

# Mineral Industry Surveys

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#### TIN IN AUGUST 2000

Domestic consumption of primary tin in August was estimated by the U.S. Geological Survey to be slightly higher than that in July and 1% higher than that in August 1999.

The *Platt's Metals Week* average composite price for tin in August was \$3.64 per pound, slightly lower than that in July and 2% higher than that in August 1999. The average price for August represents the lowest average price of tin for any month in 2000. During 2000, the average price has declined in all but one month.

Crown, Cork and Seal Corp. (Philadelphia, PA), the world's largest packaging manufacturer, announced the development of a new beverage can end that offers reduced metal usage and easier opening. Crown believes the new style can end will afford substantial savings in material costs and can be applied equally to tinplate or aluminum ends. Currently, almost all beverage can ends in the United States are aluminum, but tinplate shares the remaining worldwide market (Canning and Filling, 2000).

In Indonesia, PT Timah Tbk, the world's largest integrated tin producer, announced plans to cut tin production to 35,000 metric tons (t) in 2000 from nearly 40,000 t in 1999. Also, Timah announced that it would seek to open new tin mines in Myanmar and Vietnam (American Metal Market, 2000).

In Bolivia, it was reported that the privatization of COMIBOL's Vinto tin smelter and the Huanuni and Colquiri tin mines earlier this year caused tin production to decline. New owners, Allied Deals Corp. (Vinto/Huanuni) and COMSUR (Colquiri), are formulating their development plans and modernizing the former government-operated facilities. Colquiri was closed in April for refurbishment. Nevertheless, refined tin output in 2000 is expected to be near the 10,500 t produced by COMIBOL in 1999, largely due to Allied's contract to process some 6,000 tons per year (t/yr) of tin-in-concentrate from Brazil. Allied expects to spend \$10 million on new investment in Huanuni over the first 2 years of its privatization contract. Plans to introduce new mining techniques at the 360-meter-deep underground mine will require at least 18 months to implement. Increased feed to the Vinto tin smelter is a priority (Metal Bulletin, 2000).

In London, it was reported that a new proposal has been made to reopen the South Crofty tin mine, which was England's last operating tin mine when it closed in 1998. The new effort follows an abortive attempt made last year to reopen the mine. A local Cornwall firm, Baseresult plc, reportedly is negotiating with South

Crofty plc (the mine's owner) for the mine, land comprising the mine-site, and processing equipment from the Wheal Jane concentrator plant nearby. South Crofty's mining permit was extended to allow the negotiations to continue. Baseresult plans to produce 2,000 t/yr of tin at an operating cost of \$2,800 per ton of tin, well below the current cost of \$5,510 per ton. However, officials believe the mine can only be profitable if the company diversifies the operation to include other activities (such as waste management from energy facilities in the region). Officials also expressed confidence that Basersult can extend the life of the mine beyond the 7 years during which it plans to mine the upper levels of the deposit (Platt's Metals Week, 2000a).

In Jakarta, the Government announced that it has granted PT Koba Tin a 10-year extension of its contract to operate in Indonesia. Koba Tin is 75%-owned by Iluka Resources NL (Australia). Koba has been mining tin at a rate of 10,000 t/yr (Platt's Metals Week, 2000b).

Recycling rates for European steel packaging (mostly tinplate) in 1999 have been reported. Comparatively high rates were reported for Germany (80%), The Netherlands (78%), and Austria (75%); lower rates were reported for Finland (16%), Portugal (15%), and Italy (10%). Overall, the steel can recycling rate in Europe averaged 47% in 1999 (Container Recycling Report, 2000).

#### **Update**

On October 6, 2000, the *Platt's Metals Week* composite price for tin was \$ 3.66 per pound.

## **References Cited**

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v. 11, no. 9, September, p. 3-4. Metal Bulletin, 2000, Bolivia tin privatization finally set to increase output: Metal Bulletin, no. 8506, September 7, p. 15.

