## ZINC STATISTICS ${ }^{1}$

## U.S. GEOLOGICAL SURVEY

[All values in metric tons ( $\mathbf{t}$ ) zinc unless otherwise noted]
Last modification: November 2, 2007

| Year | $\begin{array}{\|c\|} \hline \text { Primary } \\ \text { production } \\ \hline \end{array}$ | Secondary production | Imports | Exports | Stocks | Apparent consumption | Unit value (\$/t) | Unit value (98\$/t) | World production |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1900 | 112,000 |  | 0 | 20,300 |  | 90,200 | 97.0 | 1,900 | 479,000 |
| 1901 | 128,000 |  | 0 | 3,080 |  | 129,000 | 90.0 | 1,800 | 510,000 |
| 1902 | 142,000 |  | 406 | 2,940 |  | 139,000 | 106 | 2,000 | 547,000 |
| 1903 | 144,000 |  | 183 | 1,380 |  | 140,000 | 119 | 2,200 | 574,000 |
| 1904 | 169,000 |  | 309 | 9,210 |  | 164,000 | 112 | 2,000 | 629,000 |
| 1905 | 185,000 |  | 388 | 5,000 |  | 182,000 | 130 | 2,400 | 660,000 |
| 1906 | 204,000 |  | 926 | 4,240 |  | 200,000 | 135 | 2,500 | 704,000 |
| 1907 | 227,000 | 6,400 | 1,550 | 511 |  | 206,000 | 128 | 2,200 | 738,000 |
| 1908 | 191,000 | 6,500 | 704 | 1,120 |  | 194,000 | 101 | 1,800 | 723,000 |
| 1909 | 232,000 | 8,410 | 8,550 | 303 |  | 246,000 | 119 | 2,200 | 775,000 |
| 1910 | 244,000 | 11,600 | 897 | 3,390 |  | 223,000 | 119 | 2,100 | 810,000 |
| 1911 | 260,000 | 12,700 | 293 | 13,000 |  | 254,000 | 126 | 2,200 | 895,000 |
| 1912 | 307,000 | 23,600 | 9,720 | 6,810 |  | 309,000 | 152 | 2,600 | 971,000 |
| 1913 | 314,000 | 23,600 | 4,690 | 12,200 |  | 268,000 | 123 | 2,030 | 939,000 |
| 1914 | 320,000 | 18,700 | 177 | 67,600 |  | 272,000 | 112 | 1,830 | 795,000 |
| 1915 | 444,000 | 27,000 | 57 | 119,000 | 13,000 | 331,000 | 313 | 5,050 | 760,000 |
| 1916 | 606,000 | 26,100 | 19 | 137,000 | 16,000 | 417,000 | 300 | 4,480 | 882,000 |
| 1917 | 607,000 | 15,300 | 16 | 200,000 | 49,000 | 375,000 | 196 | 2,500 | 901,000 |
| 1918 | 470,000 | 9,000 | 10 | 96,800 | 37,000 | 334,000 | 176 | 1,900 | 849,000 |
| 1919 | 423,000 | 17,900 | 29 | 133,000 | 33,000 | 294,000 | 154 | 1,450 | 719,000 |
| 1920 | 420,000 | 19,400 | 0 | 104,000 | 64,000 | 293,000 | 172 | 1,400 | 682,000 |
| 1921 | 182,000 | 15,900 | 5,990 | 4,500 | 64,000 | 185,000 | 104 | 945 | 464,000 |
| 1922 | 321,000 | 29,900 | 36 | 31,600 | 15,000 | 338,000 | 126 | 1,220 | 730,000 |
| 1923 | 463,000 | 35,800 | 1 | 29,900 | 25,000 | 405,000 | 148 | 1,410 | 889,000 |
| 1924 | 469,000 | 32,200 | 10 | 69,200 | 19,000 | 407,000 | 139 | 1,320 | 986,000 |
