## ZINC STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY [All values in metric tons (t) zinc content unless otherwise noted] Last modification: October 25, 2012

Year production Imports Exports Stocks consumption (%) (98%) production   1900 112,000 NA 0 20,300 NA 90,200 9.0 1,800 1   1901 128,000 NA 406 2,940 NA 139,000 106 2,000 2   1903 144,000 NA 446 2,940 NA 149,000 112 2,000 1   1904 169,000 NA 309 9,210 NA 144,000 112 2,000 1   1905 185,000 NA 388 5,000 NA 20,000 135 2,200 1   1907 227,000 6,400 1,550 511 NA 26,000 101 1,800 1   1908 191,000 6,500 704 1,20 NA 254,000 116 2,000 1 1 1,800 1 1 1,900 1 1			~ .	Last	modification	n: October	/			
1900 112,000 NA 90,200 97.0 1900   1901 128,000 NA 0 3,080 NA 129,000 97.0 1900   1902 142,000 NA 406 2,940 NA 139,000 106 2,000 3   1903 164,000 NA 309 9,210 NA 140,000 112 2,000 3   1906 244,000 NA 309 9,210 NA 140,000 133 2,400   1907 227,000 6,400 1,550 511 NA 206,000 182 2,200   1908 191,000 6,500 704 1,120 NA 194,000 101 1,800   1910 244,000 11,600 897 3,390 NA 223,000 182 2,000 191 2,000 191 2,000 191 2,000 191 2,000 191 2,000 143 20,000 152 2,600		Primary	Secondary			~ -	Apparent	Unit value	Unit value	World
1901 128,000 NA 0 3,080 NA 129,000 90.0 1,800 1   1903 144,000 NA 406 2,940 NA 139,000 106 2,000 1   1904 169,000 NA 309 9,210 NA 144,000 119 2,200 1   1905 185,000 NA 388 5,000 NA 133 2,400 1   1906 204,000 NA 926 4,240 NA 200,000 133 2,400 1   1907 227,000 6,400 1,550 511 NA 246,000 118,800 1 1 180 1 1 140,00 110 1,800 1 1 1 1 1 2,000 1 1 1,800 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-	<u> </u>		<u> </u>		1	. ,	· · · · ·	production
1902 142.000 NA 406 2.940 NA 139,000 106 2.000 3   1903 144,000 NA 183 1.380 NA 140,000 119 2.200 3   1904 169,000 NA 388 5,000 NA 182,000 133 2,400   1905 220,000 6,400 1,550 511 NA 206,000 128 2,200   1907 227,000 6,400 1,550 511 NA 206,000 128 2,200   1908 191,000 6,500 704 1,120 NA 194,000 110 1,800   1919 24,000 11,600 897 3,390 NA 223,000 122 2,000 12 120 120 123 2,030 13 120 120 123 2,030 12 2,000 13 5,050 123 2,030 122 2,000 133 5,050 12 2,000 <td></td> <td></td> <td></td> <td>-</td> <td>,</td> <td></td> <td>,</td> <td></td> <td>,</td> <td>479,000</td>				-	,		,		,	479,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				÷	,		,		,	510,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $										547,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							,		,	574,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		,								629,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		,			,		,		,	660,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		,					,			704,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		,	,	1,550			,		,	738,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		,	,		,		,			723,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		232,000	8,410	8,550			246,000			775,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1910	244,000	11,600	897	3,390	NA	223,000	119	2,100	810,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1911	260,000	12,700	293	13,000	NA	254,000	126	2,200	895,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1912	307,000	23,600	9,720	6,810	NA	309,000	152	2,600	971,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1913	314,000	23,600	4,690	12,200	NA	268,000	123	2,030	939,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1914	320,000	18,700	177	67,600	NA	272,000	112	1,830	795,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1915	444,000	27,000	57	119,000	13,000	331,000	313	5,050	760,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1916	606,000	26,100	19	137,000	16,000	417,000	300	4,480	882,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1917	607,000	15,300	16	200,000	49,000	375,000	196	2,500	901,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1918	470,000	9,000	10	96,800	37,000	334,000	176	1,900	849,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1919	423,000	17,900	29	133,000	33,000	294,000	154	1,450	719,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1920	420,000	19,400	0	104,000	64,000	293,000	172	1,400	682,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1921	182,000	15,900	5,990	4,500	64,000	185,000	104	945	464,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1922	321,000	29,900	36	31,600	15,000	338,000	126	1,220	730,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1923	463,000	35,800	1	29,900	25,000	405,000	148	1,410	889,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1924	469,000	32,200	10	69,200	19,000	407,000	139	1,320	986,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1925	520,000	35,500	0	69,300	12,000	454,000	169	1,580	1,190,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1926	561,000	37,000	0	38,900	24,000	505,000	163	1,500	1,410,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1927	538,000	38,800	35	41,500	49,000	468,000	138	1,290	1,420,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1928	547,000	44,100	0	22,900	43,900	568,000	133	1,270	1,360,000
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1929	567,000	43,000	205	13,100	81,200	575,000	143	1,360	1,320,000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1930	452,000	31,600	255	4,200	154,000	409,000	101	990	1,260,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1931	265,000	19,600	249	583	133,000	336,000	80.0	857	904,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1932	188,000	13,400	281	5,870	119,000	235,000	64.0	762	709,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1933	279,000	27,300	1,720	1,030	103,000	318,000	89.0	1,120	892,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1934									1,060,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1935	382,000	26,000	4,030	1,470	83,200	429,000	96.0	1,140	1,210,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1936	446,000	38,300	10,600	34	50,900	528,000	108	1,270	1,330,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		505,000		33,800	226	73,600				1,470,000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										1,420,000
1940613,00044,40071,80071,80018,100655,0001401,6301,41941746,00054,00036,50081,00083,400751,0001651,8301,41942809,00048,30033,000122,000145,000661,0001821,8201,41943855,00043,70050,90088,400237,000741,0001821,7201,41944789,00044,50057,70019,600271,000806,0001821,6901,41945694,00044,70087,8007,060298,000773,0001821,6501,4		,	,		4,100		,			1,500,000
1941746,00054,00036,50081,00083,400751,0001651,8301,51942809,00048,30033,000122,000145,000661,0001821,8201,61943855,00043,70050,90088,400237,000741,0001821,7201,61944789,00044,50057,70019,600271,000806,0001821,6901,61945694,00044,70087,8007,060298,000773,0001821,6501,6			44,400	,						1,470,000
1942809,00048,30033,000122,000145,000661,0001821,8201,1943855,00043,70050,90088,400237,000741,0001821,7201,1944789,00044,50057,70019,600271,000806,0001821,6901,1945694,00044,70087,8007,060298,000773,0001821,6501,			,				,			1,590,000
1943855,00043,70050,90088,400237,000741,0001821,7201,31944789,00044,50057,70019,600271,000806,0001821,6901,31945694,00044,70087,8007,060298,000773,0001821,6501,4		,	,							1,630,000
1944789,00044,50057,70019,600271,000806,0001821,6901,91945694,00044,70087,8007,060298,000773,0001821,6501,4										1,830,000
1945 694,000 44,700 87,800 7,060 298,000 773,000 182 1,650 1,4										1,870,000
										1,470,000
										1,440,000
			,			,			,	1,600,000
										1,690,000
							,		,	1,730,000
	1950	765,000	60,800	141,000	11,700	66,300	877,000	306		2,150,000

