USGS
science for a changing world

125 years of science for America 1879–2004

Mineral Industry Surveys

For information, contact:
James F. Carlin, Jr., Tin Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4985, Fax: (703) 648-7757
E-mail: jcarlin@usgs.gov

Elsie D. Isaac (Data)
Telephone: (703) 648-7950
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

Internet: http://minerals.usgs.gov/minerals

TIN IN APRIL 2004

Domestic consumption of primary tin in April was estimated by the U.S. Geological Survey to be just slightly lower than that in both March 2004 and April 2003. Consumption during the first 4 months of 2004 was just slightly above that of the first 4 months of 2003.

The Platts Metals Week average composite price for tin in April was $5.76 per pound, about 16% higher than that in March and 79% higher than that in April 2003.

PT Timah Tbk, the large Indonesian tin miner and smelter, reported that its refined tin production in 2003 reached an all-time record level of 46,000 metric tons (t). This level was only achieved, however, by running down its previously very high stocks of tin concentrates. The Indonesian government currently owns 65% of Timah, but plans, subject to parliamentary approval, to sell off 14% of its shareholdings this year (CRU Tin Monitor, 2004).

Malaysia Smelting Corp. (MSC), the large Malaysian tin smelter, announced that it had recently established a new Indonesian subsidiary, PT MSC Indonesia, to undertake exploration and mining on Banka Island with a private firm, PT Mitra Stania Prima. Indonesia-based PT Koba Tin, a 75%-25% joint venture with state-controlled producer PT Timah, produced 18,800 t of refined tin in 2003 while MSC's Butterworth tin smelter in Malaysia produced 18,200 t (CRU Tin Monitor, 2004).

The Renison Bell Tin Mine in Tasmania, Australia, was sold to Sydney-based Bluestone Nominees Ltd. Prior to its closure, production of tin-in-concentrate at Renison had dropped to an annual rate of 5,000 t, from earlier levels of close to 10,000 t annually. Bluestone also owns the Collingwood tin project in Queensland, which has known reserves sufficient to support tin production of about 3,000 t yearly for up to 5 years (CRU Tin Monitor, 2004).

Yunnan Tin Corp., China's largest tin producer, reported refined tin production of 31,100 t in 2003, an increase of 8% over that of 2002. Solders, tin chemicals, and other tin products accounted for some 30% of total sales. The company also produces copper, lead, silver, and bismuth. Chinese national tin production has continued to rise rapidly in the first 2 months of 2004, with refined tin output up 21% to 14,900 t compared with the comparable period of 2003 (CRU Tin Monitor, 2004).

In Russia, the Novosibirsk Tin Combine plans to double tin production to 8,000 t annually over the next 5 years. Its Dalolovo and Vostokolovo tin mines plan to boost tin concentrate production by 90% to 1,500 t in 2004 (CRU Tin Monitor, 2004).

Rio Tinto plc (UK) and the Portugese State holding company, Empresa de Desenvolvimento Mineiro, have agreed to sell their interests (49% and 51% respectively) in the Neves Corvo Mine in Portugal to EuroZinc for 128 million euros ($156 million). The mine is expected to produce 90,000 t of copper and 300 t of tin-in-concentrate in 2004 (CRU Tin Monitor, 2004).

International Steel Group Inc. (ISG), Cleveland, OH, announced the finalization of its acquisition of Weirton Steel Corp. (Weirton, WV). Weirton began operations in 1909, and is the fifth-largest integrated steel producer in the United States, with an annual capacity of 3 million metric tons (Mt). ISG now becomes the largest integrated steel producer in the United States, with domestic steel production capacity of 23 Mt annually. Weirton has long been a leading tinplate producer (CRU Tin Monitor, 2004).

The Steel Recycling Institute announced that 1.6 Mt of steel cans were recycled in 2003, with a recycling rate of 60.2%, compared with 58.5% in 2002 (Steel Recycling Institute, 2004).

In Australia, Malachite Resources NL announced the start of a program of drilling at its Elsmore Tin Project, in northern New South Wales, where the firm has an option to purchase a 100% interest (Malachite Resources NL, 2004).

Recently, a Chinese-based publication listed, in order of production, the current major Chinese producers of refined tin:

1) Yunnan Tin Industry Co. Ltd. (Yunnan Province).
2) Liuzhou China Tin Group Co. Ltd. (Guangxi Province).
3) Gejin Zili Smelter (Yunnan Province).
4) Yunnan Chengfong Nonferrous Metals Co. Ltd. (Yunnan Province).
5) Zhongshan County Jinyi Smelting Co. Ltd. (Guangxi Province).