| 1925 | 520,000 | 35,500 | 0 | 69,300 | 12,000 | 454,000 | 169 | 1,580 | 1,190,000 |
| 1926 | 561,000 | 37,000 | 0 | 38,900 | 24,000 | 505,000 | 163 | 1,500 | 1,410,000 |
| 1927 | 538,000 | 38,800 | 35 | 41,500 | 49,000 | 468,000 | 138 | 1,290 | 1,420,000 |
| 1928 | 547,000 | 44,100 | 0 | 22,900 | 43,900 | 568,000 | 133 | 1,270 | 1,360,000 |
| 1929 | 567,000 | 43,000 | 205 | 13,100 | 81,200 | 575,000 | 143 | 1,360 | 1,320,000 |
| 1930 | 452,000 | 31,600 | 255 | 4,200 | 154,000 | 409,000 | 101 | 990 | 1,260,000 |
| 1931 | 265,000 | 19,600 | 249 | 583 | 133,000 | 336,000 | 80.0 | 857 | 904,000 |
| 1932 | 188,000 | 13,400 | 281 | 5,870 | 119,000 | 235,000 | 64.0 | 762 | 709,000 |
| 1933 | 279,000 | 27,300 | 1,720 | 1,030 | 103,000 | 318,000 | 89.0 | 1,120 | 892,000 |
| 1934 | 330,000 | 17,900 | 1,570 | 4,630 | 116,000 | 326,000 | 92.0 | 1,120 | 1,060,000 |
| 1935 | 382,000 | 26,000 | 4,030 | 1,470 | 83,200 | 429,000 | 96.0 | 1,140 | 1,210,000 |
| 1936 | 446,000 | 38,300 | 10,600 | 34 | 50,900 | 528,000 | 108 | 1,270 | 1,330,000 |
| 1937 | 505,000 | 46,800 | 33,800 | 226 | 73,600 | 553,000 | 144 | 1,630 | 1,470,000 |
| 1938 | 405,000 | 28,700 | 6,560 | 0 | 145,000 | 382,000 | 102 | 1,180 | 1,420,000 |
| 1939 | 460,000 | 45,700 | 28,100 | 4,100 | 78,300 | 568,000 | 113 | 1,320 | 1,500,000 |
| 1940 | 613,000 | 44,400 | 71,800 | 71,800 | 18,100 | 655,000 | 140 | 1,630 | 1,470,000 |
| 1941 | 746,000 | 54,000 | 36,500 | 81,000 | 83,400 | 751,000 | 165 | 1,830 | 1,590,000 |
| 1942 | 809,000 | 48,300 | 33,000 | 122,000 | 145,000 | 661,000 | 182 | 1,820 | 1,630,000 |
| 1943 | 855,000 | 43,700 | 50,900 | 88,400 | 237,000 | 741,000 | 182 | 1,720 | 1,830,000 |
| 1944 | 789,000 | 44,500 | 57,700 | 19,600 | 271,000 | 806,000 | 182 | 1,690 | 1,870,000 |
| 1945 | 694,000 | 44,700 | 87,800 | 7,060 | 298,000 | 773,000 | 182 | 1,650 | 1,470,000 |
| 1946 | 661,000 | 40,400 | 94,400 | 42,800 | 244,000 | 735,000 | 192 | 1,600 | 1,440,000 |
| 1947 | 728,000 | 54,000 | 65,400 | 96,800 | 136,000 | 713,000 | 232 | 1,690 | 1,600,000 |
| 1948 | 715,000 | 56,500 | 83,900 | 59,500 | 106,000 | 742,000 | 299 | 2,020 | 1,690,000 |
| 1949 | 739,000 | 49,900 | 114,000 | 53,300 | 160,000 | 646,000 | 268 | 1,840 | 1,730,000 |
| 1950 | 765,000 | 60,800 | 141,000 | 11,700 | 66,300 | 877,000 | 306 | 2,070 | 2,150,000 |
| 1951 | 800,000 | 44,100 | 79,900 | 33,100 | 65,800 | 847,000 | 397 | 2,480 | 2,360,000 |

