

IRON AND STEEL SLAG STATISTICS¹

U.S. GEOLOGICAL SURVEY

[All values in metric tons (t) gross weight unless otherwise noted]

Last modification: September 4, 2012

Year	Production (Sales)	Imports	Exports	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)
1942	17,300,000	NA	NA	17,300,000	0.84	8.40
1943	15,000,000	NA	NA	15,000,000	0.93	8.76
1944	11,300,000	NA	NA	11,300,000	0.97	8.98
1945	11,500,000	NA	NA	11,500,000	1.00	9.06
1946	15,200,000	NA	NA	15,200,000	1.08	9.03
1947	17,800,000	NA	NA	17,800,000	1.21	8.84
1948	19,200,000	NA	NA	19,200,000	1.29	8.72
1949	19,600,000	NA	NA	19,600,000	1.38	9.45
1950	22,600,000	NA	NA	22,600,000	1.44	9.74
1951	26,600,000	NA	NA	26,600,000	1.50	9.40
1952	24,400,000	NA	NA	24,400,000	1.53	9.41
1953	27,700,000	NA	NA	27,700,000	1.60	9.77
1954	26,500,000	NA	NA	26,500,000	1.64	9.94
1955	29,400,000	NA	NA	29,400,000	1.73	10.50
1956	32,000,000	NA	NA	32,000,000	1.72	10.30
1957	29,800,000	NA	NA	29,800,000	1.86	10.80
1958	25,800,000	NA	NA	25,800,000	1.60	9.02
1959	25,700,000	NA	NA	25,700,000	2.02	11.30
1960	26,100,000	NA	NA	26,100,000	2.02	11.10
1961	23,300,000	NA	NA	23,300,000	2.04	11.10
1962	21,300,000	NA	NA	21,300,000	2.12	11.40
1963	21,500,000	NA	NA	21,500,000	2.12	11.30
1964	24,400,000	NA	NA	24,400,000	2.10	11.00
1965	27,300,000	NA	NA	27,300,000	2.08	10.80
1966	28,400,000	NA	NA	28,400,000	1.81	9.11
1967	31,300,000	NA	NA	31,300,000	1.90	9.27
1968	31,700,000	NA	NA	31,700,000	1.92	8.99
1969	33,600,000	NA	NA	33,600,000	2.02	8.97
1970	30,600,000	1,720	26,400	30,600,000	2.00	8.40
1971	30,200,000	2,110	19,700	30,200,000	2.13	8.57
1972	31,900,000	1,320	24,900	31,900,000	2.22	8.66
1973	35,000,000	1,150	33,700	35,000,000	2.30	8.44
1974	35,100,000	NA	47,100	35,100,000	2.41	7.97
1975	29,600,000	NA	NA	29,600,000	2.70	8.18
1976	29,600,000	NA	NA	29,600,000	2.97	8.51
1977	29,400,000	NA	NA	29,400,000	3.08	8.28
1978	33,400,000	NA	NA	33,400,000	3.33	8.33
1979	32,400,000	NA	NA	32,400,000	3.76	8.44
1980	22,900,000	NA	NA	22,900,000	4.46	8.82
1981	19,500,000	NA	NA	19,500,000	4.77	8.55
1982	17,700,000	NA	NA	17,700,000	4.95	8.36
1983	16,700,000	NA	NA	16,700,000	5.24	8.58
1984	20,000,000	NA	NA	20,000,000	5.66	8.88
1985	19,100,000	10,900	379,000	18,700,000	6.02	9.12
1986	19,100,000	27,200	18,100	19,100,000	6.38	9.49
1987	19,300,000	121,000	331,000	19,100,000	5.99	8.59
1988	19,600,000	155,000	1,000	19,800,000	6.10	8.40
1989	20,700,000	100,000	7,000	20,800,000	5.77	7.58
1990	21,900,000	227,000	5,000	22,100,000	5.78	7.21
1991	20,300,000	150,000	5,000	20,400,000	6.60	7.90
1992	21,400,000	100,000	4,000	21,500,000	6.25	7.26