Platt's Metals Week, 2000a, Baseresult targets 2,000 mt/yr tin at South Crofty: Platt's Metals Week, v. 71, no. 39, September 25, p. 12.

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## TABLE 1 SALIENT TIN STATISTICS 1/

(Metric tons, unless otherwise noted)

|                                      |         |          | 2000   |          |  |
|--------------------------------------|---------|----------|--------|----------|--|
|                                      | _       |          |        | January- |  |
|                                      | 1999 p/ | July     | August | August   |  |
| Production, secondary e/ 2/          | 10,800  | 900      | 900    | 7,200    |  |
| Consumption:                         |         |          |        |          |  |
| Primary                              | 42,800  | 3,540    | 3,560  | 28,300   |  |
| Secondary                            | 12,300  | 858      | 906    | 7,170    |  |
| Imports for consumption, metal       | 47,500  | 4,030    | NA     | NA       |  |
| Exports, metal                       | 6,770   | 524      | NA     | NA       |  |
| Stocks at end of period              | XX      | 8,240 r/ | 7,880  | XX       |  |
| Prices (average cents per pound): 3/ |         |          |        |          |  |
| Metals Week composite 4/             | 365.98  | 366.03   | 363.52 | XX       |  |
| Metals Week New York dealer          | 254.54  | 249.50   | 249.50 | XX       |  |
| London, standard grade, cash         | 245.00  | 242.00   | 240.00 | XX       |  |
| Kuala Lumpur                         | 240.70  | 241.63   | 239.34 | XX       |  |

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

TABLE 2
METALS WEEK COMPOSITE PRICE 1/

(Cents per pound)

| Period              | High   | Low      | Average |  |
|---------------------|--------|----------|---------|--|
| 1999:               |        |          | _       |  |
| August              | 362.04 | 355.27   | 358.10  |  |
| September           | 372.30 | 357.68   | 364.61  |  |
| October             | 383.67 | 363.53   | 369.61  |  |
| November            | 397.54 | 385.56   | 391.55  |  |
| December            | 403.52 | 381.53   | 386.61  |  |
| Year                | 403.52 | 343.72   | 365.98  |  |
| 2000:               |        |          |         |  |
| January             | 405.27 | 390.75   | 397.72  |  |
| 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  |  |
| 4 ( 55) 3.5 1 227 1 |        | 1 1 10 1 |         |  |

<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: Platt's Metals Week.

<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: Platt's 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.

 ${\bf TABLE~3}$  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/ |  |
| 1999 p/  | W               | 1,750,000            | 9,080   | 5.2         | 2,370,000    |  |
| 2000:    |                 |                      |         |             |              |  |
| January  | W               | 141,000              | 718     | 5.1         | 184,000      |  |
| February | W               | 144,000              | 785     | 5.5         | 175,000      |  |
| March    | W               | 155,000              | 810     | 5.2         | 203,000      |  |
| April    | W               | 149,000              | 736     | 4.9         | 170,000      |  |
| May      | W               | 156,000              | 816     | 5.2         | 219,000      |  |
| June     | W               | 149,000              | 795     | 5.3         | 203,000      |  |
| July     | W               | 165,000              | 780     | 4.7         | 182,000      |  |
| August   | W               | 157,000              | 795     | 5.1         | 214,000      |  |

p/ Preliminary. W Withheld to avoid disclosing company proprietary data.

 $\label{eq:table 4} \textbf{U.S.} \ \ \textbf{TIN IMPORTS FOR CONSUMPTION AND EXPORTS} \ \ 1/$ 