## ZINC STATISTICS ${ }^{1}$

## U.S. GEOLOGICAL SURVEY

## [All values in metric tons ( $\mathbf{t}$ ) zinc unless otherwise noted]

Last modification: November 2, 2007

| Year | Primary production | Secondary production | Imports | Exports | Stocks | $\begin{array}{\|c\|} \hline \text { Apparent } \\ \text { consumption } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Unit value } \\ (\$ / \mathbf{t}) \end{array}$ | $\begin{array}{\|c\|} \hline \text { Unit value } \\ (98 \$ / t) \\ \hline \end{array}$ | World production |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1952 | 821,000 | 50,000 | 103,000 | 52,400 | 161,000 | 774,000 | 357 | 2,190 | 2,590,000 |
| 1953 | 831,000 | 48,000 | 207,000 | 16,300 | 241,000 | 894,000 | 239 | 1,460 | 2,670,000 |
| 1954 | 728,000 | 61,700 | 145,000 | 22,700 | 206,000 | 802,000 | 236 | 1,430 | 2,660,000 |
| 1955 | 874,000 | 59,900 | 177,000 | 16,400 | 148,000 | 1,020,000 | 271 | 1,650 | 2,900,000 |
| 1956 | 892,000 | 65,400 | 222,000 | 8,000 | 155,000 | 915,000 | 297 | 1,780 | 3,110,000 |
| 1957 | 894,000 | 65,800 | 244,000 | 9,780 | 222,000 | 849,000 | 251 | 1,460 | 3,150,000 |
| 1958 | 709,000 | 42,300 | 168,000 | 1,880 | 252,000 | 788,000 | 227 | 1,280 | 2,950,000 |
| 1959 | 725,000 | 52,500 | 149,000 | 10,600 | 235,000 | 867,000 | 253 | 1,410 | 3,020,000 |
| 1960 | 725,000 | 62,400 | 110,000 | 68,200 | 231,000 | 796,000 | 286 | 1,570 | 3,090,000 |
| 1961 | 768,000 | 50,100 | 114,000 | 45,400 | 220,000 | 845,000 | 255 | 1,390 | 3,490,000 |
| 1962 | 798,000 | 53,400 | 123,000 | 32,300 | 204,000 | 936,000 | 256 | 1,380 | 3,570,000 |
| 1963 | 810,000 | 54,700 | 120,000 | 30,700 | 132,000 | 1,000,000 | 265 | 1,410 | 3,660,000 |
| 1964 | 866,000 | 65,000 | 122,000 | 24,100 | 127,000 | 1,100,000 | 299 | 1,570 | 4,030,000 |
| 1965 | 902,000 | 75,900 | 140,000 | 5,390 | 163,000 | 1,230,000 | 320 | 1,660 | 4,310,000 |
| 1966 | 930,000 | 75,500 | 254,000 | 1,280 | 176,000 | 1,290,000 | 320 | 1,610 | 4,500,000 |
| 1967 | 852,000 | 66,700 | 201,000 | 15,300 | 167,000 | 1,130,000 | 305 | 1,490 | 4,840,000 |
| 1968 | 926,000 | 72,500 | 276,000 | 29,900 | 1,200,000 | 1,230,000 | 298 | 1,400 | 4,970,000 |
| 1969 | 944,000 | 64,000 | 295,000 | 8,440 | 1,190,000 | 1,260,000 | 323 | 1,430 | 5,340,000 |
| 1970 | 796,000 | 70,000 | 236,000 | 261 | 1,230,000 | 1,080,000 | 338 | 1,420 | 5,460,000 |
| 1971 | 695,000 | 73,400 | 294,000 | 12,100 | 1,160,000 | 1,140,000 | 356 | 1,430 | 5,520,000 |
| 1972 | 574,000 | 66,900 | 469,000 | 3,920 | 1,000,000 | 1,290,000 | 391 | 1,520 | 5,440,000 |
| 1973 | 529,000 | 75,500 | 536,000 | 13,200 | 741,000 | 1,360,000 | 456 | 1,670 | 5,710,000 |
| 1974 | 504,000 | 71,200 | 493,000 | 17,300 | 583,000 | 1,170,000 | 793 | 2,620 | 5,780,000 |
