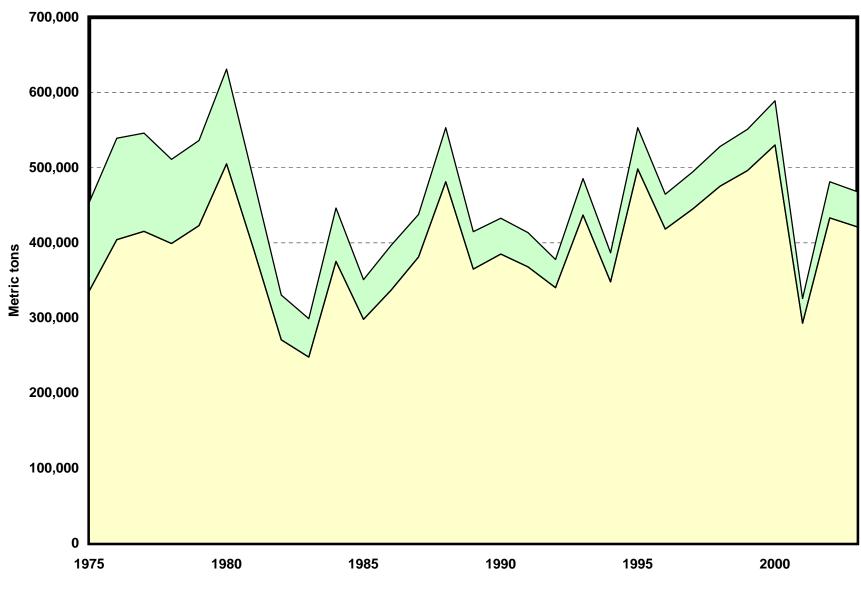
# CHROMIUM END-USE STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY [Metric tons]

## Last modification: September 1, 2005

			Apparent
Year	Metallurgical	Other	consumption
1975	336,000	118,000	454,000
1976	404,000	135,000	539,000
1977	415,000	131,000	546,000
1978	399,000	112,000	511,000
1979	423,000	113,000	536,000
1980	505,000	126,000	631,000
1981	391,000	91,800	483,000
1982	271,000	59,600	331,000
1983	248,000	50,800	299,000
1984	375,000	71,400	446,000
1985	298,000	52,700	351,000
1986	337,000	59,600	397,000
1987	381,000	56,900	438,000
1988	481,000	71,900	553,000
1989	365,000	49,800	415,000
1990	385,000	47,600	433,000
1991	368,000	45,400	413,000
1992	340,000	37,800	378,000
1993	437,000	48,500	485,000
1994	348,000	38,700	387,000
1995	498,000	55,300	553,000
1996	418,000	46,400	464,000
1997	445,000	49,400	494,000
1998	475,000	52,800	528,000
1999	496,000	55,100	551,000
2000	530,000	58,900	589,000
2001	293,000	32,600	326,000
2002	433,000	48,100	481,000
2003	421,000	46,800	468,000

<sup>1</sup>Compiled by G.R. Matos and J.F. Papp.

# **End Uses of Chromium**



□ Metallurgical □ Other

# **Chromium End-Use Worksheet Notes**

### **Data Source**

The chromium end-use worksheet is based on data from 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, in those years for which data was published. Unpublished data were also used.

#### End Use

End use is defined as the use of the mineral commodity in a particular industrial sector or product. While actual consumption is different than apparent consumption, trends are similar. For chromium, end-uses are metallurgical and other, which comprises chemical, foundry, and refractory.

End-use estimates are derived by associating the material constituents of apparent consumption with metallurgical and other end-use industries. These categories were estimated by assuming that:

- Apparent consumption comprises chromite ore, chromium ferroalloys, and chromium metal (chromium ferroalloys are metal typically of about 50 percent chromium, and chromium metal is metal typically of more than 99 percent chromium).
- All of chromium ferroalloys and chromium metal is consumed by the metallurgical industry.
- Part of chromite ore is consumed by the metallurgical industry and part by other industries.

Then, apparent consumption was deconstructed into a metallurgical part comprising chromium ferroalloys and metal and some of chromite ore and an "other" part comprised of the remainder of chromite ore. Reported consumption of chromite ore was used to estimate the amount of chromite ore consumed by the metallurgical industry and the amount consumed by other industries.

Data are rounded to no more than three significant digits; 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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