### (Metric tons)

|                        |         |       |       | January- |
|------------------------|---------|-------|-------|----------|
| Country or product     | 1999 p/ | June  | July  | July     |
| Imports:               |         |       |       |          |
| Metal (unwrought tin): |         |       |       |          |
| Bolivia                | 3,850   | 1,510 | 651   | 4,730    |
| Brazil                 | 4,700   | 502   | 662   | 3,400    |
| Chile                  | 3,980   | 245   |       | 1,720    |
| China                  | 13,900  | 260   | 937   | 6,460    |
| Hong Kong              | 261     |       | 120   | 397      |
| Indonesia              | 7,930   | 519   | 479   | 3,180    |
| Japan                  | 282     |       |       |          |
| Malaysia               | 944     | 60    |       | 104      |
| Peru                   | 11,000  | 920   | 1,110 | 7,060    |
| Russia                 |         | 145   |       | 145      |
| Singapore              | 60      |       |       | 20       |
| Thailand               | 20      |       |       |          |
| United Kingdom         | 60      | 1     | 5     | 214      |
| Other                  | 533     | 72    | 70    | 255      |
| Total                  | 47,500  | 4,230 | 4,030 | 27,700   |
| Other (gross weight):  |         |       |       |          |
| Alloys                 | 3,090   | 469   | 324   | 2,410    |
| Bars and rods          | 872     | 68    | 112   | 580      |
| Foil, tubes, pipes     | 1       |       |       |          |
| Plates, sheets, strip  | 122     | 3     | 7     | 414      |
| Waste and scrap        | 2,730   | 422   | 104   | 1,250    |
| Miscellaneous          | 2,290   | 1,480 | 1,550 | 4,540    |
| Total                  | 9,100   | 2,440 | 2,090 | 9,200    |
| Exports (metal)        | 6,770   | 351   | 524   | 3,390    |

p/ Preliminary. -- Zero.

Source: U.S. Census Bureau.

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

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

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

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

(Metric tons of contained tin)

|                            |         | 2000    |           |       |         |           |       |          |
|----------------------------|---------|---------|-----------|-------|---------|-----------|-------|----------|
|                            |         |         |           |       |         |           |       | January- |
|                            |         |         | July      |       |         | August    |       | August   |
| Product                    | 1999 p/ | Primary | Secondary | Total | Primary | Secondary | Total | total 2/ |
| Alloys (miscellaneous) 3/  | W       | 119     | W         | 119   | 121     | W         | 121   | 980      |
| Babbitt                    | . 22    | 46      | W         | 46    | W       | W         | W     | 249      |
| Bar tin and anodes         | 244     | 25      | W         | 25    | 25      | W         | 25    | 196      |
| Bronze and brass           | 3,170   | 102     | 114       | 216   | 100     | 144       | 244   | 1,940    |
| Chemicals                  | 8,140   | 682     | W         | 682   | 682     | W         | 682   | 5,450    |
| Collapsible tubes and foil | W       | W       | W         | W     | W       | W         | W     | W        |
| Solder                     | 14,000  | 1,070   | 398       | 1,470 | 741     | 338       | 1,080 | 11,300   |
| Tinning                    | 508     | 49      |           | 49    | 49      |           | 49    | 461      |
| Tinplate 4/                | 9,080   | 780     |           | 780   | 795     |           | 795   | 6,240    |
| Tin powder                 | W       | W       |           | W     | W       |           | W     | 147      |
| White metal 5/             | W       | W       |           | W     | W       |           | W     | 10       |
| Other                      | 6,120   | 61      | 46        | 107   | 450     | 124       | 574   | 1,260    |
| Total reported             | 41,300  | 2,940   | 558       | 3,500 | 2,960   | 606       | 3,570 | 28,300   |
| Estimated undistributed    | -       |         |           |       |         |           |       |          |
| consumption 6/             | 13,800  | 600     | 300       | 900   | 600     | 300       | 900   | 7,170    |
| Grand total                | 55,100  | 3,540   | 858       | 4,400 | 3,560   | 906       | 4,470 | 35,400   |

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

 $<sup>1/\,\</sup>textsc{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>2/</sup> May include revisions for prior months.

<sup>3/</sup> Includes terne metal.

<sup>4/</sup> Includes secondary pig tin and tin components of tinplating chemical solutions.

<sup>5/</sup> Includes pewter, britannia metal, and jewelers' metal.

<sup>6/</sup> Estimated consumption of plants reporting on an annual basis.