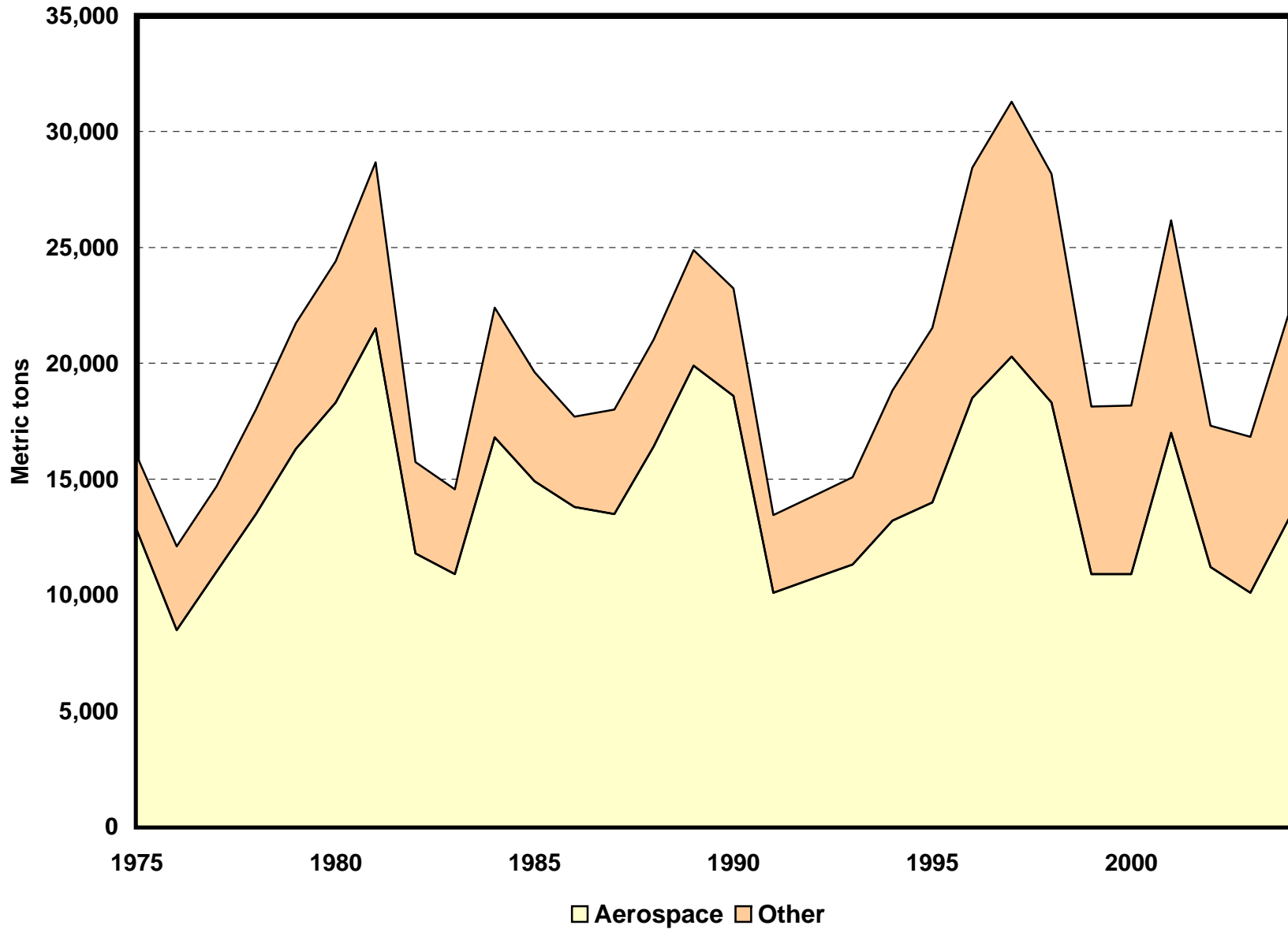


TITANIUM SPONGE METAL END-USE STATISTICS¹
U.S. GEOLOGICAL SURVEY
 [Metric tons of titanium sponge metal content]
 Last modification: January 26, 2006

| Year | Aerospace | Other | Apparent consumption |
|-------------|------------------|--------------|-----------------------------|
| 1975 | 12,800 | 3,200 | 16,000 |
| 1976 | 8,470 | 3,630 | 12,100 |
| 1977 | 11,000 | 3,690 | 14,700 |
| 1978 | 13,500 | 4,500 | 18,000 |
| 1979 | 16,300 | 5,430 | 21,700 |
| 1980 | 18,300 | 6,110 | 24,400 |
| 1981 | 21,500 | 7,170 | 28,700 |
| 1982 | 11,800 | 3,930 | 15,700 |
| 1983 | 10,900 | 3,650 | 14,600 |
| 1984 | 16,800 | 5,610 | 22,400 |
| 1985 | 14,900 | 4,720 | 19,600 |
| 1986 | 13,800 | 3,890 | 17,700 |
| 1987 | 13,500 | 4,500 | 18,000 |
| 1988 | 16,400 | 4,620 | 21,000 |
| 1989 | 19,900 | 4,980 | 24,900 |
| 1990 | 18,600 | 4,640 | 23,200 |
| 1991 | 10,100 | 3,350 | 13,400 |
| 1992 | 10,700 | 3,550 | 14,200 |
| 1993 | 11,300 | 3,780 | 15,100 |
| 1994 | 13,200 | 5,640 | 18,800 |
| 1995 | 14,000 | 7,530 | 21,500 |
| 1996 | 18,500 | 9,940 | 28,400 |
| 1997 | 20,300 | 11,000 | 31,300 |
| 1998 | 18,300 | 9,870 | 28,200 |
| 1999 | 10,900 | 7,240 | 18,100 |
| 2000 | 10,900 | 7,280 | 18,200 |
| 2001 | 17,000 | 9,170 | 26,200 |
| 2002 | 11,200 | 6,100 | 17,300 |
| 2003 | 10,100 | 6,720 | 16,800 |
| 2004 | 13,400 | 8,960 | 22,400 |

¹Compiled by D.A. Buckingham and J. Gambogi.

End Uses of Titanium Sponge Metal



Titanium Sponge Metal End-Use Worksheet Notes

Data Source

The sources of data for the titanium sponge metal end-use worksheet are the Commodity Data Summaries and the Mineral Commodity Summaries (MCS), annual mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey; and 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.

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 percentages of industrial sector mill shipments as reported in the MCS to apparent consumption as reported in the MYB. Consumption is limited to titanium sponge used to produce titanium metal products. Titanium used in the production of steel and other alloys is primarily derived from scrap metal.

For titanium sponge metal, end-use categories are aerospace and other uses. The aerospace category includes components for air and space vehicles, such as air frames and engine parts. The other uses category includes armor, chemical processing, marine, medical, power generation, and sporting goods. No quantitative detail is available for these applications.

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

References

- U.S. Bureau of Mines, 1975–77, Commodity Data Summaries, 1975–77.
- U.S. Bureau of Mines, 1977–96, Minerals Yearbook, v. I, 1975–94.
- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Geological Survey, 1997–2006, Minerals Yearbook, v. I, 1995–2004.
- U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

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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