

RHENIUM STATISTICS¹
U.S. GEOLOGICAL SURVEY

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

Last modification: November 29, 2012

| Year | Production | Imports | Apparent consumption | Unit value (\$/t) | Unit value (98\$/t) | World production |
|------|------------|---------|----------------------|-------------------|---------------------|------------------|
| 1963 | NA | 0.00907 | 0.227 | NA | NA | NA |
| 1964 | 0.454 | 0.0962 | 0.680 | 1,010,000 | 5,330,000 | NA |
| 1965 | 0.544 | 0.213 | 0.458 | 1,000,000 | 5,190,000 | NA |
| 1966 | 0.735 | 0.0381 | 0.472 | 981,000 | 4,930,000 | NA |
| 1967 | 0.782 | 0.0435 | 0.386 | 976,000 | 4,760,000 | NA |
| 1968 | 1.09 | 0.198 | 0.352 | 754,000 | 3,540,000 | NA |
| 1969 | 1.59 | 4.44 | 0.907 | 79,400 | 352,000 | NA |
| 1970 | 2.68 | 0.469 | 2.31 | 1,890,000 | 7,930,000 | NA |
| 1971 | 3.29 | 1.73 | 3.45 | 2,430,000 | 9,770,000 | NA |
| 1972 | 2.77 | 0.948 | 2.18 | 2,240,000 | 8,720,000 | NA |
| 1973 | 3.18 | 2.03 | 2.00 | 2,110,000 | 7,760,000 | 6.53 |
| 1974 | 2.27 | 1.51 | 2.04 | 1,210,000 | 4,010,000 | 6.49 |
| 1975 | 0.910 | 0.465 | 2.72 | 1,010,000 | 3,060,000 | 4.26 |
| 1976 | 0.680 | 1.87 | 3.76 | 771,000 | 2,210,000 | 5.90 |
| 1977 | NA | 2.84 | 3.31 | 590,000 | 1,590,000 | 4.58 |
| 1978 | NA | 5.67 | 5.67 | 453,000 | 1,130,000 | 7.12 |
| 1979 | NA | 4.18 | 4.31 | 924,000 | 2,070,000 | 7.26 |
| 1980 | 6.44 | 2.50 | 3.31 | 3,430,000 | 6,780,000 | 9.5 |
| 1981 | 7.17 | 4.39 | 2.99 | 765,000 | 1,370,000 | 13.7 |
| 1982 | 5.08 | 2.44 | 2.68 | 366,000 | 618,000 | 13.5 |
| 1983 | 7.35 | 2.98 | 3.99 | 440,000 | 720,000 | 9.6 |
| 1984 | 7.80 | 3.05 | 4.63 | 493,000 | 773,000 | 15.2 |
| 1985 | 9.57 | 3.75 | 5.90 | 505,000 | 765,000 | 18.4 |
| 1986 | 9.84 | 2.49 | 5.90 | 600,000 | 893,000 | 19.0 |
| 1987 | 9.89 | 3.37 | 7.03 | 638,000 | 916,000 | 24.4 |
| 1988 | 11.9 | 3.09 | 7.71 | 1,180,000 | 1,620,000 | 26.7 |
| 1989 | 17.5 | 3.79 | 8.17 | 1,090,000 | 1,430,000 | 35.2 |
| 1990 | 17.5 | 7.97 | 7.71 | 1,130,000 | 1,410,000 | 33.6 |
| 1991 | 19.2 | 13.3 | 8.87 | 1,210,000 | 1,450,000 | 36.6 |
| 1992 | 16.0 | 10.3 | 6.80 | 1,350,000 | 1,570,000 | 32.0 |
| 1993 | 12.2 | 4.90 | 6.90 | 1,010,000 | 1,130,000 | 24.2 |
| 1994 | 15.5 | 7.49 | 12.9 | 922,000 | 1,010,000 | 26.7 |
| 1995 | 17.0 | 11.8 | 16.2 | 700,000 | 749,000 | 28.2 |
| 1996 | 14.0 | 17.7 | 24.1 | 729,000 | 758,000 | 22.7 |
| 1997 | 15.4 | 13.1 | 17.9 | 720,000 | 731,000 | 35.6 |
| 1998 | 5.9 | 21.8 | 27.7 | 817,000 | 817,000 | 33.2 |
| 1999 | 6.2 | 14.6 | 20.8 | 1,030,000 | 1,010,000 | 35.3 |
| 2000 | 7.2 | 16.4 | 23.6 | 871,000 | 825,000 | 36.0 |
| 2001 | 8.3 | 23.4 | 31.7 | 984,000 | 906,000 | 33.1 |
| 2002 | 4.4 | 16.6 | 21.0 | 1,080,000 | 976,000 | 31.6 |
| 2003 | 6.3 | 14.5 | 20.8 | 1,110,000 | 980,000 | 38.3 |
| 2004 | 6.5 | 19.2 | 25.7 | 1,070,000 | 923,000 | 42.9 |
| 2005 | 7.9 | 28.9 | 36.9 | 1,040,000 | 868,000 | 47.3 |
| 2006 | 8.1 | 38.8 | 46.9 | 1,240,000 | 1,010,000 | 46.7 |
| 2007 | 7.1 | 41.0 | 48.1 | 2,390,000 | 1,880,000 | 44.8 |
| 2008 | 7.91 | 43.7 | 51.6 | 10,400,000 | 7,870,000 | 50.3 |
| 2009 | 5.58 | 31.5 | 37.1 | 7,500,000 | 5,700,000 | 41.4 |
| 2010 | 6.1 | 33.6 | 39.6 | 4,720,000 | 3,530,000 | 44.7 |
| 2011 | 8.61 | 33.5 | 42.1 | 4,670,000 | 3,380,000 | 50.7 |

