

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 AUGUST 2003

Domestic consumption of primary tin in August was estimated by the U.S. Geological Survey to be the same as that in July and 2% lower than that in August 2002.

The Platts Metals Week average composite price for tin in August was \$3.36 per pound, 1% above that in July and 20% above that in August 2002.

Indonesia's major tin producer, PT Timah, announced plans to list the company on the Euronext cross-border exchange in Amsterdam, Netherlands. The plan is part of a pilot project by the Jakarta Stock Exchange (JSX) to test dual listing collaboration between the JSX and Euronext. Timah is listed on the JSX and is one of two firms selected for the trial (Platts Metals Week, 2003).

In Brazil, steelmaker Companhia Siderúrgica Nacional (CSN), a major tinplate producer, completed purchase of a 50% stake in Portugal's Lusosider Acos Planos SA, also a tinplate producer. The Anglo-Dutch steelmaker, Corus Group plc., is the only other stakeholder in Lusosider (The Canmaker, 2003a).

U.S. Steel Corp. (Pittsburgh, PA) announced the completion of an \$80 million tin mill expansion at its U.S. Steel Kosice plant in Slovakia. A new continuous annealing line and an electrolytic tinning line have more than doubled Kosice's annual capacity to 375,000 metric tons (t) (The Canmaker, 2003b).

In China, the Government announced that production of the country's 10 most important non-ferrous metals, one of which is tin, rose by 18% to 5.5 million t in the first half of 2002, compared with the first half of 2001. Tin production in the first 6 months was 43,300 t, 11% more than in the comparable 2002 period (Metal-Pages, 2003§¹).

Hydromet Environmental Recovery Ltd. announced that its plant in Newman, IL, has successfully begun to extract tin from tin waste slurry. Hydromet changed its name to Stanmet Limited and is listed on the TSX Venture Exchange (Hydromet Environmental Recovery Ltd., 2003).

Researchers at the University of Wisconsin announced the development of a nickel-tin-aluminum catalyst that could replace the precious metal platinum in a process for extracting hydrogen gas from plants. The relatively low-temperature process is said to be environmentally sustainable and greenhouse-gas neutral. The catalyst was discovered by testing more than 300 materials before finding a nickel-tin-aluminum combination that reacts with biomass-derived oxygenated hydrocarbons to produce hydrogen and carbon dioxide without producing large amounts of unwanted methane. The new catalyst offers opportunities for making a transition from a world economy based on fossil fuels to one based on renewable resources. The reportedly simple process converts hydrocarbons such as glucose into hydrogen, carbon dioxide, and gaseous alkanes with hydrogen constituting half of the products (Advanced Materials & Processes, 2003).

Update

On October 3, 2003, the Platts Metals Week Composite price for tin was \$3.48 per pound.

References Cited

Advanced Materials & Processes, 2003, Nickel-tin replaces platinum in extracting catalyst: Advanced Materials & Processes, v. 161, no. 10, October, p. 27.

Hydromet Environmental Recovery Ltd., 2003, Financial news: Newman, IL,
Hydromet Environmental Recovery, Ltd., press release, August 29, 1 p.
Platts Metals Week, 2003, Indonesia's Timah to list on Euronext: Platts Metals Week, v. 74, no. 33, August 18, p. 7.

The Canmaker, 2003a, CSN buys into European Steel: The Canmaker, v. 16, August, p. 8.

The Canmaker, 2003b, U.S. Steel Kosice expands tin lines: The Canmaker, v. 16, August, p. 9.

Internet Reference Cited

Metal-Pages, 2003 (August 9), Metals output rises in China in the first half, accessed September 5, 2003, at URL http://www.metal-pages.com.

¹A reference with a section mark (§) is found in the Internet Reference Cited section.

