

Mineral Industry Surveys

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TIN IN JANUARY 2006

Domestic consumption of primary tin in January was estimated by the U.S. Geological Survey to be about 7% higher than that in December 2005 and about 4% lower than that in January 2005. Leading refined tin exporters to the United States in 2005 were, in descending order of tonnage shipped, Peru, Bolivia, Indonesia, China, Brazil, and Malaysia.

The Platts Metals Week average composite price for tin in January 2006 was \$4.64 per pound, about 5% higher than that in December 2005 and 8% lower than that in January 2005.

ITRI Ltd. and CRU International Ltd. (both based in the United Kingdom) jointly released new data regarding world tin consumption. Solder and tinplate have long been considered the "big two" applications for tin, but data indicate that the global solder market is now more than twice the size of the tinplate business. Refined tin usage in solders in 2004 amounted to 141,000 metric tons (t), or 45% of total world consumption, while usage in tinplate was around 63,000 t, or 20% of the world market. The third ranked application, organic and inorganic chemicals, accounted for some 48,000 t of tin, or 15% of the total market (CRU Week in the News, 2006a§¹).

European tin traders reported a marked increased demand for tin this winter, as European electronics manufacturers began to substitute tin for lead in their products. The new European Union (EU) rules requiring the use of lead-free solder go into effect July 1, 2006. Some observers believe that strong demand in the electronics sector could increase tin consumption by 5% or 15,000 to 20,000 metric tons per year (t/yr). The global tin market was estimated to be about 337,000 t in 2005. Analysts observe that the new EU dictum results in solder moving from a composition with 62-63% tin to one with 96% tin. The new rules would affect all electronic products delivered into the European market, wherever they are made. Some industry observers believe similar rules may eventually be established in the United States (American Metal Market, 2006b).

In Peru, the Energy and Mines Ministry reported that Minsur SA increased its tin production to 42,100 t in 2005, a record

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

level, with the Funsur refinery producing 36,700 t (CRU Week in the News, 2006b§).

In Brazil, the country's tin producers association, Sindicato Nacional da Industria da Extração do Estano (SNIEE), reported that production of tin-in-concentrate fell by 12% to 11,000 t in 2005, while refined tin output declined by 22% to 9,000 t. This was the lowest level of mine and refinery production since 1982. Production of tin-in-concentrate by the country's leading miner, Paranapanema SA, fell by 21% to 5,700 t in 2005, although the full commissioning of the company's Rocha Sa Mine was expected to reverse the decline in 2006 (CRU Week in the News, 2006b§).

The Mines Company (China) announced that it was seeking to develop large scale mining operations in Bolivia, starting with the country's leading tin mine, Huanuni. The mine, which produces about 4,000 t/yr of tin-in-concentrate, has been under the control of a court-appointed administrator since 2002 (Platts Metals Week, 2006).

Major canmaker Ball Corp. (Broomfield, CO) announced that it had reached an agreement to buy U.S. Can Corp.'s (Lombard, IL) operations in the United States and Argentina in a non-cash deal valued at \$594 million. U.S. Can is the leading manufacturer of aerosol cans in the United States and also makes paint cans at 10 domestic plants. Ball is North America's second-largest maker of metal food cans, in terms of sales volume (American Metal Market, 2006a).

Update

On March 10, 2006, the Platts Metals Week composite price for tin was \$5.10 per pound.

References Cited

- American Metal Market, 2006a, Ball signs deal to buy U.S. Can units for \$594 M: American Metal Market, v. 114, no. 6-4, February 16, p. 1, 4.
American Metal Market, 2006b, EU's new electronics regulations create increase in demand for tin: American Metal Market, v. 114, no. 8-3, March 1, p. 7.
Platts Metals Week, 2006, China's Mines Co may invest in Bolivia's Huanuni Tin: Platts Metals Week, v. 77, no. 8, February 20, p. 9.

Internet References Cited

CRU Week in the News, 2006a (February 23), Tin, accessed February 23, 2006,
via URL <http://www.crumonitor.com>.

CRU Week in the News, 2006b (March 9), Tin, accessed March 10, 2006, via
URL <http://www.crumonitor.com>.

TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2005 ^p		2006 January
	January- December	December	
Production, secondary ^{e,2}	10,800	900	900
Consumption:			
Primary	35,900	2,990 ^r	3,190
Secondary	10,800	709 ^r	687
Imports for consumption, metal	37,500	1,780	NA
Exports, metal	4,330	307	NA
Stocks at end of period	5,400	5,400 ^r	5,400
Prices (average cents per pound): ³			
Metals Week composite ⁴	483.04	443.03	463.85
Metals Week New York dealer	360.93	329.69	340.11
London, standard grade, cash	343.00	304.00	319.00
Kuala Lumpur	333.55	301.83	317.41

^eEstimated. ^pPreliminary. ^rRevised. NA Not available.

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
2005:			
December	457.37	418.38	443.03
2006:			
January	521.70	492.15	503.78

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)	
2005 ^p	W	2,270,000	7,670	3.4	1,860,000
December	W	200,000	589	3.0	142,000
2006:					
January	4,670	179,000	569	3.2	NA

^pPreliminary. 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	2005			
	2004	November	December	January- December
Imports:				
Metal (unwrought tin):				
Bolivia	5,060	20	--	5,400
Brazil	4,330	123	125	2,150
Chile	281	--	--	20
China	5,310	288	526	4,510
Indonesia	4,660	832	475	5,220
Japan	540	--	--	--
Malaysia	6,600	150	96	1,530
Peru	19,600	1,610	540	18,300
Switzerland	178	--	--	--
Thailand	500	--	--	45
United Kingdom	97	2	21	67
Other	472	101	2	264
Total	47,600	3,130	1,780	37,500
Other (gross weight):				
Alloys	5,180	342	515	7,460
Bars and rods	625	102	65	1,030
Foil, tubes, pipes	6	(2)	--	8
Plates, sheets, strip	509	28	6	324
Waste and scrap	1,950	212	673	3,530
Miscellaneous	3,330	267	241	3,310
Total	11,600	951	1,500	15,700
Exports (metal)	3,650	342	307	4,330

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2005						
	January -	December			January 2006		
	December ^p	Primary	Secondary	Total	Primary	Secondary	Total
Alloys (miscellaneous) ²	1,240	93 ^r	--	93 ^r	105	--	105
Babbitt	276	20	W	20	18	W	18
Bar tin and anodes	275	23	W	23	23	W	23
Bronze and brass	3,700	176	143	319	175	128	303
Chemicals	8,680	773	W	773	758	W	758
Collapsible tubes and foil	W	W	W	W	W	W	W
Solder	12,200	572 ^r	257 ^r	829 ^r	803	249	1,050
Tinning	740	66	--	66	69	--	69
Tinplate ³	7,670	589	--	589	569	--	569
Tin powder	W	W	--	W	W	--	W
White metal ⁴	W	W	--	W	W	--	W
Other	1,070	79 ^r	9	88 ^r	71	10	81
Total reported	35,900	2,390 ^r	409 ^r	2,800 ^r	2,590	387	2,980
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900
Grand total	46,700	2,990 ^r	709 ^r	3,700 ^r	3,190	687	3,880

^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.