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Mineral Industry Surveys

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TIN IN FEBRUARY 2001

Domestic consumption of primary tin in February was estimated by the U.S. Geological Survey to be about 3% lower than that in January and 7% lower than that in February 2000.

The Platts Metals Week average composite price for tin in February was $3.53 per pound, down 1% from that in January and 9% lower than that in February 2000.

The Defense National Stockpile Center announced the implementation of the Department of Defense Revised Fiscal Year 2001 Annual Materials Plan for the disposal of tin and other National Defense Stockpile (NDS) materials. The Plan, which will expire September 30, 2001, permits the sale of up to 12,000 metric tons (t) of stockpiled tin, an amount similar to the quantities of NDS tin authorized for sale in recent years (Defense National Stockpile Center, 2001). A later report indicated that the Defense Logistics Agency planned to sell 6,500 t of Longhorn brand tin stored in Baton Rouge, LA, in April via a negotiated long-term contract. This would be DLA's first tin offering in fiscal 2001, which began October 1, 2000 (Platts Metals Week, 2001a).

U.S. Steel Group announced that the United States Bankruptcy Court approved its planned purchase of LTV Corp.'s tin mill products business. The purchase agreement, announced last October, was delayed when LTV filed for Chapter 11 bankruptcy protection in December. Under the terms of the agreement, U.S. Steel will lease the land and take title to the buildings, facilities, and inventory of LTV's Indiana Harbor Works, IN, tin mill, which it will operate as an ongoing business. Tin mill employees at Indiana Harbor will become U.S. Steel employees and the acquirer will also have the right to transfer certain tin line equipment from LTV's Aliquippa, PA, tin mill to U.S. Steel. U.S. Steel, part of the USX-USS Group, the largest steelmaker in North America, already manufactures tin mill products. LTV has more than 50 plants in Europe and the Americas. LTV's tin mills are in East Chicago, IN, and Aliquippa. The Indiana plant consists of a 270,000-metric-ton-per-year (t/yr) tinplate line and a 155,000-t/yr tin-free line. Both firms rank as major tin consumers (Platts Metals Week, 2001c).

USS-Posco Industries Corp. (CA) announced that it anticipated the fairly imminent modernization of an annealing line that will increase its tinplate capacity. The West Coast's only producer of tin mill products, whose output of prime tinplate is expected to reach about 500,000 t this year is now completing the third leg of modernization on its No. 1 continuous annealing line. This final stage, costing about $2 million, is expected to be completed by the third quarter 2001 (American Metal Market, 2001c).

Europe's two largest steelmakers, Usinor SA (France) and Arbed SA (Belgium), and Aceralia SA (Spain), part of the Arbed Group, presented the framework of the new company they intend to create. The joint press conference took place at neither of the partners' headquarters but in Europe's de-facto capital of Brussels, possibly to indicate the project's continental significance. The transnational aspect of the new company also showed in the choice of multi-lingual Luxembourg as headquarters for the "New Company" (Newco), which has become the working title for the proposed entity. The three partners' memorandum of understanding aims to form the world's largest steel group, employing 110,000 people producing 46 million t of crude steel annually. Its combined sales would be $28 billion yearly. Usinor shareholders would hold 57% of the resultant firm. The merger would create an entity with a crude steel production of around 46 million t, larger by far than the world's next two biggest steel producers—Nippon Steel Corp. (Japan) and POSCO (Republic of South Korea). Usinor has long ranked as one of the world's major tin users (American Metal Market, 2001b).

A regional development authority has expressed skepticism about the fate of the South Crofty tin mine in Cornwall, England. Baserult Ltd. completed its acquisition of the closed mine in February and plans to start production within 2 years if sufficient funding materializes. After sustaining losses of more than $1 million per year for several years, the mine was closed in 1997, putting nearly 300 people out of work. The mine shafts were flooded, and it is estimated that it will take 4 years and cost $2

million to pump the waste out of the tunnels, which are up to 2,600 feet deep. Tin has been mined in Cornwall for over 2,500 years and, at its peak in the 1870's, the tin industry employed 30,000 workers there. The South West England Regional Development Agency has plans to develop a business park in the area and has expressed concern about a mining project near its planned site (American Metal Market, 2001a).

In March, Denmark put into effect an order signed in November 2000 that bans the use of lead in a large number of products. The ban is the first of its kind in the world. The statutory order, signed by the minister for Environment and Energy, will also apply to cadmium, mercury, and nickel and will affect products containing lead compounds such as plastic stabilizers, as well as metallic lead used for ballasts and weights. This decision was made despite opposition from a majority of the European Union's 15 member states and a negative opinion from the European Commission's scientific studies. Tin is often an alloying component with these metals and may benefit by substitution as the use of these metals is limited in some applications (JOM, 2001).

PT Timah (Indonesia), the world's largest tin mining organization, announced plans to explore for new tin reserves in Burma (Myanmar), Malaysia, and Vietnam. Timah has signed a memorandum of understanding with the Government of Vietnam to explore for tin reserves there. With Burma and Vietnam, Timah is still negotiating the profit percentage those two Governments should receive. Malaysia has closed many of its tin mining sites over the past 10-15 years due to low tin prices, but Timah believes it has an efficient tin mining system that would make it worthwhile to re-open some of these mines, and the Government of Malaysia has agreed. The mines in Burma and Malaysia are offshore (Platts Metals Week, 2001b).

Timah reported that its exploration projects in 2000 yielded over 32,000 t of new tin resources: 7,000 t of them inland with an average grading of 0.38 kg tin per cubic meter; and 25,000 t of them offshore, with the same average grade. At the end of 2000, Timah reported measured resources of 590,000 t of tin (Metal Bulletin, 2001b).

