# MAGNESIUM METAL STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY

[All values are in metric tons (t) magnesium metal unless otherwise noted]

Last modification: October 14, 2008

				Last mou	inication: Oct	0001 14,	2000			
	Primary	Secondary			Government		Apparent	Unit	Unit value	World
Voor	production	production	Imports	Ermonta		Stocks	consumption			production
Year	39.7	production	Imports	Exports	shipments	Stocks	_	( , ,	` ' /	production
1915 1916	34.2						39.7 34.2	11,100 9,100	179,000 136,000	
1916	52.5						52.5	4,450	56,700	
1917	129		5.40				134	3,990	43,100	
1919	57.8		6.00				63.8	4,030	38,000	
1920	56.2		13.00				69.2	3,530	28,700	
1921	21.8 27.2		18.00				39.8	3,530	32,100	
1922			83.00				110	3,530	34,300	
1923	56.7		6.00				63.0	2,760	26,300	
1924	58.1		4.00				62.0	2,360	22,500	
1925	111		4.00				115	1,900	17,800	
1926	146		5.00				151	1,760	16,100	
1927	166		3.00	2.00			169	1,500	14,000	
1928	241		5.00	2.00			244	1,210	11,500	
1929	412		2.00	52.0			362	1,260	12,000	
1930	254		3.00	38.0			219	1,060	10,400	
1931	263		1.00	58.0			206	661	7,080	
1932	359		0.424	77.0			283	639	7,610	
1933	651		0.261	199			452	617	7,730	
1934	1,930		0.300	291			1,637	573	6,970	
1935	1,920		0.401	953			971	573	6,820	
1936	1,770		1.00	390			1,382	573	6,720	10.600
1937	2,060		1.00	276			1,784	661	7,490	19,600
1938	2,920		0	1,130			1,786	661	7,640	23,900
1939	3,040		0	2,020			1,020	661	7,750	29,400
1940	5,680	110	0	779			4,900	595	6,930	37,800
1941	14,800	14.0	0	1,410			13,400	507	5,620	59,800
1942	44,400	79.0	1.00	3,670		21.000	40,829	507	5,070	105,000
1943	167,000	136	0	36,700		21,800	130,000	463	4,370	238,000
1944	143,000	190	55.0	22,000			121,000	463	4,290	218,000
1945	29,700	748	52.0	1,250			29,298	463	4,210	62,000
1946	4,820	1,100	219	278			5,863	463	3,860	24,000
1947	11,200						15,228			
1948	9,080	3,800	615	403			13,086	463	3,130	31,000
1949	10,500	2,670	2,320	642			14,900	463	3,170	34,000
1950	14,300	4,510		824			18,800	551	3,720	45,600
1951	37,100	5,590	3,610	690			45,600	551	3,440	82,600
1952	96,000	6,570	272	1,090		15 400	102,000	595	3,650	150,000
1953	84,400	5,480	2,220	2,690		15,400	89,400	595	3,630	153,000
1954	63,300	2,950		2,990		22,200	58,100	617	3,740	119,000
1955	55,500	4,130		7,690		26,900	47,900	716	4,370	
1956	62,000	4,860		3,570		30,200	60,600	777	4,650	103,000
1957	73,700	4,590	930	1,450		63,400	44,600	799	4,650	,
1958	27,300	4,330		954		52,600	42,000	799	4,510	71,200
1959	28,200	4,460	585	2,170		37,100	46,600	799	4,460	74,700
1960	36,400	3,940		4,660		24,400	48,700	799	4,390	92,900
1961	37,000	4,280		6,060		7,930	52,600	799	4,370	105,000
1962	62,600	2,850		6,390	0.150	9,190	60,000	799	4,320	134,000
1963	68,800	1,990		14,700	3,150	16,800	53,800	799	4,250	143,000
1964	72,100	3,730		15,300	4,160	19,500	64,500	799	4,210	151,000
1965	73,800	3,330	2,700	16,600	2,400	14,100	71,100	799	4,140	162,000

# $\begin{array}{c} {\bf MAGNESIUM~METAL~STATISTICS}^1\\ {\bf U.S.~GEOLOGICAL~SURVEY} \end{array}$

[All values are in metric tons (t) magnesium metal unless otherwise noted]

