TANTALUM STATISTICS¹ U.S. GEOLOGICAL SURVEY

[All values are in metric tons (t) tantalum content unless otherwise noted]

Last modification: November 20, 2012

| | Mine | Secondary | Producer | Government | inication: | TTOTCHISC | 20, 20 | Apparent | Unit value | Unit value | World |
|------|------------|------------|-----------|------------|------------|-----------|--------|----------|------------|------------|------------|
| Year | production | production | shipments | shipments | Imports | Exports | Stocks | | (\$/t) | (98\$/t) | production |
| 1964 | 0 | 23 | NA | 184 | 353 | 54 | 1,790 | 231 | 17,500 | 92,100 | NA |
| 1965 | 0 | 32 | NA | 75 | 385 | 57 | 1,870 | 352 | 20,900 | 108,000 | NA |
| 1966 | W | 45 | NA | 251 | 608 | 59 | 2,090 | 632 | 35,000 | 176,000 | NA |
| 1967 | W | 50 | 405 | 260 | 955 | 64 | 2,310 | 785 | 27,600 | 135,000 | NA |
| 1968 | W | 41 | 362 | 0 | 558 | 95 | 2,090 | 472 | 17,500 | 82,200 | NA |
| 1969 | W | 16 | 446 | 98 | 360 | 104 | 1,950 | 586 | 19,200 | 85,300 | 388 |
| 1970 | 0 | 11 | 507 | 73 | 440 | 106 | 2,300 | 410 | 19,200 | 80,700 | 318 |
| 1971 | 0 | 14 | 436 | 3 | 464 | 91 | 2,150 | 536 | 17,500 | 70,400 | 496 |
| 1972 | 0 | 18 | 494 | 40 | 525 | 113 | 1,930 | 690 | 15,200 | 59,300 | 371 |
| 1973 | 0 | 18 | 682 | 121 | 566 | 146 | 1,810 | 682 | 21,500 | 78,900 | 384 |
| 1974 | 0 | 23 | 762 | 401 | 785 | 197 | 1,910 | 906 | 37,700 | 125,000 | 436 |
| 1975 | 0 | 2 | 392 | 39 | 423 | 194 | 2,080 | 100 | 43,100 | 131,000 | 411 |
| 1976 | 0 | 23 | 589 | 4 | 594 | 201 | 1,900 | 602 | 47,500 | 136,000 | 339 |
| 1977 | 0 | 20 | 646 | 0 | 933 | 244 | 1,860 | 670 | 66,300 | 178,000 | 409 |
| 1978 | 0 | 25 | 687 | 0 | 639 | 275 | 1,740 | 505 | 106,000 | 265,000 | 362 |
| 1979 | 0 | 23 | 771 | 0 | 868 | 327 | 1,250 | 653 | 249,000 | 559,000 | 476 |
| 1980 | W | 55 | 685 | 0 | 1,030 | 320 | 1,480 | 538 | 284,000 | 562,000 | 544 |
| 1981 | W | 43 | 447 | 0 | 717 | 101 | 1,570 | 572 | 101,000 | 181,000 | 403 |
| 1982 | W | 40 | 400 | -15 | 493 | 154 | 1,450 | 481 | 60,600 | 102,000 | 284 |
| 1983 | 0 | 18 | 461 | 0 | 94 | 119 | NA | 536 | 79,400 | 130,000 | 313 |
| 1984 | 0 | 59 | 582 | 0 | 330 | 174 | NA | 762 | 86,100 | 135,000 | 315 |
| 1985 | 0 | 41 | 461 | -115 | 119 | 145 | NA | 363 | 61,200 | 92,700 | 315 |
| 1986 | 0 | 34 | 462 | 0 | 148 | 142 | NA | 372 | 58,500 | 87,000 | 215 |
| 1987 | 0 | 57 | 506 | 0 | 127 | 171 | NA | 381 | 70,000 | 100,000 | 275 |
| 1988 | 0 | 59 | 523 | 0 | 239 | 256 | NA | 422 | 135,000 | 186,000 | 292 |
| 1989 | NA | 54 | 372 | 0 | 536 | 195 | NA | 376 | 72,700 | 95,600 | 395 |
| 1990 | NA | 54 | NA | 0 | 320 | 200 | NA | 390 | 88,800 | 111,000 | 396 |
| 1991 | NA | 50 | NA | 0 | 359 | 180 | NA | 370 | 76,000 | 91,000 | 477 |
| 1992 | NA | 55 | NA | 0 | 434 | 150 | NA | 375 | 78,100 | 90,700 | 399 |
| 1993 | 0 | 60 | NA | 0 | 457 | 170 | NA | 410 | 70,000 | 79,000 | 292 |
| 1994 | 0 | 85 | NA | 0 | 383 | 190 | NA | 430 | 70,700 | 77,800 | 333 |
| 1995 | 0 | 100 | NA | 0 | 481 | 220 | NA | 515 | 74,700 | 79,900 | 361 |
| 1996 | 0 | 100 | NA | 34 | 563 | 290 | NA | 524 | 74,700 | 77,600 | 436 |
| 1997 | 0 | 115 | NA | 20 | 467 | 340 | NA | 570 | 88,800 | 90,200 | 562 |
| 1998 | 0 | 148 | NA | 213 | 588 | 440 | NA | 738 | 91,400 | 91,400 | 779 |
| 1999 | 0 | 110 | NA | 5 | 564 | 480 | NA | 555 | 91,400 | 89,400 | 656 |
| 2000 | 0 | 130 | NA | 242 | 900 | 530 | NA | 650 | 591,000 | 559,000 | 1,070 |