6) Mongzi Bofa Mine-Smelting Co. Ltd. (Inner Mongolia).
7) Pinggui PGMA Co Ltd. (Guangxi Province).
8) Hezhou County Fuli Fengfan Smelter (Guangxi Province).
9) Minmetals Ganzhou Tin Industry Co. Ltd. (Guangxi Province).

(China Metal Market, 2004).

Rasselstein Hoesch GmbH (Germany), a major tinplate producer, announced that henceforth it would be known as Rasselstein GmbH. Rasselstein Hoesch was formed in 1995 by the merger of Rasselstein AG (Neuwied, Germany) and Krupp Hoesch Stahl AG (Dortmund, Germany). At that time, the Dortmund tinplate facility was closed and the main tinplate facility in Andernach was enhanced (Tin World, 2004).

Update

On June 4, 2004, the Platts Metals Week composite price for tin was $6.11 per pound.

References Cited

China Metal Market, 2004, China's output of refined tin in April: Antaike, no. 91, June, p. 10.

CRU Tin Monitor, 2004, Industry News: CRU International Ltd., April, p. 7.

Malachite Resources NL, 2004, Drilling commences at Elsmore as tin price hits 15-year high: Lindfield, New South Wales, Malachite Resources NL press release, March 22, 2 p.

Steel Recycling Instititute, 2004, Steel continues to be the backbone of recycling in America: Pittsburgh, PA, Steel Recycling Institute, May 3, 2 p.

Tin World, 2004, Name change for German tinplate maker: Tin World, no. 4, April/May, p. 5.

TABLE 1
SALIENT TIN STATISTICS[1]

(Metric tons, unless otherwise noted)

		2004		
	2003[p]	March	April	January-April
Production, secondary[e, 2]	10,800	900	900	3,600
Consumption:				
Primary	35,200	3,180	3,160	12,500
Secondary	10,800	707	677	2,750
Imports for consumption, metal	37,100	3,580	NA	NA
Exports, metal	3,690	399	NA	NA
Stocks at end of period	6,520	6,280	6,040	XX
Prices (average cents per pound):[3]				
Metals Week composite[4]	339.84	495.71	576.66	XX
Metals Week New York dealer	218.06	357.11	426.00	XX
London, standard grade, cash	207.00	345.00	406.00	XX
Kuala Lumpur	209.62	343.35	412.43	XX

[e]Estimated. [p]Preliminary. 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
2003:			
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
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	625.00	575.07	576.66

[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)

		Tinplate (all forms)			
Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments[2]
2003[p]	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

[p]Preliminary. 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)

		2004		
Country or product	2003[p]	February	March	January-March
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	214	933	1,530
Brazil	3,000	400	275	775
China	4,340	195	319	815
Indonesia	3,070	--	20	360
Japan	136	180	--	180
Malaysia	490	120	20	300
Peru	19,100	1,640	1,970	4,810
Switzerland	(2)	158	--	178
United Kingdom	143	19	2	21
Other	1,060 r	--	40	61
Total	37,100	2,920	3,580	9,030
Other (gross weight):				
Alloys	3,820	340	311	823
Bars and rods	338	40	32	105
Foil, tubes, pipes	4	(2)	(2)	(2)
Plates, sheets, strip	270	69	59	166
Waste and scrap	921	21	87	114
Miscellaneous	2,670	252	162	600
Total	8,030	722	651	1,810
Exports (metal)	3,690	268	399	924

[p]Preliminary. -- 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)

		2004						
		March			April			January-
Product	2003[p]	Primary	Secondary	Total	Primary	Secondary	Total	April
Alloys (miscellaneous)[2]	1,820	249	W	249	250	W	250	766
Babbitt	235	13	W	13	13	W	13	57
Bar tin and anodes	278	12	W	12	12	W	12	48
Bronze and brass	2,800	110	133	243	104	103	207	869
Chemicals	8,410	704	W	704	704	W	704	2,820
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	836	265	1,100	776	265	1,040	4,200
Tinning	450	41	--	41	38	--	38	154
Tinplate[3]	7,800	558	--	558	614	--	614	2,450
Tin powder	W	W	--	W	W	--	W	W
White metal[4]	W	W	--	W	W	--	W	W
Other	843	52	9	61	51	9	60	247
Total reported	35,200	2,580	407	2,980	2,560	377	2,940	11,600
Estimated undistributed consumption[5]	10,800	600	300	900	600	300	900	3,600
Grand total	46,000	3,180	707	3,880	3,160	677	3,840	15,200

[p]Preliminary. W Withheld to avoid disclosing proprietary data; included with "Other." -- Zero.

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

[2]Includes terne 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.