

# Mineral Industry Surveys

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## TIN IN OCTOBER 2009

Domestic consumption of primary tin in October 2009 was estimated to be 1,910 metric tons (t), the same level as that in September 2009, and slightly higher than that in October 2008. Imports of refined tin were 2,150 t in October 2009, 20% less than those in September 2009 and 17% lower than those in October 2008. Imports for the first 10 months of 2009 totaled 28,100 t. Peru, Bolivia, Indonesia, and China, in decreasing order, were the leading sources of tin imports.

The Platts Metals Week average composite price of tin in October 2009 was \$9.15 per pound compared with \$8.88 per pound in October 2008.

Thailand Smelting and Refining Co. Ltd. (Thaisarco) (Phuket, Thailand), the only tin smelting company in Thailand, and a subsidiary of the multinational organization AMC Group Ltd. (London, United Kingdom), announced on September 18 that it had suspended all purchases of tin ore from Congo (Kinshasa). The decision followed continued criticism by the Global Witness organization, whose goal reportedly was to expose corrupt exploitation of natural resources. AMC stated that Thaisarco would not enter into further contracts with suppliers of tin ore unless it had the support of the United Nations and campaign groups for certification schemes. Thaisarco has been participating with the tin research organization ITRI Ltd. (St. Albans, United Kingdom) to develop a certification plan to verify the origin of shipments of tin ore. The first stage of the ITRI Tin Supply Chain Initiative was implemented on July 1, 2009, and included among other requirements, a system for written confirmation of origin of the mineral from each supplier. The deposits of cassiterite in Congo (Kinshasa), the chief source of tin, are found in a broad zone extending from northern Shaba region through Sud-Kivu and Nord-Kivu Provinces to the Haut-Zaire region. These deposits are worked by artisanal miners using picks and shovels, and a single container load of ore could be sourced from thousands of miners (TIN World, 2009c).

Western United Mines Ltd. (WUM) (Redruth, United Kingdom), the owner of the South Crofty Tin Mine (Pool, United Kingdom), announced a new focus in returning the mine to production during the next 2 years. Although long known as a tin mine in an area that has produced tin ore for more than 300 years, South Crofty was actually a polymetallic mine, containing copper, lithium, precious metals, and zinc. WUM believed that by recovering a range of base metals the mine would take advantage of a range of fluctuating metal prices rather than being at the mercy of the rise and fall of tin prices. WUM planned to develop research projects with the Camborne School of Mines (Tremough, United Kingdom) to implement this approach (TIN World, 2009b).

Reportedly the Zimbabwe Mining Development Corp. (ZMDC) was holding discussions with a South African company to reopen the Kamativi Tin Mine in Zimbabwe. Kamativi was acquired by ZMDC in 1986 but closed in 1994 following a slump in global tin prices and the exhaustion of higher grade tin ores. During the mid-1980s, the open cast and underground operations together produced about 1,000 metric tons per year of tin-in-concentrate. At that time, ore grades were about 0.125% tin for the open cast operations and 0.15% to 0.35% tin for the underground operations (TIN World, 2009a).

### Update

On April 30, 2010, the Platts Metals Week composite price for tin was \$11.14 per pound.

### References Cited

- TIN World, 2009a, Prospects for revival of Kamativi: TIN World, no. 28, Fall, p. 6.
- TIN World, 2009b, South Crofty focus on polymetallic resources: TIN World, no. 28, Fall, p. 5.
- TIN World, 2009c, Thaisarco suspends DRC tin ore purchases: TIN World, no. 28, Fall, p. 4.

TABLE 1  
SALIENT TIN STATISTICS<sup>1</sup>

(Metric tons, unless otherwise noted)

	2008 <sup>p</sup>	2009		
		September	October	January- October
Production, secondary <sup>e, 2</sup>	11,900	994	994	9,940
Consumption:				
Primary	21,100	1,910	1,910	16,900
Secondary	10,800	716	736	9,000
Imports for consumption, metal	36,300	2,680	2,150	28,100
Exports, metal	9,800	192	497	2,700
Stocks at end of period	XX	7,540	7,520	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	1,128.97	904.70	915.40	XX
Metals Week New York dealer	864.53	706.94	709.56	XX
London, standard grade, cash	839.10	705.50	679.33	XX
Kuala Lumpur	837.70	662.29	668.75	XX

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. XX Not applicable.