| 1975 | 397,000 | 52,500 | 340,000 | 6,260 | 515,000 | 839,000 | 859 | 2,600 | 5,850,000 |
| 1976 | 453,000 | 62,200 | 631,000 | 3,190 | 547,000 | 1,030,000 | 816 | 2,340 | 5,690,000 |
| 1977 | 408,000 | 45,900 | 504,000 | 215 | 518,000 | 1,000,000 | 758 | 2,040 | 5,920,000 |
| 1978 | 407,000 | 34,800 | 622,000 | 723 | 483,000 | 1,050,000 | 683 | 1,710 | 5,850,000 |
| 1979 | 472,000 | 53,200 | 524,000 | 279 | 561,000 | 1,000,000 | 822 | 1,850 | 5,990,000 |
| 1980 | 340,000 | 29,400 | 410,000 | 302 | 468,000 | 811,000 | 825 | 1,630 | 5,950,000 |
| 1981 | 347,000 | 50,200 | 612,000 | 323 | 536,000 | 841,000 | 983 | 1,760 | 5,950,000 |
| 1982 | 228,000 | 74,300 | 456,000 | 341 | 500,000 | 795,000 | 848 | 1,430 | 6,130,000 |
| 1983 | 236,000 | 69,400 | 618,000 | 427 | 489,000 | 933,000 | 913 | 1,490 | 6,280,000 |
| 1984 | 253,000 | 78,100 | 639,000 | 760 | 478,000 | 980,000 | 1,070 | 1,680 | 6,520,000 |
| 1985 | 261,000 | 72,600 | 611,000 | 1,010 | 460,000 | 961,000 | 890 | 1,350 | 6,760,000 |
| 1986 | 253,000 | 62,900 | 665,000 | 1,940 | 441,000 | 999,000 | 838 | 1,250 | 6,840,000 |
| 1987 | 261,000 | 83,000 | 706,000 | 1,080 | 437,000 | 1,050,000 | 924 | 1,330 | 7,190,000 |
| 1988 | 241,000 | 88,000 | 749,000 | 482 | 426,000 | 1,090,000 | 1,330 | 1,830 | 6,770,000 |
| 1989 | 260,000 | 98,000 | 712,000 | 5,530 | 431,000 | 1,060,000 | 1,810 | 2,380 | 6,820,000 |
| 1990 | 263,000 | 96,000 | 632,000 | 1,240 | 428,000 | 991,000 | 1,640 | 2,050 | 7,150,000 |
| 1991 | 253,000 | 122,000 | 549,000 | 1,250 | 426,000 | 931,000 | 1,160 | 1,390 | 7,270,000 |
| 1992 | 272,000 | 128,000 | 644,000 | 565 | 423,000 | 1,050,000 | 1,290 | 1,500 | 7,250,000 |
| 1993 | 240,000 | 141,000 | 724,000 | 1,410 | 403,000 | 1,110,000 | 1,020 | 1,150 | 6,910,000 |
| 1994 | 217,000 | 139,000 | 793,000 | 6,310 | 366,000 | 1,180,000 | 1,090 | 1,200 | 7,050,000 |
| 1995 | 232,000 | 131,000 | 856,000 | 3,080 | 350,000 | 1,230,000 | 1,230 | 1,320 | 7,280,000 |
| 1996 | 226,000 | 140,000 | 827,000 | 1,970 | 333,000 | 1,210,000 | 1,130 | 1,170 | 7,480,000 |
| 1997 | 226,000 | 140,000 | 876,000 | 3,630 | 313,000 | 1,260,000 | 1,420 | 1,440 | 7,540,000 |
| 1998 | 234,000 | 134,000 | 879,000 | 2,330 | 267,000 | 1,290,000 | 1,130 | 1,130 | 7,570,000 |
| 1999 | 241,000 | 131,000 | 1,060,000 | 1,880 | 261,000 | 1,430,000 | 1,180 | 1,150 | 7,960,000 |
| 2000 | 228,000 | 143,000 | 915,000 | 2,770 | 215,000 | 1,330,000 | 1,230 | 1,160 | 8,770,000 |
| 2001 | 203,000 | 108,000 | 813,000 | 1,180 | 195,000 | 1,150,000 | 969 | 892 | 8,910,000 |
| 2002 | 182,000 | 113,000 | 874,000 | 1,160 | 181,000 | 1,170,000 | 852 | 772 | 8,880,000 |
| 2003 | 187,000 | 150,000 | 758,000 | 1,680 | 168,000 | 1,110,000 | 896 | 793 | 9,520,000 |

