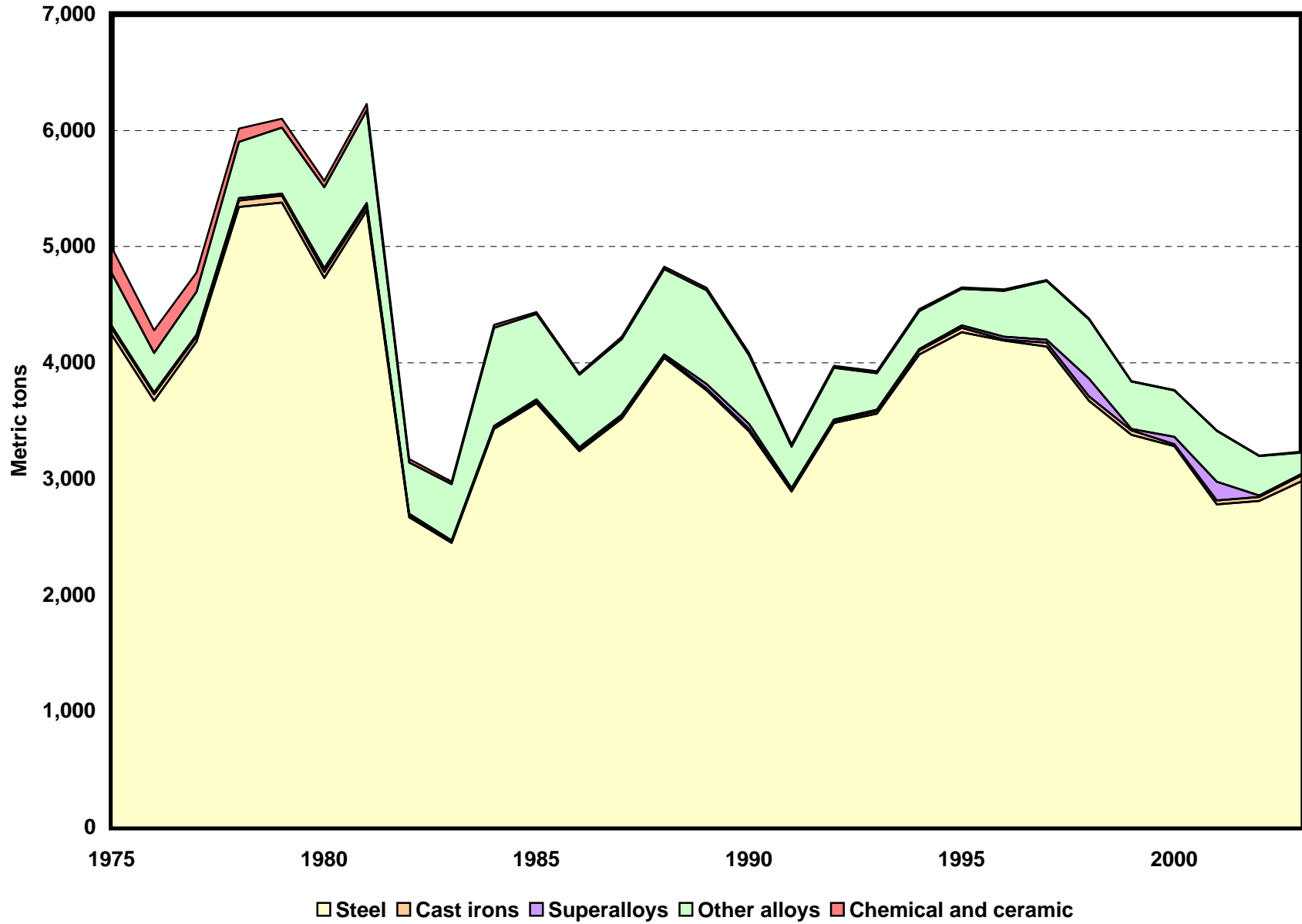


**VANADIUM END-USE STATISTICS<sup>1</sup>**  
**U.S. GEOLOGICAL SURVEY**  
 [Metric tons]  
 Last modification: September 1, 2005

Year	Steel	Cast irons	Superalloys	Other alloys	Chemical and ceramic	Apparent consumption
1975	4,240	54	24	454	219	4,990
1976	3,670	55	17	342	194	4,280
1977	4,180	43	17	370	165	4,770
1978	5,340	54	24	483	113	6,020
1979	5,380	56	18	571	75	6,100
1980	4,730	49	35	697	55	5,570
1981	5,310	38	28	798	53	6,230
1982	2,670	18	11	443	28	3,170
1983	2,450	9	13	484	18	2,970
1984	3,430	16	9	847	22	4,320
1985	3,650	20	15	735	15	4,430
1986	3,240	22	11	625	12	3,920
1987	3,520	22	9	652	19	4,220
1988	4,040	20	9	738	18	4,830
1989	3,760	18	38	808	21	4,650
1990	3,410	18	43	593	18	4,080
1991	2,890	15	16	357	19	3,290
1992	3,480	17	14	446	16	3,980
1993	3,560	21	15	314	17	3,930
1994	4,070	33	16	325	18	4,460
1995	4,260	40	20	316	14	4,650
1996	4,190	10	23	395	13	4,630
1997	4,140	33	24	506	11	4,710
1998	3,670	41	152	510	6	4,380
1999	3,380	37	13	407	5	3,840
2000	3,280	20	61	400	5	3,770
2001	2,780	33	164	436	5	3,420
2002	2,810	36	13	338	5	3,200
2003	2,980	50	13	185	5	3,230

<sup>1</sup>Compiled by G.R. Matos and M.J. Magyar.

# End Uses of Vanadium



## Vanadium End-Use Worksheet Notes

### Data Sources

The sources of data for the vanadium end-use worksheet are the Minerals Yearbook (MYB), an annual collection, compilation, and analysis of mineral industry data, published by the U.S. Bureau of Mines and the U.S. Geological Survey, and proprietary data reports.

### End Use

End use is defined as the use of the mineral commodity in a particular industrial sector or product. For vanadium, end-use categories are steel, cast iron, superalloys, other alloys, and chemical and ceramic.

End-use data reported in this table differs from that reported in the MYB during the time period of 1975–2002. The categories have been grouped differently and the data have been revised based on new information.

Apparent consumption reproduces reported consumption values from the MYB. For consistency within the historical statistics series, the column is titled apparent consumption.

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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