

# Mineral Industry Surveys

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## TIN IN OCTOBER 2001

Domestic consumption of primary tin in October was estimated by the U.S. Geological Survey to be slightly higher than that in September and 7% lower than that of October 2000.

The Platts Metals Week average composite price for tin in October was \$2.70 per pound, 4% lower than that in September and 25% lower than that in October 2000.

Several reports from Indonesia, the world's second largest tin producer, highlight various difficulties and events there: Indonesia's largest tin producer, PT Timah, announced that it is facing a critical point concerning illegal mining on Bangka and Belitung Islands, where the bulk of the firm's tin mining operations are located. Timah said that it has proposed several courses of action to deal with the problem. It has already engaged local security and law enforcement agencies, and is assessing the possibility of taking legal action against those involved with the illegal mining. As a result of illegal mining and tin smuggling, Timah claims to have paid higher compensation for its inland tin-in-concentrates this year. The company has also suffered from higher production costs and low world tin prices to such an extent that it has implemented a program of cost-cutting measures, delayed capital expenditures, and halted operations at all unprofitable mines and offshore dredges. Among Timah's 308 inland mining units, only 147 have operated in 2001 (Metal Bulletin, 2001a).

According to another report, Timah has temporarily suspended operations at 12 of its offshore tin dredges, blaming the move on illegal mining at Bangka and Belitung Islands. All 1,140 workers at the dredging operations have been temporarily laid off. Timah has 21 offshore dredges (Metal Bulletin, 2001c). Timah also announced the layoff of 3,750 workers, about 72% of its workforce, and planned to sell off some assets (Platts Metals Week, 2001d).

The Provincial Government of Bangka and Belitung Islands has agreed in principal to ban exports of tin concentrates, to help PT Timah and PT Koba in their efforts to eliminate illegal mining. The agreement was drawn up following a recent meeting of the so-called "Team of Eleven," a body comprising

officials from PT Timah, PT Koba, the Bangka and Belitung Provincial Governments, and Bangka and Belitung's separate regency governments. Timah felt that the ban would allow it to continue smelting tin on Bangka Island. In the long term, the company may also build new smelting capacity, either on Kundur Island or close to its existing facilities on Bangka Island (Metal Bulletin, 2001d).

Timah also announced that, due to its current financial difficulties, consideration was being given to a proposed merger with Aneka Tambang, a diversified, vertically integrated mining company with gold and nickel as its main products. The merger was proposed by the Government of Indonesia. Both Timah and Aneka are partially government-owned (Platts Metals Week, 2001b).

Moreover, as a further indication of Timah's difficulties, Timah has decided to sell its 25% stake in Koba Tin (Platts Metals Week, 2001c).

Five major tin producers also have joined forces to rid the tin market of illegal mining. PT Tambang Timah, PT Koba Tin, Murchison United NL, Minsur SA, and Yunnan Tin Corp. issued a joint statement calling on miners and smelters not to purchase tin ore from sources that may be illegal (American Metal Market, 2001).

In Brazil, Mamore Mineração, the country's largest tin mining company, announced that it expected to get approval for an \$80 million International Finance Corp. (IFC) loan needed to complete an expansion at its largest mine. Mamore, a subsidiary of the Paranapanema Group, plans to boost tin output to 14,300 metric tons per year (t/yr) by 2004 from 10,000 t/yr in 2000. The group has already invested \$40 million over the last few years to begin working a mountain, called Rocha Sa, containing tin ore. The location is near Mamore's Pitinga tin mine, once Brazil's largest, in the western Amazon region. Mamore is now dynamiting the mountain and has installed equipment at the site to separate and concentrate the tin, tantalum, and niobium ore. The IFC (the World Bank's financing arm) has already done an environmental inspection of

the tin mine expansion project. Mamore has installed small primary and secondary crushing machines at the mining site, as well as rod mills to reduce crushed tin, tantalum, and niobium ores into powders used to make concentrate. It was expected that most of the IFC financing would go to add additional and larger crushing machines and two more rod mills. Mamore wants to begin working Rocha Sa because its Pitinga tin mine, where alluvial tin mining is performed, is near exhaustion. Tin concentrate from the Rocha Sa operation is being sent to a Paranapanema refinery in southeastern Sao Paulo State, and tantalum and niobium concentrates are being sent to a recently purchased Paranapanema refinery in east-central Minas Gerais State (Platts Metals Week, 2001a).

In Malaysia, it was reported that Iluka Resources (Perth, Australia) would sell its 75% stake in Koba Tin (Indonesia) and use the proceeds to fund new titanium minerals and zircon production facilities in Australia and the United States. Malaysia Smelting Corp. (MSC) reportedly will buy the Koba Tin stake for up to \$20 million. MSC operates a custom tin smelter in Penang, Malaysia, with a capacity of 25,000 t/yr. MSC observed that synergies exist between the firm's domestic base of operations and the Bangka Island (Indonesia) assets of Koba Tin which would allow for significant cost

reductions (Metal Bulletin, 2001b).

### **Update**

On December 7, 2001, the Platts Metals Week composite price for tin was \$2.91 per pound.