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| | Mine | Secondary | Producer | Government | | | | Apparent | Unit value | Unit value | World |
|------|------------|------------|-----------|------------|---------|----------------|--------|-------------|-----------------|------------|------------|
| Year | production | production | shipments | shipments | Imports | Exports | Stocks | consumption | (\$/t) | (98\$/t) | production |
| 2001 | 0 | 110 | NA | -53 | 1,160 | 640 | NA | 550 | 99,500 | 91,600 | 1,180 |
| 2002 | 0 | 100 | NA | 16 | 1,040 | 510 | NA | 500 | 80,500 | 82,000 | 1,340 |
| 2003 | 0 | NA | NA | 336 | 957 | 619 | NA | 674 | 80,200 | 71,100 | 1,390 |
| 2004 | 0 | NA | NA | 127 | 1,540 | 984 | NA | 679 | 80,000 | 66,400 | 1,430 |
| 2005 | 0 | NA | NA | 210 | 1,630 | 984 | NA | 852 | 94,000 | 75,800 | 1,380 |
| 2006 | 0 | NA | NA | 289 | 1,160 | 949 | NA | 498 | 87,500 | 70,700 | 859 |
| 2007 | 0 | NA | NA | 0 | 1,160 | 511 | NA | 644 | 100,000 | 78,700 | 1,060 |
| 2008 | 0 | NA | NA | 0 | 1,290 | 662 | NA | 629 | 118,000 | 89,200 | 1,300 |
| 2009 | 0 | NA | NA | 0 | 798 | 326 | NA | 473 | 108,000 | 82,200 | 770 |
| 2010 | 0 | NA | NA | 0 | 1,600 | 438 | NA | 1,160 | 146,000 | 109,000 | 644 |
| 2011 | 0 | NA | NA | 0 | 1,850 | 648 | NA | 1,210 | 336,000 | 244,000 | 767 |

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

Data are calculated, estimated, or reported. See notes for more information.

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Tantalum Worksheet Notes

Data Sources

The sources of data for the tantalum worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB), Mineral Commodity Summaries (MCS), Mineral Facts and Problems (MFP), and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below. Tantalum data prior to 1964 were not included in the tantalum statistics worksheet because they were either in gross weight, combined with columbium data, ambiguous in detail, or were not available. Zeros are used where data are actually "0."

Mine Production

Mine production data represent the tantalum content in tantalum-bearing ores and mineral concentrates that were mined within the United States. Mine production data for 1966–69 and 1980–82 were withheld because they were proprietary. A small, unreported quantity of tantalum contained in tantalum-bearing concentrates was produced in 1980-82 and 1989–92. No mine production of tantalum-bearing ores and mineral concentrates took place for 1964–65, 1970–79, 1983–88 and 1993 to the most recent year, as reported in the MYB.

Secondary Production

Secondary production represents the tantalum content in tantalum scrap materials that was consumed in the United States. Secondary production data for 1964–83 were from the MFP. Secondary production data for 1984–2004 were from the USGS tantalum commodity specialist. Secondary production data were not available after 2002.

Shipments

Shipment data for 1964 to the most recent year were from the MYB and the MFP. Producer shipment data for 1967–89 represent the tantalum content in tantalum metal, alloy additives, carbides, power, scrap, and other tantalum materials that were shipped by domestic producers. Producer shipments data for 1964–66 and 1990 to the most recent year were not available. Government shipment data for 1964 to the most recent year are shipments or releases of tantalum-bearing materials from the National Defense Stockpile (NDS). Negative numbers for 1982 and 1985 indicate U.S. Government inventory acquisitions. Negative number in 2001, the year in which NDS changed accounting systems, indicates U.S. Government inventory increase.

Imports

Import data for 1964–68 were from the MFP. Import data for 1969 to the most recent year were from the MYB. Import data for 1964–82 represent the tantalum content in tantalum mineral concentrates, metal, alloys, tin slags, synthetic concentrates, and other tantalum materials that were imported into the United States for consumption purposes. Tantalum import data for 1983–2004 exclude tantalum contained in tin slags, synthetic concentrate, and tantalum-bearing ore and concentrates other than tantalum ore and concentrate, materials that were included in 1964–82 data. Starting in 2005, import data were from the MYB.

Exports

Export data represent the tantalum content in various tantalum materials that were exported from the United States. Export data for 1964–75 were from the MFP. Export data for 1976–2004 were from the MCS. Starting in 2005, export data were from the MYB.

Stocks

Stock data for 1964–82 represent the tantalum content in various tantalum materials that were held in industrial producer or processor inventories. Stock data for 1964–82 were from the MFP. Beginning in 1983, domestic tantalum stock data were not available.

Apparent Consumption

Apparent consumption data represent the tantalum content in various tantalum materials that were consumed within the United States. Apparent consumption data for 1964–75 were from the MFP. Apparent consumption data for 1976 to the most recent year were from the MCS.

Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of tantalum apparent consumption. Unit value data for 1964 to the most recent year were based on the yearend average price of tantalite ore reported by trade journals in units of dollars per pound of tantalum pentoxide content and converted to contained tantalum using the equation below.

UNIT VALUE = (YEAREND AVERAGE PRICE * 2,204.623) / (0.8189674)

Yearend average price data were from the MP98 and the MYB.

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 production data for 1964–68 were not available. World production data for 1969 to the most recent year represent the tantalum content in tantalum-bearing ores and mineral concentrates that were produced from mines throughout the world. World production data for 1969 to the most recent year were from the MYB.

References

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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, accessed [date], at http://pubs.usgs.gov/ds/2005/140/.

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