## ZINC STATISTICS ${ }^{1}$

U.S. GEOLOGICAL SURVEY
[All values in metric tons ( $\mathbf{t}$ ) zinc unless otherwise noted]
Last modification: November 2, 2007

| Year | Primary <br> production | Secondary <br> production | Imports | Exports | Stocks | Apparent <br> consumption | Unit value <br> $\mathbf{( \$ / t )}$ | Unit value <br> $\mathbf{( 9 8 \$ / t )}$ | World <br> production |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2004 | 188,000 | 139,000 | 812,000 | 3,300 | 135,000 | $1,170,000$ | 1,160 | 999 | $9,590,000$ |
| 2005 | 182,000 | 139,000 | 668,000 | 784 | 106,000 | $1,020,000$ | 1,480 | 1,240 | $9,930,000$ |
| 2006 | 113,000 | 139,000 | 851,000 | 2,530 | 72,000 | $1,130,000$ | 3,500 | 2,830 | $10,000,000$ |

${ }^{1}$ Compiled by C.A. DiFrancesco (retired), J. Plachy (retired), P.N. Gabby, D.I. Bleiwas, and A.C. Tolcin.
Data are calculated, estimated, or reported. See notes for more information.

## Zinc Worksheet Notes

## Data Sources

The sources of data for the zinc worksheet are the mineral statistics publications of the U.S. Bureau of Mines (USBM) and the U.S. Geological Survey (USGS) - Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); Mineral Commodity Summaries (MCS); Statistical Compendium (SC); and USBM Open-File Report 72-92 (Jolly, 1992) (OFR 72-92). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data were not available.

## Primary Production

Primary U.S. zinc production data report the amount of refined zinc in slab form. Data were from the SC for the years 1900-83, 1985-86, and 1988-89, the OFR 72-92 for the years 1984 and 1987, and the MCS for the years 1990-2006.

## Secondary Production

Secondary production includes slab zinc produced from old scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Data were from the SC for the years 1907-34, 1935-40, 1941-87, and 1989, the OFR 7292 for the year 1988, and the MCS for the years 1990-2006. Blank cells in the worksheet indicate that data were not available for the years 1900-06. The increase in production from 1990-91 reflects an expansion of capacity and its utilization at the secondary slab zinc smelter at Monaca, PA.

## Imports

Import data report the amounts of slab zinc imported into the United States in various shapes and forms. Import data exclude all manufactured zinc products. Data were from the SC for the years 1900-01, 1903-09, 1911-53, 1955-61, 1963-76, and 1978-89, the OFR 72-92 for the years 1902, 1910, 1954, 1962, and 1977, and the MYB for 1990-2006.

## Exports

Export data report the amounts of slab zinc exported from the United States in various shapes and forms. Export data exclude all manufactured zinc products. Data were from the SC for the years 1900-02, 1904-09, 1911-65, 1967-70, 1972-78, and 1980-89, the OFR 72-92 for the years 1903, 1910, 1966, 1971, and the MYB for the years 1990-2006.

## Stocks

Stocks are the sum of available data on slab zinc held in government, industry, consumer, and merchant stocks. From 2002-06, stocks total does not include merchant stocks Blank cells in the worksheet indicate that data were not available for the years 1900-14. Data were from the SC for the years 1928-90, and the MR and MYB for the years 1915-27 and 1991-2006. Values may change because of introduction of new data categories (merchant stocks) and/or expansion of data collection and legislation (Government stocks). Consumer stocks were first reported in the SC in 1932. Government stocks were reported beginning in the year 1968 in the SC. Government stock data for the years 1991-2006 were from the MYB. Merchant stocks were first reported in the SC beginning in 1979 and were not reported in 1991. Stocks data for 1991 was estimated using the average of stocks estimates for 1990 and 1992. Large stock decreases in 1972-74 resulted largely from sales of zinc from Government stocks. Sales from Government stocks began on a continuing basis from 1993 through 2004 when only 66,400 metric tons ( t ) remained from approximately 1 million metric tons in 1968.

## Apparent Consumption

U.S. apparent consumption of slab zinc came from the SC, which lists U.S. reported consumption data of slab zinc for the years 1900-17, 1919-45, 1947-82 and U.S. apparent consumption data of slab zinc for the years 1984-87, and 1989; for the years 19912006, came from the MYB. Data for the years 1918, 1946, 1983, 1988, and 1990 were taken from the OFR 72-92. The first year of introduction for data relating to stocks not published in previous years (such as 1968) were not included in the estimates to avoid misrepresenting apparent consumption.

## Unit Value (\$/t)

Unit value is the value in dollars of 1 t of zinc slab apparent consumption. Unit value $(\$ / t)$ was estimated from a price series in the SC for the period 1900-90 and from the MYB for U.S. prices for high-grade zinc for the years 1991-2001. Unit value is the Platts Metals Week price for Special High Grade zinc from 2002-06.

## Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

## World Production

World zinc production data were for zinc content of smelter production for the years 1900-12, 1914-17, and 1929-42. World mine production data were used for the years 1913, 1918-28, and 1943-2006. Data were from the MYB and MR.

## References

Jolly, J.J., 1992, Materials Flow of Zinc in the United States 1850-1990: U.S. Bureau of Mines Open-File Report 72-92, 53 p.
U.S. Bureau of Mines, 1927-34, Mineral Resources of the United States, 1924-31.
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U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

## Recommended Citation Format:

U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, in Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, available online at http://pubs.usgs.gov/ds/2005/140/. (Accessed [date].)

## For more information, please contact:

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