In India, the Tinplate Co. of India, part of the Tata Group, announced plans to de-bottleneck operations so as to increase the capacity of its electrolytic tinning line from the current 90,000 tons per year to 125,000 tons per year. India has two tinplate producers: Tinplate Co. has a current capacity of 90,000 tons per year and Sail's Rourkela steel plant has 150,000 tons per year. The combined production of both the plants was 129,000 t during 1999-2000, showing considerable under-utilization. The producers complained of heavy tinplate imports, which totaled 138,000 t in 1999-2000 (Metal Bulletin, 2001c).

In China, the Government reported a 43% surge last year in tinplate imports, which totalled 397,000 t in 2000, compared to 278,000 t in 1999. The largest individual increase came from the United Kingdom. Western Europe as a whole exported 67,000 t to China in 2000, a 158% increase. Eight Chinese tinplate producers recently filed a petition with the Government seeking curbs on imports of tinplate. They complained that cheap imports were forcing down local prices. Their complaint cited more than 10 exporting countries in Europe, Australasia, East Asia, and North America. Australia also recorded a marked jump in the level of its tinplate sales into China, which rose 160% to 52,000 t last year. Commonwealth of Independent States exports reached 57,000 t, up 73% from the prior year of which Russia accounted for 23,000 t. In terms of quantity, Japan was still the primary source of Chinese tinplate imports at 91,000 t. The Republic of South Korea ranked next, at 63,000 t. Imports from Taiwan, the United States, South Africa, and other countries increased from 27% to 75% over the prior year. China's annual tinplate demand was estimated at 1 million t by the eight firms that filed the petition. Domestic production capacity is 1.4 million tons per year (Metal Bulletin, 2001a).

Update

On March 30, 2001, the Platts Metals Week composite price for tin was $3.42 per pound.

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TABLE 1
SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

		2001		
	2000 p/	January	February	January-February
Production, secondary e/ 2/	10,800	900	900	1,800
Consumption:				
Primary	42,000	3,390 r/	3,310	6,710
Secondary	10,700	862 r/	866	1,730
Imports for consumption, metal	44,900	5,520	NA	NA
Exports, metal	6,640	650	NA	NA
Stocks at end of period	XX	8,330 r/	7,950	XX
Prices (average cents per pound): 3/				
Metals Week composite 4/	370.16	355.86	352.96	XX
Metals Week New York dealer	254.92	242.05	240.85	XX
London, standard grade, cash	246.00	234.00	232.00	XX
Kuala Lumpur	244.12	232.86	230.87	XX

e/ Estimated. p/ Preliminary. r/ Revised. 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
2000:			
February	391.72	377.25	382.84
March	383.26	364.68	373.01
April	371.49	365.85	368.16
May	369.58	363.91	367.72
June	373.83	362.99	368.23
July	372.25	362.15	366.03
August	372.25	362.15	363.52
September	375.60	365.86	372.11
October	368.35	355.28	362.14
November	364.20	355.77	361.05
December	361.83	355.46	359.43
Year	405.27	355.46	370.16
2001:			
January	359.90	350.60	355.86
February	355.03	349.76	352.96

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)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms) Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments 2/
2000 p/	W	1,720,000	8,990	5.2	2,290,000
2000:					
December	W	107,000	646	6.0	162,000
2001:					
January	W	W	710	7.3	179,000
February	W	92,800	679	7.3	NA

p/ Preliminary. NA Not available. 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)

Country or product	2000 Year p/	2000 December	2001 January
Imports:			
Metal (unwrought tin):			
Bolivia	6,330	181	1,080
Brazil	5,860	320	421
Chile	2,630	101	42
China	10,200	557	1,580
Hong Kong	397	--	--
Indonesia	5,320	340	459
Malaysia	214	100	--
Peru	12,800	820	1,910
Russia	145	--	--
Singapore	20	--	--
United Kingdom	514	81	2
Other	434	40	43
Total	44,900	2,540	5,520
Other (gross weight):			
Alloys	4,370	471	409
Bars and rods	993	69	82
Foil, tubes, pipes	(2/)	--	(2/)
Plates, sheets, strip	588	1	6
Waste and scrap	2,340	138	128
Miscellaneous	8,510	211	3,000
Total	16,800	890	3,630
Exports (metal)	6,640	573	650

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)

Product	2000 p/	2001						
		January			February			January-February
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) 2/	1,430	131 r/	W	131 r/	125	W	125	256
Babbitt	249	20 r/	7	27	21	7	28	55
Bar tin and anodes	294	24	W	24	21	W	21	45
Bronze and brass	2,800	85 r/	129 r/	214 r/	78	134	212	426
Chemicals	8,180	669 r/	W	669 r/	669	W	669	1,340
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	16,900	1,020	406 r/	1,420 r/	966	404	1,370	2,790
Tinning	666	75 r/	--	75 r/	77	--	77	152
Tinplate 3/	9,020	710	--	710	679	--	679	1,390
Tin powder	195	W	--	W	W	W	W	W
White metal 4/	10	W	--	W	W	W	W	W
Other	2,240	62 r/	20 r/	82 r/	78	21	99	181
Total reported	41,900	2,790 r/	562 r/	3,350 r/	2,710	566	3,280	6,630
Estimated undistributed consumption 5/	10,800	600	300	900	600	300	900	1,800
Grand total	52,700	3,390 r/	862 r/	4,250 r/	3,310	866	4,180	8,430

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company 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.