$\begin{tabular}{ll} TABLE 1 \\ SALIENT TIN STATISTICS \end{tabular}$

(Metric tons, unless otherwise noted)

	2003					
				January-		
	2002 ^p	July	August	August		
Production, secondary ^{e, 2}	10,800	900	900	7,200		
Consumption:						
Primary	35,800	3,130 ^r	3,130	25,000		
Secondary	10,800	711	710	5,600		
Imports for consumption, metal	42,200	3,800	NA	NA		
Exports, metal	2,940	267	NA	NA		
Stocks at end of period	7,280	6,420 ^r	6,250	XX		
Prices (average cents per pound): ³						
Metals Week composite ⁴	291.97	331.38	335.84	XX		
Metals Week New York dealer	194.75	226.33	229.44	XX		
London, standard grade, cash	184.00	215.00	219.00	XX		
Kuala Lumpur	184.35	215.35	218.48	XX		

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

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

(Cents per pound)

Period	High	Low	Average	
2002:				
August	286.95	272.37	279.74	
September	295.72	277.95	286.19	
October	308.99	294.63	302.39	
November	306.01	297.88	301.54	
December	306.94	298.78	302.37	
Year	316.83	267.12	291.97	
2003:				
January	320.43	303.14	313.84	
February	333.87	310.69	322.82	
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	

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.

 $^{^{1}\}mbox{Data}$ 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.

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

(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 ²
2002 ^p	61,100	2,400,000	7,440	3.1	2,100,000
2003:					
January	2,790	216,000	642	3.0	180,000
February	2,510	214,000	640	3.0	156,000
March	W	225,000	686	3.1	156,000
April	W	217,000	704	3.2	165,000
May	1,780	215,000	536	2.5	158,000
June	W	208,000 r	732 ^r	3.5 ^r	173,000
July	W	205,000 r	659 ^r	3.2 ^r	176,000
August	W	197,000	688	3.5	NA

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

 ${\bf TABLE~4} \\ {\bf U.S.~TIN~IMPORTS~FOR~CONSUMPTION~AND~EXPORTS}^1$

(Metric tons)

			2003		
				January-	
Country or product	2002	June	July	July	
Imports:	<u></u>				
Metal (unwrought tin):					
Bolivia	6,150	515	745	3,950	
Brazil	4,840	400	325	2,110	
China	7,600	155	445	2,840	
Indonesia	3,340	230	300	1,800	
Malaysia	122	80	29	325	
Peru	19,900	1,300	1,840	12,100	
Russia	21				
United Kingdom	2	49	14	63	
Other	264	124	96	482	
Total	42,200	2,850	3,800	23,700	
Other (gross weight):	_				
Alloys	3,530	198	365	1,940	
Bars and rods	224	20	25	225	
Foil, tubes, pipes	1	(2)	1	4	
Plates, sheets, strip	128	3	66	92	
Waste and scrap	561	98	33	683	
Miscellaneous	7,810	192	187	1,440	
Total	12,300	511	677	4,380	
Exports (metal)	2,940	385	267	1,980	

⁻⁻ Zero

Source: U.S. Census Bureau.

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

²Source: American Iron and Steel Institute monthly publication.

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

²Less than 1/2 unit.

 ${\bf TABLE~5}$ CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT 1

(Metric tons of contained tin)

		2003						
		July			August			January-
Product	2002 ^p	Primary	Secondary	Total	Primary	Secondary	Total	August
Alloys (miscellaneous) ²	1,660	143	W	143	140	W	140	1,220
Babbitt	501	15	W	15	15	W	15	155
Bar tin and anodes	192	14	W	14	15	W	15	181
Bronze and brass	2,390	85	130	215	107	128	235	1,550
Chemicals	7,550	697	W	697	697	W	697	5,580
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	14,500	796	266	1,060	755	266	1,020	8,390
Tinning	411	37		37	34		34	286
Tinplate ³	7,440	659 ^r		659 ^r	688		688	5,220
Tin powder	W	W		W	W		W	W
White metal ⁴	W	W		W	W		W	W
Other	1,110	83 ^r	15	98 ^r	82	16	98	795
Total reported	35,800	2,530 ^r	411	2,940 ^r	2,530	410	2,940	23,400
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	7,200
Grand total	46,600	3,130 ^r	711	3,840 ^r	3,130	710	3,840	30,600

^pPreliminary. ^rRevised. W Withheld to avoid disclosing proprietary data; included with "Other." -- Zero.

 $^{^{1}\}mathrm{Data}$ 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.