### **References Cited**

- American Metal Market, 2001, Five large global tin producers team up against illegal mining: American Metal Market, v. 109, no. 211, October 30, p. 2.
- Metal Bulletin, 2001a, Illegal mining forces PT Timah to face critical moment: Metal Bulletin, no. 8622, November 5, p. 3.
- 2001b, Malaysia Smelting buys Koba Tin stake: Metal Bulletin, no. 8622, November 5, p. 3.
- 2001c, PT Timah suspends offshore tin dredging: Metal Bulletin, no. 8624, November 12, p. 5.
- 2001d, Timah cheered by proposal to ban tin concs exports: Metal Bulletin, no. 8628, November 26, p. 5.
- Platts Metals Week, 2001a, Brazil's largest tin producer expects expansion funds: Platts Metals Week, v. 72, no. 46, November 12, p. 13.
- 2001b, Indonesia's Antam mulls Timah merger: Platts Metals Week, v. 72, no. 47, November 19, p. 3.
- 2001c, Tambang Timah to sell Koba stake to help recoup losses: Platts Metals Week, v. 72, no. 46, November 12, p. 13.
- 2001d, Timah's profit slump to bring asset sales, layoffs: Platts Metals Week, v. 72, no. 45, November 5, p. 13.

TABLE 1  
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

	2001			
	2000	September	October	January- October
Production, secondary e/ 2/	15,100 r/	900	900	9,000
<b>Consumption:</b>				
Primary	38,100 r/	3,300	3,330	32,800
Secondary	8,940 r/	853	868	8,670
Imports for consumption, metal	44,900	1,510	NA	NA
Exports, metal	6,640	253	NA	NA
Stocks at end of period	10,400	9,030 r/	7,630	XX
<b>Prices (average cents per pound): 3/</b>				
Metals Week composite 4/	370.16	280.33	270.42	XX
Metals Week New York dealer	254.92	185.28	178.11	XX
London, standard grade, cash	246.00	177.00	169.00	XX
Kuala Lumpur	244.12	173.21	165.27	XX

e/ Estimated. r/ Revised. NA Not available. XX Not applicable.

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

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

3/ Source: Platts Metals Week.

4/ 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 1/

(Cents per pound)

Period	High	Low	Average
<b>2000:</b>			
October	368.35	355.28	362.14
November	364.20	355.77	361.05
December	361.83	355.46	359.43
Year	405.27	355.46	370.16
<b>2001:</b>			
January	359.90	350.60	355.86
February	355.03	349.76	352.96
March	352.74	341.70	348.45
April	346.75	340.32	342.70
May	348.21	336.94	342.78
June	359.89	325.63	332.74
July	359.89	291.50	306.98
August	291.44	270.73	268.50
September	359.89	262.81	280.33
October	275.81	264.30	270.42

1/ 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 1/

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms)			Shipments 2/
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2000	W	1,720,000	8,990	5.2	2,290,000
2000:					
December	W	107,000	646	6.0	162,000
2001:					
January	W	W	710	7.3	179,000
February	W	92,800	679	7.3	160,000
March	W	102,000	663	6.5	167,000
April	W	90,700	698	7.7	162,000
May	W	88,900	679	7.6	181,000
June	W	80,600	666	8.3	175,000
July	W	80,300	514	6.4	167,000
August	W	W	511	6.2	185,000
September	W	W	531	6.1	160,000
October	W	W	552	6.8	NA

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

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

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

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

(Metric tons)

Country or product	2000	2001		
		August	September	January- September
<b>Imports:</b>				
<b>Metal (unwrought tin):</b>				
Bolivia	6,330	235	430	4,960
Brazil	5,860	540	373	3,810
Chile	2,630	--	--	122
China	10,200	320	240	5,840
Hong Kong	397	--	--	20
Indonesia	5,320	480	140	3,100
Malaysia	214	--	1	223
Peru	12,800	1,320	285	10,300
Russia	145	--	--	141
Singapore	20	--	--	105
United Kingdom	514	(2/)	--	118
Other	434	21	44	378
Total	44,900	2,910	1,510	29,100
<b>Other (gross weight):</b>				
Alloys	4,370	637	142	2,790
Bars and rods	993	24	58	428
Foil, tubes, pipes	(2/)	1	(2/)	1
Plates, sheets, strip	588	19	--	54
Waste and scrap	2,340	139	61	3,590
Miscellaneous	8,510	420	1,920	11,100
Total	16,800	1,240	2,180	18,000
Exports (metal)	6,640	292	253	3,460

-- Zero.

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

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2001							
	2000	September			October			January- October
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	W	128	W	128	128	W	128	1,260
Babbitt	1,660 r/	24	W	24	24	W	24	290
Bar tin and anodes	714 r/	20	W	20	21	W	21	207
Bronze and brass	3,360 r/	104	113	217	106	127	233	2,230
Chemicals	8,040 r/	668	W	668	668	W	668	6,690
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	18,800 r/	1,070	393	1,460	1,070	394	1,460	13,700
Tinning	1,200 r/	76	--	76	75	--	75	763
Tinplate 3/	8,800 r/	531	--	531	552	--	552	6,200
Tin powder	W	W	W	W	W	W	W	W
White metal 4/	1,260	W	W	W	W	W	W	W
Other	3,140 r/	85	47	132	85	47	132	1,130
Total reported	47,000 r/	2,700	553	3,260	2,730	568	3,290	32,500
Estimated undistributed consumption 5/	--	600	300	900	600	300	900	9,000
Grand total	47,000 r/	3,300	853	4,160	3,330	868	4,190	41,500

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

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

2/ Includesterne metal.

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

4/ Includes pewter, britannia metal, and jewelers' metal.

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