Last modification: October 14, 2008

Year	Primary production	Secondary production	Imports	Exports	Government shipments	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1966	72,400	4,120	3,590	14,000	20,600	10,200	90,500	799	4,020	163,000
1967	88,400	3,730	8,820	12,000	0	11,700	87,500	799	3,900	185,000
1968	89,200	3,150	4,360	17,700	2,720	9,020	84,500	799	3,750	189,000
1969	90,600	2,710	3,920	24,800	24,000	11,400	94,000	799	3,550	198,000
1970	102,000	2,520	2,990	32,400	13,200	11,500	87,800	799	3,360	220,000
1971	112,000	2,850	3,330	22,100	644	13,400	94,900	799	3,220	232,000
1972	110,000	2,710	4,060	15,900	7,020	20,900	100,000	821	3,200	234,000
1973	111,000	3,720	3,020	35,900	60,500	17,100	146,000	843	3,100	240,000
1974		5,190	4,810	42,100	19,000		130,000	1,650	5,460	130,000
1975	109,000	8,880	7,170	29,600		35,500	120,000	1,810	5,480	235,000
1976	109,000	10,500	13,500	12,200		50,700	105,000	2,030	5,820	249,000
1977	114,000	11,400	5,410	25,500		47,100	109,000	2,180	5,860	257,000
1978	136,000	12,800	6,050	37,900		45,700	118,000	2,230	5,580	288,000
1979	147,000	12,600	4,310	49,200		40,000	121,000	2,400	5,390	307,000
1980	154,000	15,900	3,410	51,500		44,700	117,000	2,760	5,460	316,000
1981	140,000	21,900	6,260	31,600		56,800	124,000	2,950	5,290	308,000
1982	92,700	21,300	4,340	35,900		43,400	95,700	3,090	5,220	254,000
1983	105,000	22,400	5,760	42,400		25,100	109,000	3,040	4,980	260,000
1984	144,000	24,300	8,510	43,900		31,400	127,000	3,260	5,120	328,000
1985	136,000	23,500	8,410	36,900		39,300	123,000	3,370	5,110	325,000
1986	126,000	23,000	8,360	39,900		39,300	117,000	3,370	5,010	322,000
1987	124,000	23,500	10,900	44,200		28,500	125,000	3,370	4,840	324,000
1988	142,000	27,600	14,400	49,800		24,800	138,000	3,590	4,950	334,000
1989	152,000	28,000	12,300	56,600		26,300	134,000	3,590	4,720	344,000
1990	139,000	31,100	26,800	51,800		26,000	146,000	3,150	3,930	354,000
1991	131,000	27,500	31,900	55,200		27,000	134,000	3,150	3,770	342,000
1992	137,000	30,900	11,800	52,000		13,000	142,000	3,310	3,850	295,000
1993	132,000	30,600	37,200	38,800		26,000	148,000	3,210	3,620	269,000
1994	128,000	29,600	29,100	45,200		20,000	148,000	3,590	3,950	282,000
1995	142,000	29,700	34,800	38,300		21,000	167,000	4,610	4,930	395,000
1996	133,000	30,100	46,600	40,500		26,000	164,000	3,860	4,010	378,000
1997	125,000	30,500	65,100	40,500		21,000	185,000	3,640	3,700	384,000
1998	106,000	31,800	82,500	35,400		22,000	184,000	3,460	3,460	396,000
1999		34,200	90,700	29,100			179,000	3,250	3,180	341,000
2000		30,100	91,400	23,800			160,000	2,790	2,640	422,000
2001		27,200	68,500	19,600			120,000	2,740	2,530	420,000
2002		26,400	88,000	25,400			110,000	2,560	2,320	432,000
2003		25,400	83,400	20,400			120,000	2,500	2,210	509,000
2004		20,500	98,600	11,800			140,000	3,470	2,990	595,000
2005		19,400		9,650			130,000			
2006		21,700		12,300			120,000	3,090	2,500	689,000
2007		23,800	71,800	14,800		_	130,000	4,960	3,900	749,000

<sup>&</sup>lt;sup>1</sup>Compiled by C.A. DiFrancesco (retired) and D.A. Kramer.

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

## **Magnesium Metal Worksheet Notes**

#### **Data Sources**

The sources of data for the magnesium metal worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); Mineral Commodity Summaries (MCS); 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. Blank cells in the worksheet indicate that data either were not available or were withheld because they are proprietary.

#### **Primary Production**

Production data were for magnesium metal in the United States. Magnesium was first produced commercially in the United States in 1915. Data were from the MR and the MYB. Data were withheld for the years 1974 and 1999 to the most recent in order to avoid disclosing proprietary data.

## **Secondary Production**

Secondary production includes old scrap only (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–40.

## **Imports**

Import data report the amount of magnesium metal imported into the United States. Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–17.

#### **Exports**

Export data report the amounts of magnesium metal exported from the United States. Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–27.

#### **Government Shipments**

Government shipment data were for shipments from the government stockpile. Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–62 and 1975 to the most recent.

## Stocks

Stocks data report the amount of magnesium metal held in stocks at the end of the year. Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–42 and 1944–52. Data were withheld for the years 1974 and 1999 to the most recent in order to avoid disclosing proprietary data.

## **Apparent Consumption**

Apparent consumption was estimated for the years 1915–98 by using the formula:

APPARENT CONSUMPTION = PRODUCTION (PRIMARY + SECONDARY) + IMPORTS – EXPORTS  $\pm$  GOVERNMENT SHIPMENTS  $\pm$  STOCK CHANGES.

Due to the proprietary nature of the data, apparent consumption was estimated by regression for the years 1974–75 to two significant figures. Rounded apparent consumption from the MCS was used for the years 1999 to the most recent.

## Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of magnesium metal apparent consumption. Unit value for 1915–98 was estimated for the United States in actual dollars by using price data from the MP98 for primary magnesium. Unit value for 1999 to the most recent was from 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 were for primary magnesium produced. Data were from the MR and the MYB. Blank cells in the worksheet indicate that data were not available for the years 1915–36.

#### References

U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.

U.S. Bureau of Mines, 1933–96, Minerals Yearbook, 1932–94.

- U.S. Geological Survey, 1916–27, Mineral Resources of the United States, 1915–23.
- U.S. Geological Survey, 1997–2008, Minerals Yearbook, v. I, 1995–2007.
- U.S. Geological Survey, 1999, Metal Prices in the United States through 1998.
- U.S. Geological Survey, 2006–2008, Mineral Commodity Summaries 2006–2008.

## **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** Magnesium Metal Commodity Specialist