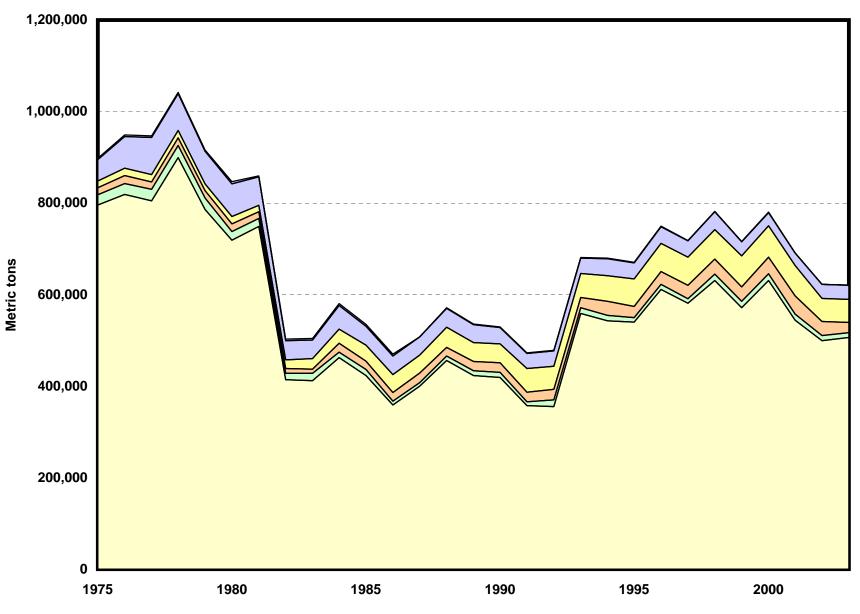
MANGANESE END-USE STATISTICS¹ U.S. GEOLOGICAL SURVEY [Metric tons] Last modification: September 1, 2005

			Alloys (incl.	ilcation. Septem	,			
			alloy steels and					Apparent
Year	Steel	Cast irons	superalloys)	Batteries	Chemical	Miscellaneous	Undistributed	consumption
1975	796,000	21,900	15,700	14,500	47,100	2,690	132,000	1,030,000
1976	819,000	23,700	17,600	16,200	69,300	3,080	291,000	1,240,000
1977	805,000	24,900	16,200	15,900	81,500	3,150	434,000	1,380,000
1978	899,000	27,100	16,600	15,900	80,300	2,820	238,000	1,280,000
1979	786,000	24,900	16,200	15,000	71,500	2,370	214,000	1,130,000
1980	719,000	18,800	16,600	15,900	72,000	4,580	86,100	933,000
1981	749,000	17,700	14,300	14,200	62,100	2,140	72,200	932,000
1982	414,000	14,000	10,400	19,100	42,100	3,450	107,000	610,000
1983	412,000	15,700	9,480	22,700	41,100	3,370	102,000	606,000
1984	462,000	12,200	19,400	30,900	51,800	3,970	-11,400	569,000
1985	423,000	13,300	18,300	35,000	41,500	4,020	97,900	633,000
1986	359,000	8,310	19,000	39,200	40,200	3,900	193,000	662,000
1987	400,000	7,900	20,600	39,000	40,000	478	126,000	634,000
1988	456,000	9,700	18,800	43,900	41,500	1,450	111,000	682,000
1989	423,000	10,800	20,100	41,100	39,100	1,370	187,000	723,000
1990	419,000	11,000	20,900	41,500	35,900	1,410	101,000	630,000
1991	357,000	8,990	20,800	52,000	32,700	1,210	125,000	598,000
1992	355,000	15,000	22,900	50,200	33,900	1,050	118,000	596,000
1993	559,000	12,300	22,400	52,300	33,600	1,650	14,300	696,000
1994	543,000	11,200	31,100	55,900	37,400	1,360	13,700	694,000
1995	540,000	9,320	24,900	60,000	35,300	1,020	4,950	676,000
1996	611,000	11,200	27,900	61,500	36,900	839	26,600	776,000
1997	581,000	9,560	29,900	61,500	35,300	811	-75,500	643,000
1998	631,000	13,700	32,700	64,800	38,700	706	-5,940	776,000
1999	571,000	14,400	31,500	67,400	30,900	835	2,920	719,000
2000	631,000	14,400	36,200	68,800	28,900	983	-12,300	768,000
2001	544,000	13,200	40,200	66,000	27,300	385	874	692,000
2002	499,000	11,500	30,500	50,900	30,200	417	73,100	696,000
2003	506,000	10,800	22,700	49,700	31,400	540	190	621,000

¹Compiled by G.R. Matos and L.A. Corathers.

End Uses of Manganese



□ Steel □ Cast irons □ Alloys (incl. alloy steels and superalloys) □ Batteries □ Chemical □ Miscellaneous

Manganese End-Use Worksheet Notes

Data Source

The source of data for the manganese end-use worksheet is the Mineral Yearbook, an annual collection, compilation, and analysis of mineral industry data, published by the U.S. Bureau of Mines and the U.S. Geological Survey.

End Use

End use is defined as the use of the mineral commodity in a particular industrial sector or product. For manganese, end-use categories are steel, cast irons, alloys (including alloy steels and superalloys), batteries, chemical, and miscellaneous uses. The undistributed category, the difference between apparent consumption and reported end uses, accounts for imported manganese ore, which is not reported by use.

In 1982, there was a combination of factors for the depressed demand for manganese; mainly in the use of manganese in steelmaking. The U.S. recession and changes in steelmaking technologies were among the factors causing lower manganese usage rates.

Data are rounded to no more than three significant digits; data may not add to totals shown.

References

U.S. Bureau of Mines, 1977–96, Minerals Yearbook, v. I, 1975–94.

U.S. Geological Survey, 1997–2005, Minerals Yearbook, v. I, 1995–2003.

Recommended Citation Format:

(1) If taken from CD version:

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, one CD-ROM. (Also available online at http://pubs.usgs.gov/ds/2005/140/.)

(2) If taken from online version:

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].)

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