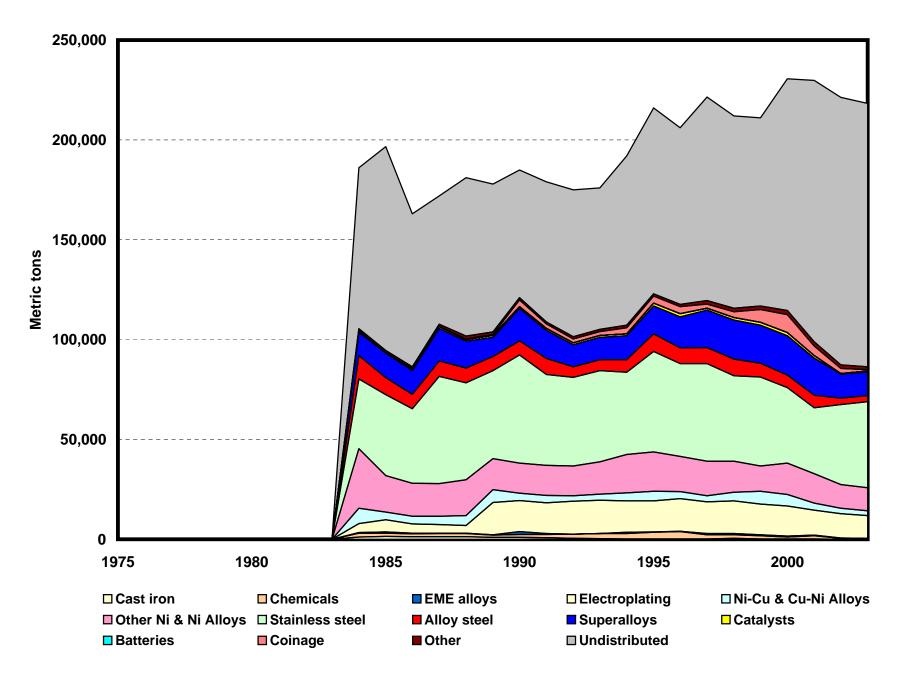
NICKEL END-USE STATISTICS¹ U.S. GEOLOGICAL SURVEY [Metric tons] Last modification: September 1, 2005

					Ni-Cu & Cu-Ni	Other Ni & Ni						Apparent
Year	Cast iron	Chemicals	EME alloys	Electroplating	Alloys	Alloys	Stainless steel	Alloy steel	Superalloys	Other	Undistributed	consumption
1975												199,000
1976												221,000
1977												231,000
1978												247,000
1979												205,000
1980												187,000
1981												187,000
1982												164,000
1983												175,000
1984	1,110	2,010	211	4,550	7,650	29,900	34,800	11,800	11,700	1,710	80,600	186,000
1985	1,380	1,660	666	6,010	3,840	18,300	40,600	8,450	12,400	1,320	102,000	197,000
1986	1,290	1,490	307	4,600	3,890	16,500	37,300	7,140	12,000	1,860	76,600	163,000
1987	1,260	1,600	187	4,280	4,200	16,300	53,800	7,570	16,400	2,110	,	172,000
1988	1,280	1,590	209	3,830	5,030	17,900	48,600	7,300	13,400	2,590	79,300	181,000
1989	945	1,210	136	16,100	6,390	15,600	44,100	7,010	9,650	2,720	74,100	178,000
1990	981	1,500		15,600	3,660	15,100	54,200	7,040	16,100	5,500	64,000	185,000
1991	867	1,550		15,500	3,650	15,100	45,400	7,990	14,100	4,290	70,100	179,000
1992	425	2,090	110	16,500	2,630	14,900	44,500	5,200	11,100	4,020	73,500	175,000
1993	260	2,580	34	16,600	3,160	16,200	45,700	5,360	11,300	3,980	70,800	176,000
1994	229	2,680	547	15,800	3,960	19,300	41,100	6,260	12,000	5,300	84,800	192,000
1995	223	3,330	74	15,600	4,750	19,700	50,400	8,840	13,900	6,090	93,100	216,000
1996	225	3,620	221	16,300	3,480	17,600	46,500	7,890	15,600	6,180	88,400	206,000
1997	222	1,990		15,900	3,140	17,300	48,900	7,970	18,700	4,810	102,000	222,000
1998	560	1,740	516	16,400	4,310	15,600	42,800	8,340	19,500	5,960	96,300	212,000
1999	147	1,580	478	15,400	6,510	12,600	44,600	6,820	19,100	9,560	94,200	211,000
2000	153	1,010		15,100	5,640	15,700	37,800	6,350	19,700	12,600	116,000	231,000
2001	169	1,650	273	12,500	3,440	14,900	33,000	6,190	18,600	8,080	131,000	230,000
2002	75	386		12,300	2,700	11,800	40,100	3,170	12,000	4,610	134,000	221,000
2003	75	248	134	11,400	2,370	11,600	43,100	2,950	12,000	2,440	132,000	218,000

¹Compiled by G.R. Matos and P.H. Kuck.

End Uses of Nickel



Nickel End-Use Worksheet Notes

Data Sources

The source of data for the nickel end-use worksheet is 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 commodity in a particular industrial sector or product. For nickel, end-use categories are cast iron; chemicals; electric, magnetic, and expansion (EME) alloys; electroplating; nickel-copper (Ni-Cu) and copper-nickel (Cu-Ni) alloys; other nickel (Ni) and nickel (Ni) alloys; stainless steel; alloy steel; superalloys; and other industrial uses which includes batteries, catalysts, ceramics, coinage, and miscellaneous alloys containing nickel. The undistributed category includes secondary nickel consumption which was not broken down by end use plus differences from the calculated apparent consumption.

The cast iron, chemicals, and alloy steel categories depict a steady decline over the period shown, likely a result of declines in reporting in these categories rather than declines in actual usage.

The EME alloys category in 1990 is an anomaly probably a result of mistaken categorization of reported material.

The jump in the electroplating category in 1988 is likely a result of increased reporting coverage that year rather than a surge in use.

The drop in the other nickel and nickel alloy category in 1988 is probably a result of relatively even redistribution of material into other defined categories, based on new information.

An electronic database for nickel end use was not available prior to 1984. Data are rounded to 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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