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Year	Production (Sales)	Imports	Exports	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)
1993	19,000,000	162,000	4,000	19,200,000	6.63	7.48
1994	20,100,000	199,000	4,000	20,300,000	6.97	7.67
1995	21,000,000	280,000	4,000	21,300,000	6.86	7.34
1996	20,500,000	346,000	3,000	20,800,000	6.88	7.15
1997	18,900,000	663,000	9,000	19,600,000	7.25	7.36
1998	18,400,000	700,000	10,000	19,100,000	8.15	8.15
1999	17,100,000	920,000	12,000	18,000,000	8.21	8.03
2000	16,300,000	1,200,000	20,000	17,500,000	8.65	8.19
2001	16,900,000	2,600,000	50,000	19,500,000	8.05	7.41
2002	19,100,000	1,100,000	100,000	19,000,000	15.50	14.00
2003	19,700,000	1,100,000	100,000	19,600,000	15.00	13.30
2004	21,200,000	1,000,000	100,000	21,100,000	15.50	13.40
2005	21,600,000	1,600,000	35,000	21,600,000	17.60	14.70
2006	20,300,000	1,600,000	98,000	20,200,000	20.00	16.20
2007	19,600,000	1,900,000	54,000	19,500,000	22.00	17.30
2008	18,800,000	1,300,000	7,000	18,800,000	18.00	13.60
2009	12,500,000	1,280,000	9,800	12,500,000	19.00	14.44
2010	15,800,000	1,380,000	77,000	15,800,000	17.00	12.71
2011	15,400,000	1,500,000	33,000	15,400,000	16.50	11.96

NA Not available.

¹Compiled by T.D. Kelly (retired), R.S. Kalyoncu (retired), and H.G. van Oss.

Data are calculated, estimated, or reported. See notes for more information.

Iron and Steel Slag Worksheet Notes

Data Sources

The sources of data for the slag—iron and steel worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and Mineral Commodity Summaries (MCS).

Production (Sales)

Production data of iron and steel slag is the sum of blast furnace slag and steel slag reported as total sales in the MYB for 1942–2000. Data for 2001 to the most recent year are reported in the MCS. Because materials may remain in stockpiles for longer than the usual yearly turnaround, data estimates may be less accurate. Data on total slag production are not collected.

Imports

Imports are reported from the MYB for 1970–73 as the sum of slag, dross, and scaling. For 1985 to the most recent year, imports are reported in the MCS as “imports” and are per the Census Bureau. The slag import tariff code contains significant, but uncertain, tonnages of materials that are not slag, but no correction has been made for these. For 1942–69 and 1974–84, import data were not available.

Exports

Exports are reported from the MYB for 1970–74 as the sum of slag, dross, and scaling. For 1985 to the most recent year, exports are reported in MCS as “exports.” For 1942–69 and 1975–84, export data were not available. The reported amount of exports for 2002 to the most recent year is considerably higher than that of previous years, because of the addition of granulated slag, which had not been included in exports statistics previously.

Apparent Consumption

Apparent consumption was estimated by the following formula:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION (SALES)} - \text{EXPORTS.}$$

For the years that imports and exports were not available, production (sales) was assumed equal to apparent consumption. For data for 2001 to the most recent year, imports are assumed to be included in the “production” (sales) data to a substantial degree, exports were very small, and apparent consumption thus remains approximately equal to production (sales).

Unit Value (\$/t)

Unit value is defined as the value in current dollars of 1 metric ton (t) of slag apparent consumption. Unit value was estimated by dividing total slag production value by total slag production quantity, (as defined above). Data prior to 2001 are reported from the MYB. Unit value data for 2001 to the most recent year are the average value f.o.b. plant, reported in the MCS. The higher unit value from 2002 to the most recent year represents more complete data on sales of ground granulated blast furnace slag, valued at almost \$60.00 per ton as compared with air-cooled blast furnace and steel slags, valued from \$4.00 to \$7.00 per ton.

Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

References

- U.S. Bureau of Mines, 1945–96, Minerals Yearbook, 1942–94.
- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Geological Survey, 1995–present, Minerals Yearbook, v. I. (Available via <http://minerals.usgs.gov/minerals>.)
- U.S. Geological Survey, 1997–most recent, Mineral Commodity Summaries 1997–most recent. (Available via <http://minerals.usgs.gov/minerals>.)
- U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

Recommended Citation Format:

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, accessed [date], at <http://pubs.usgs.gov/ds/2005/140/>.

For more information, please contact:

[USGS Iron and Steel Slag Commodity Specialist](#)