

COBALT END-USE STATISTICS¹**U.S. GEOLOGICAL SURVEY**

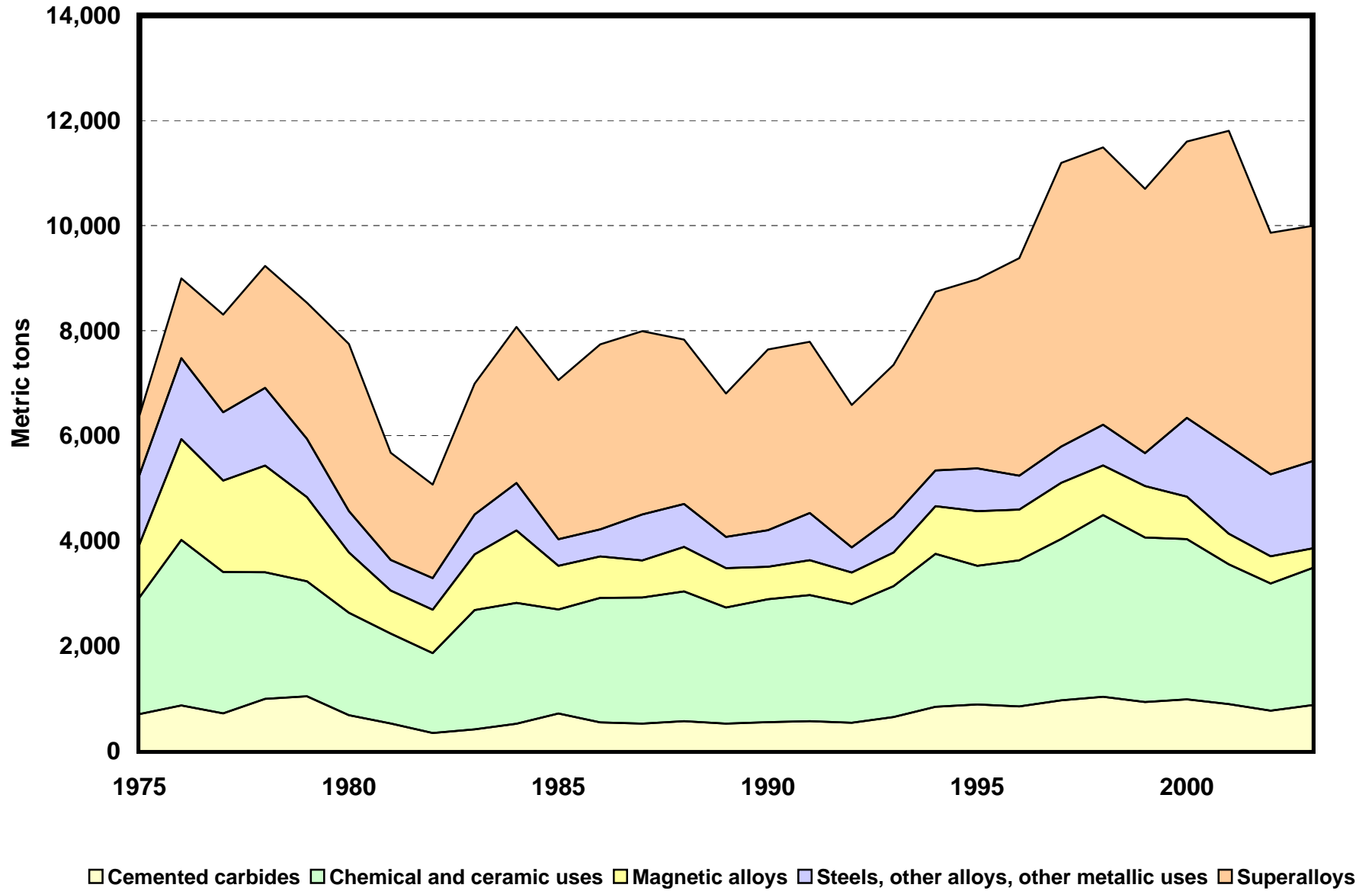
[Metric tons of cobalt content]

Last modification: September 1, 2005

Year	Cemented carbides	Chemical and ceramic uses	Magnetic alloys	Steels, other alloys, other metallic uses	Superalloys	Apparent consumption
1975	700	2,220	1,010	1,320	1,130	6,380
1976	866	3,150	1,920	1,540	1,520	9,000
1977	716	2,690	1,740	1,300	1,860	8,310
1978	991	2,410	2,030	1,480	2,320	9,240
1979	1,040	2,190	1,600	1,110	2,590	8,530
1980	679	1,950	1,150	788	3,180	7,740
1981	523	1,710	820	582	2,040	5,680
1982	342	1,520	827	600	1,780	5,070
1983	411	2,270	1,060	760	2,490	6,980
1984	517	2,300	1,380	904	2,970	8,060
1985	713	1,980	831	505	3,030	7,060
1986	543	2,370	790	516	3,520	7,740
1987	521	2,400	705	875	3,490	7,990
1988	566	2,470	848	817	3,130	7,830
1989	521	2,210	749	594	2,730	6,800
1990	547	2,340	618	696	3,440	7,640
1991	567	2,400	663	899	3,260	7,790
1992	537	2,260	598	480	2,710	6,590
1993	646	2,490	641	682	2,890	7,350
1994	841	2,910	907	681	3,400	8,730
1995	884	2,640	1,040	815	3,600	8,970
1996	848	2,780	965	647	4,140	9,380
1997	964	3,070	1,070	689	5,400	11,200
1998	1,030	3,460	945	774	5,280	11,500
1999	932	3,130	980	627	5,030	10,700
2000	982	3,050	808	1,500	5,260	11,600
2001	891	2,660	584	1,670	6,000	11,800
2002	767	2,420	517	1,560	4,600	9,860
2003	873	2,610	372	1,660	4,480	10,000

¹Compiled by G.R. Matos and K.B. Shedd.

End Uses of Cobalt



Cobalt End-Use Worksheet Notes

Data Sources

The sources of data for the cobalt end-use worksheet are the report Cobalt Recycling in the United States in 1998, U.S. Geological Survey; and the Minerals 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. End-use estimates are derived by applying the calculated percentages of end-use consumption to the calculated U.S. apparent consumption; actual consumption may be greater or less. For cobalt, end-use categories are cemented carbides; chemical and ceramic uses; magnetic alloys; steels, other alloys, other metallic uses; and superalloys.

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

References

Shedd, K.B., 2003, Cobalt recycling in the United States in 1998: U.S. Geological Survey Circular 1196-M, 16 p. (Also available online at <http://pubs.usgs.gov/circ/2004/1196am/c1196a-m.pdf>.)
U.S. Bureau of Mines, 1977–96, Minerals Yearbook, v. I, 1975–94.
U.S. Geological Survey, 1997–2005, Mineral 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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