NA Not available.

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

Rhenium Worksheet Notes

Data Sources

The sources of data for the rhenium worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and Mineral Commodity Summaries (MCS), and its predecessor, Commodity Data Summaries (CDS). The years of publication and corresponding years of data coverage are listed in the References section below.

Production

For 1964 to the most recent year, production is reported as mine production in rhenium metal content in the MYB. Data were not available for 1977–79. For 1980–97, rhenium production was estimated as rhenium content of the total potential production of molybdenite (MoS₂) produced as a byproduct of porphyry copper ore production. For 1998 to the most recent year, rhenium production was estimated as rhenium content of molybdenite (MoS₂) produced as a byproduct of an estimate of actual porphyry copper ore production.

Imports

For 1963–89, imports are reported in the MYB as rhenium metal and ammonium perrhenate in contained weight of rhenium. Since that time ammonium perrhenate was reported in gross weight. For this table, contained weights of rhenium for both rhenium metal and ammonium perrhenate are summed. All imports for 1963 to the most recent year are reported in the MYB.

Apparent Consumption

Apparent consumption is reported in the MYB as estimated consumption for 1963 to the most recent year. Apparent consumption is not calculated because there is inadequate information. Primary production is inferred; secondary production, stocks, and exports are unavailable; only imports are reported.

Unit Value (\$/t)

Unit value is the value of 1 metric ton (t) of rhenium apparent (estimated) consumption. For 1963–2007, the unit value is estimated by weighted averaging of the import value of rhenium metal and ammonium perrhenate metal content. For 2008 to the most recent year, the unit value is estimated by the rhenium metal price series from Metal Bulletin. The import values for metal and ammonium perrhenate are reported in the MYB for 1963 to the most recent year. The import data used to calculate unit value in 1969 was edited to exclude a single import that deviated from reported prices and other import unit values.

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 of rhenium is reported in the MCS and CDS as world mine production for 1972–97, and which over- and underestimated production for several major countries for 1985–97. Data were taken from the MYB for 1998 to the most recent year and were the result of recalculations to correct the prior estimates.

References

- U.S. Bureau of Mines, 1962–77, Commodity Data Summaries, 1962–77.
- U.S. Bureau of Mines, 1963–96, Minerals Yearbook, 1963–94.
- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Geological Survey, 1995–present, Minerals Yearbook, v. I. (Available via <http://minerals.usgs.gov/minerals/>.)
- U.S. Geological Survey, 1997–most recent, Mineral Commodity Summaries, 1997–most recent.
- 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, accessed [date], at <http://pubs.usgs.gov/ds/2005/140/>.

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