RHENIUM STATISTICS[1]
U.S. GEOLOGICAL SURVEY
[All values in metric tons (t) rhenium unless otherwise noted]
Last modification: December 11, 2008

Year	Production	Imports	Apparent consumption	Unit value ($/t)	Unit value (98$/t)	World production
1963		0.00907	0.227			
1964	0.454	0.0962	0.680	1,010,000	5,330,000	
1965	0.544	0.213	0.458	1,000,000	5,190,000	
1966	0.735	0.0381	0.472	981,000	4,930,000	
1967	0.782	0.0435	0.386	976,000	4,760,000	
1968	1.09	0.198	0.352	754,000	3,540,000	
1969	1.59	4.44	0.907	79,400	352,000	
1970	2.68	0.469	2.31	1,890,000	7,930,000	
1971	3.29	1.73	3.45	2,430,000	9,770,000	
1972	2.77	0.948	2.18	2,240,000	8,720,000	
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		2.84	3.31	590,000	1,590,000	4.58
1978		5.67	5.67	453,000	1,130,000	7.12
1979		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	810,000	810,000	33.2
1999	6.2	14.6	20.8	1,070,000	1,040,000	35.3
2000	7.2	16.4	23.6	922,000	873,000	36.0
2001	5.5	23.4	28.9	938,000	863,000	33.1
2002	4.4	16.6	21.0	1,030,000	951,000	31.6
2003	6.3	14.5	20.8	1,090,000	970,000	38.3
2004	6.5	19.2	25.7	1,090,000	940,000	42.1
2005	7.9	28.9	36.9	1,070,000	890,000	49.1
2006	8.1	38.8	46.9	1,260,000	1,020,000	47.2
2007	7.1	41	48.1	1,620,000	1,270,000	51.1

[1]Compiled by T.D. Kelly (retired) and M.J. Magyar.
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. Blank cells in the worksheet indicate that data were not available.

Production
For the years 1964 to the most recent, production is reported as mine production in rhenium metal content in the MYB. Data were not available for the years 1977–79. For the years 1980–97, rhenium production was estimated as rhenium content of the total potential production of molybdenite (MoS_2) produced as a byproduct of porphyry copper ore production. For the years 1998 to the most recent, rhenium production was estimated as rhenium content of molybdenite (MoS_2) produced as a byproduct of an estimate of actual porphyry copper ore production.

Imports
For the years 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 the years 1963 to the most recent are reported in the MYB.

Apparent Consumption
Apparent consumption is reported in the MYB as estimated consumption for the years 1963 to the most recent. 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. Unit value is estimated by weighted averaging of the import value of rhenium metal and ammonium perrhenate metal content. The import values for metal and ammonium perrhenate are reported in the MYB for the years 1963 to the most recent. 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 the years 1972–97, and which over- and underestimated production for several major countries for the years 1985–97. Data were taken from the MYB for the years 1998 to the most recent 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, 1997–2001, Mineral Commodity Summaries, 1997–2001.
U.S. Geological Survey, 1997–2008, Minerals Yearbook, v. I, 1995–2007.
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:

USGS Rhenium Commodity Specialist