first time in decades; solder use in the Western World may increase to 90,000 t in 2004.
- d) There has been very little investment in tin mines in the past 10 to 20 years, and small mines accounted for 45-50% of world production in 2003.
- e) Supply is likely to remain tight for the next few years unless new mines are developed, or existing smelters are upgraded.
- f) The U.S. Government tin stockpile will be exhausted over the next few years, in effect removing a large "producer" from the market (Platts Metals Week, 2004b).

In Australia, Bluestone Nominees Pty Ltd. announced that it expected dewatering at its recently acquired Renison Bell Tin Mine to be completed in June. The firm expected operations to begin by October 2004, and anticipated initial production of tinin-concentrate to be 5,000 t/yr. With their existing Collingwood (Queensland) deposit, which has an expected 3,000 t/yr capacity, Bluestone felt total production could be nearly 10,000 t annually by the end of 2005 (Platts Metals Week, 2004a).

The chairman of the International Steel Group Inc. (ISG) (Cleveland, OH) observed that the consolidation considered essential for the steel industry's survival led to the formation of three giant steel producers [ISG, Nucor Corporation, and United States Steel Corporation (U.S. Steel)], which control

two-thirds of U.S. carbon steel production. ISG is the largest of these domestic integrated steel producers with over 20 million metric tons per year (Mt/yr) of production capacity. U.S. Steel has production capacity of about 5 Mt/yr at plants in Slovakia and Serbia. Both ISG and U.S. Steel are major tinplate producers (Platts Metals Week, 2004d).

In Spain, Goldtech Mining Corp. acquired a 12,500-acre mining property from Solid Resources Ltd. that formerly produced lithium, niobium, tantalum and tin. Goldtech has committed to a \$600,000 drilling program. The property, known as the "Golpejas Property," is located near Salamanca, Spain, and has hydroelectric power and paved road access. Before its closure in the early 1970s, the Golpejas Mine produced over 5 million metric tons (Mt) of lithium, niobium, tantalum, and tin. According to Goldtech, the Spanish Institute of Mines has identified over 3.5 Mt of resources remaining at the site (TIN World, 2004).

#### **Update**

On July 2, 2004, the Platts Metals Week composite price for tin was \$5.73 per pound.

#### **References Cited**

Platts Metals Week, 2004a, Bluestone to finish Renison mine: Platts Metals Week, v.75, no. 23, June 7, p. 15.

Platts Metals Week, 2004b, Tin market prices face sustained strength: Platts Metals Week, v.75, no. 23, June 7, p. 1, 15.

Platts Metals Week, 2004c, Tin price peak expected in early 2005: Platts Metals Week, v. 75, no. 25, June 21, p. 14.

Platts Metals Week, 2004d, Two-thirds of U.S. steel industry held by three companies: Platts Metals Week, v. 75, no. 21, May 24, p. 6.

Platts Metals Week, 2004e, Yunnan tin to maintain output at reasonable levels: Platts Metals Week, v. 75, no. 24, June 14, p. 4.

TIN World, 2004, New prospects for Spanish mine: TIN World, no. 5, June/July, p. 4.

# $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT TIN STATISTICS}^1$

(Metric tons, unless otherwise noted)

	•			January-
	2003 <sup>p</sup>	April	May	May
Production, secondary <sup>e, 2</sup>	10,800	900	900	4,500
Consumption:				
Primary	35,200	3,160	3,200	15,700
Secondary	10,800	677	684	3,430
Imports for consumption, metal	37,100	3,750	NA	NA
Exports, metal	3,690	340	NA	NA
Stocks at end of period	6,520	5,850 <sup>r</sup>	5,960 <sup>r</sup>	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	339.84	575.65	592.12	XX
Metals Week New York dealer	218.06	426.00	455.12	XX
London, standard grade, cash	207.00	406.00	428.00	XX
Kuala Lumpur	209.62	412.43	420.53	XX

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available. XX Not applicable.

 $\label{eq:table 2} \textbf{METALS WEEK COMPOSITE PRICE}^1$ 

(Cents per pound)

Period	High	Low	Average
2003:			
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
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 <sup>r</sup>	561.93 <sup>r</sup>	575.65 <sup>r</sup>
May	624.98	575.07	592.12

rRevised.

Source: Platts Metals Week.

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

<sup>&</sup>lt;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>&</sup>lt;sup>3</sup>Source: Platts Metals Week.

<sup>&</sup>lt;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.

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 $\label{eq:table 3} \textbf{TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES}^1$ 

(Metric tons, unless otherwise noted)

		Tinplate (all forms)					
	Tinplate waste	Tin per					
	(waste, strips,			metric ton			
	cobbles, etc.)	Gross	Tin	of plate			
Period	(gross weight)	weight	content	(kilograms)	Shipments <sup>2</sup>		
2003 <sup>p</sup>	W	2,500,000	7,750	3.1	2,100,000		
December	W	204,000	647	3.2	172,000		
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	190,000	626	3.3	NA		

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

 $\label{eq:table 4} \textbf{U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS}^1$ 

(Metric tons)

				January-
Country or product	2003 <sup>p</sup>	March	April	April
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	933	124	1,660
Brazil	3,000	275	540	1,320
China	4,340	319	340	1,160
Indonesia	3,070	20	140	500
Japan	136			180
Malaysia	490	20	991	1,290
Peru	19,100	1,970	1,580	6,390
Switzerland	(2)		1	178
United Kingdom	143	2	19	40
Other	1,060	40	16	77
Total	37,100	3,580	3,750	12,800
Other (gross weight):	<u> </u>			
Alloys	3,820	311	253	1,080
Bars and rods	338	32	67	171
Foil, tubes, pipes	4	(2)	1	2
Plates, sheets, strip	270	59	38	204
Waste and scrap	921	87	256	371
Miscellaneous	2,670	162	160	760
Total	8,030	651	775	2,590
Exports (metal)	3,690	399	340	1,260

<sup>&</sup>lt;sup>p</sup>Preliminary. -- Zero.

Source: U.S. Census Bureau.

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

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

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

<sup>&</sup>lt;sup>2</sup>Less than 1/2 unit.

TABLE 5 CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT  $^{\! 1}$ 

## (Metric tons of contained tin)

		2004							
		April			May			January-	
Product	2003 <sup>p</sup>	Primary	Secondary	Total	Primary	Secondary	Total	May	
Alloys (miscellaneous) <sup>2</sup>	1,820	251 <sup>r</sup>	W	251 <sup>r</sup>	247	W	247	1,010	
Babbitt	235	13	W	13	13	W	13	70	
Bar tin and anodes	278	12	W	12	12	W	12	60	
Bronze and brass	2,800	104	103	207	102	109	211	1,080	
Chemicals	8,410	704	W	704	704	W	704	3,520	
Collapsible tubes and foil	W	W	W	W	W	W	W	W	
Solder	12,500	776	265	1,040	806	265	1,070	5,270	
Tinning	450	38		38	41		41	195	
Tinplate <sup>3</sup>	7,800	614		614	626		626	3,080	
Tin powder	W	W		W	W		W	W	
White metal <sup>4</sup>	W	W		W	W		W	W	
Other	843	51	9	60	52	10	62	309	
Total reported	35,200	2,560	377	2,940	2,600	384	2,990	14,600	
Estimated undistributed consumption <sup>5</sup>	10,800	600	300	900	600	300	900	4,500	
Grand total	46,000	3,160	677	3,840	3,200	684	3,890	19,100	

<sup>&</sup>lt;sup>p</sup>Preliminary. <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>&</sup>lt;sup>2</sup>Includes terne metal.

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

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

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