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

<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>3</sup>Source: Platts Metals Week.

<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.

TABLE 2  
METALS WEEK COMPOSITE PRICE<sup>1</sup>

(Cents per pound)

Period	High	Low	Average
2008	1,529.29	630.41	1,128.97
2009:			
January	748.18	688.67	711.90
February	712.54	670.97	692.57
March	698.72	647.98	668.86
April	781.18	661.48	725.34
May	874.60	785.83	849.13
June	970.28	891.14	924.85
July	909.95	780.62	864.70
August	945.24	881.50	909.91
September	925.48	872.29	904.70
October	933.14	894.98	915.40

<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.

TABLE 3  
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES<sup>1</sup>

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments <sup>2</sup>
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2008	30,900	2,280,000	6,690	2.9	1,770,000
2009:					
January	1,440	118,000	562	4.8	103,000
February	1,170	86,500	523	6.0	94,400
March	1,350	96,000	547	5.7	107,000
April	372	87,900	527	6.0	122,000
May	402	78,600	479	6.1	132,000
June	508	73,600	452	6.1	140,000
July	1,550	98,300	511	5.2	136,000
August	1,710	94,500	478	5.1	NA
September	1,730	96,200	498	5.2	151,000
October	1,290	103,000	509	4.9	145,000

NA Not available.

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

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

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

(Metric tons)

Country or product	2009			
	2008	September	October	January- October
<b>Imports:</b>				
<b>Metal (unwrought tin):</b>				
Bolivia	4,980	883	151	4,900
Brazil	1,570	--	--	951
China	2,380	61	156	1,020
Indonesia	2,000	235	240	2,740
Malaysia	1,740	--	--	121
Peru	20,900	1,420	1,540	17,700
Singapore	706	--	--	400
Thailand	1,670	--	--	15
United Kingdom	225	--	--	--
Other	152	76	69	299
<b>Total</b>	<b>36,300</b>	<b>2,680</b>	<b>2,150</b>	<b>28,100</b>
<b>Other (gross weight):</b>				
Alloys	1,720	101	65	1,070
Bars and rods	4,190	268	309	2,480
Foil, tubes, pipes	97	12	4	53
Plates, sheets, strip	1,150	(2)	--	1,880
Waste and scrap	23,300	8,620	5,860	72,600
Miscellaneous	2,940	377	576	3,060
<b>Total</b>	<b>33,400</b>	<b>9,380</b>	<b>6,820</b>	<b>81,200</b>
Exports (metal)	9,800	192	497	2,700

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2009							
	2008 <sup>p</sup>	September			October			January- October
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) <sup>2</sup>	1,800	132	W	132	129	W	129	1,460
Babbitt	459	19	W	19	18	W	18	353
Bar tin and anodes	218	20	--	20	17	--	17	165
Bronze and brass	2,250	87	93	180	88	113	201	1,750
Chemicals	2,940	281	W	281	281	W	281	2,540
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	5,750	195	277	472	197	277	474	4,740
Tinning	322	27	--	27	27	--	27	260
Tinplate <sup>3</sup>	6,690	498	--	498	509	--	509	5,090
Tin powder	227	18	W	18	18	W	18	189
White metal <sup>4</sup>	W	W	W	W	W	W	W	W
Other	389	28	47	75	28	47	75	321
Total reported	21,100	1,310	416	1,720	1,310	436	1,750	16,900
Estimated undistributed consumption <sup>5</sup>	10,800	600	300	900	600	300	900	9,000
Grand total	31,900	1,910	716	2,620	1,910	736	2,650	25,900

<sup>p</sup>Preliminary. W Withheld to avoid disclosing company 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>2</sup>Includes terne metal.

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

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

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