

# Mineral Industry Surveys

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#### TIN IN MARCH 2006

Domestic consumption of primary tin in March was estimated to be 1% higher than that in February and 7% lower than that in March 2005. Consumption of primary tin for the first 3 months of 2006 totaled 9,240 metric tons (t), a decline of 5% from that in the comparable period of 2005.

The Platts Metals Week average composite price for tin in March was \$5.18 per pound, about 2% higher than that in February and about 5% lower than that in March 2005.

In Indonesia, publicly owned PT Tambang Timah, the country's leading tin producer, announced that it expected to produce about 40,000 to 42,000 t of refined tin in 2006, in line with the 42,600 t it produced in 2005. Owing to better maintenance and operating performance of its dredge fleet, Timah's offshore production is expected to increase to 10,000 t of tin from about 9,400 t in 2005. The balance is expected to come from tin concentrates from "unconventional" inland mining for which Timah expected intense competition from the 21 private smelters operating in the country. These private smelters, which used to supply crude tin to smelters throughout Asia, have upgraded their facilities and now have the capacity to produce 76,000 metric tons per year (t/yr) of refined tin (Platts Metals Week, 2006c).

In Japan, two major tinplate producers, Nippon Steel Co., Ltd., and Toyo Kohan Corp., formed an alliance to better penetrate the domestic beer can market, currently dominated by aluminum. The firms agreed to jointly procure tin to reduce raw material costs, share production facilities, codevelop can stock that would compete with aluminum cans, and collaborate on overseas business. In addition to collaborations at the operational level, the firms have also agreed to cross-hold shares. Nippon Steel will hold a 1.19% stake in Toyo Kohan,

while Toyo Kohan will hold a 0.15% stake in Nippon Steel. Nippon Steel's output of tinplate can stock for the domestic market is 450,000 to 500,000 t/yr and Toyo Kohan's output is 300,000 t/yr (Platts Metals Week, 2006a).

In Brazil, Paranapanema SA's new Rocha Sa tin property in the Amazon region was scheduled to begin production in October and produce 7,000 t/yr of tin and 3,000 t/yr of tantalum alloys. Paranapanema spent \$19 million on its tin properties in 2005, largely to develop Rocha Sa at the site of its Pitinga Mine (Platts Metals Week, 2006b).

In Singapore, reports indicated that the Singapore Tin Industries' new tin refinery was operating only at one-half capacity as a result of a lack of feedstock. The feed shortage was attributed to a longer-than-normal monsoon season in Indonesia. The smelter's capacity is 36,000 t/yr. The smelter is a joint venture of Yunnan Tin Co., Ltd. and Singapore's KJP International (CRU International, Ltd. 2006).

#### **Update**

On May 5, 2006, the Platts Metals Week composite price for tin was \$5.96 per pound.

#### **References Cited**

CRU International Ltd., 2006, CRU Monitor—Tin: CRU International Ltd., April, 8 p.

Platts Metals Week, 2006a, Japanese tinplate takes on aluminum-held beer can market: Platts Metals Week, v.77, no. 14, April 3, p. 1, 11.

Platts Metals Week, 2006b, Rocha Sa to start in October: Platts Metals Week, v. 77, no. 14, April 3, p. 11.

Platts Metals Week, 2006c, Timah holds 2006 tin output at 40,000-42,000 mt: Platts Metals Week, v. 77, no. 15, April 10, p. 3.

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

(Metric tons, unless otherwise noted)

	2005		2006		
	January-			January-	
	December <sup>p</sup>	February	March	March	
Production, secondary <sup>e, 2</sup>	10,800	900	900	2,700	
Consumption:					
Primary	35,900	3,000 r	3,040	9,240	
Secondary	10,800	694	698	2,080	
Imports for consumption, metal	37,500	2,080	NA	NA	
Exports, metal	4,330	428	NA	NA	
Stocks at end of period	5,400	5,330 <sup>r</sup>	5,430	XX	
Prices (average cents per pound): <sup>3</sup>					
Metals Week composite <sup>4</sup>	443.03	507.70	517.91	XX	
Metals Week New York dealer	329.69	375.87	383.55	XX	
London, standard grade, cash	304.00	355.00 <sup>r</sup>	359.00	XX	
Kuala Lumpur	301.83	351.84	361.08	XX	

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

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

# (Cents per pound)

Period	High	Low	Average
2005, December	457.37	418.38	443.03
2006:			
January	521.70	492.15	503.78
February	517.39	499.65	507.70
March	533.89	508.89	517.91

<sup>&</sup>lt;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.

<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.

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

(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>	
2005 <sup>p</sup>	W	2,270,000	7,670	3.4	1,860,000	
2006:						
January	4,670	179,000	569	3.2	166,000	
February	4,640	174,000 <sup>r</sup>	591 <sup>r</sup>	3.4 <sup>r</sup>	138,000	
March	4,870	185,000	626	3.4	NA	

Preliminary. <sup>r</sup>Revised. 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)

		200			
				January-	
Country or product	2005	January	February	February	
Imports:					
Metal (unwrought tin):					
Bolivia	5,400	1,040	801	1,840	
Brazil	2,150	100	51	151	
Chile	20				
China	4,510	256	217	473	
Indonesia	5,220	1,400	413	1,820	
Malaysia	1,530		50	50	
Peru	18,300	1,570	500	2,070	
Thailand	45		25	25	
United Kingdom	67		5	5	
Other	264		22	22	
Total	37,500	4,370	2,080	6,450	
Other (gross weight):					
Alloys	7,460	973	1,090	2,060	
Bars and rods	1,030	91	86	177	
Foil, tubes, pipes	8	(2)	(2)	(2)	
Plates, sheets, strip	324	25	11	36	
Waste and scrap	3,530	558	154	712	
Miscellaneous	3,310	158	250	408	
Total	15,700	1,810	1,590	3,400	
Exports (metal)	4,330	412	428	840	

<sup>--</sup> 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 ½ unit.

 ${\bf TABLE~5}$  CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT  $^{\rm l}$ 

# (Metric tons of contained tin)

	2005	2006						
	January	February			March			January-
Product	December p	Primary	Secondary	Total	Primary	Secondary	Total	March
Alloys (miscellaneous) <sup>2</sup>	1,240	137		137	138		138	380
Babbitt	276	19	W	19	17	W	17	55
Bar tin and anodes	275	26	W	26	26	W	26	77
Bronze and brass	3,700	172	136	308	175	139	314	926
Chemicals	8,680	754	W	754	754	W	754	2,270
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,200	625	250	875	623	250	873	2,800
Tinning	<del></del>	38 <sup>r</sup>		38 <sup>r</sup>	42		42	149
Tinplate <sup>3</sup>	7,670	591 <sup>r</sup>		591 <sup>r</sup>	626		626	1,790
Tin powder	W	W		W	W		W	W
White metal <sup>4</sup>	W	W		W	W		W	W
Other	1,070	41	8	49	42	9	51	182
Total reported	35,900	2,400 <sup>r</sup>	394	2,800	2,440	398	2,840	8,620
Estimated undistributed consumption <sup>5</sup>	10,800	600	300	900	600	300	900	2,700
Grand total	46,700	3,000 <sup>r</sup>	694	3,700	3,040	698	3,740	11,300

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

<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>Includes terne metal.

 $<sup>^3 \</sup>mbox{Includes}$  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.