## ZINC STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY [All values in metric tons (t) zinc content unless otherwise noted] Last modification: October 25, 2012

			Last	modificatio	n: October	· · · · · · · · · · · · · · · · · · ·	-		
	Primary	Secondary				Apparent	Unit value	Unit value	World
Year	production	production	Imports	Exports	Stocks	consumption	(\$/t)	( <b>98</b> \$/t)	production
1951	800,000	44,100	79,900	33,100	65,800	847,000	397	2,480	2,360,000
1952	821,000	50,000	103,000	52,400	161,000	774,000	357	2,190	2,590,000
1953	831,000	48,000	207,000	16,300	241,000	894,000	239	1,460	2,670,000
1954	728,000	61,700	145,000	22,700	206,000	802,000	236		2,660,000
1955	874,000	59,900	177,000	16,400	148,000	1,020,000	271	1,650	2,900,000
1956	892,000	65,400	222,000	8,000	155,000	915,000	297	1,780	3,110,000
1957	894,000	65,800	244,000	9,780	222,000	849,000	251	1,460	3,150,000
1958	709,000	42,300	168,000	1,880	252,000	788,000	227	1,280	2,950,000
1959	725,000	52,500	149,000	10,600	235,000	867,000	253	1,410	3,020,000
1960	725,000	62,400	110,000	68,200	231,000	796,000	286	1,570	3,090,000
1961	768,000	50,100	114,000	45,400	220,000	845,000	255	1,390	3,490,000
1962	798,000	53,400	123,000	32,300	204,000	936,000	256	1,380	3,570,000
1963	810,000	54,700	120,000	30,700	132,000	1,000,000	265	1,410	3,660,000
1964	866,000	65,000	122,000	24,100	127,000	1,100,000	299	1,570	4,030,000
1965	902,000	75,900	140,000	5,390	163,000	1,230,000	320	1,660	4,310,000
1966	930,000	75,500	254,000	1,280	176,000	1,290,000	320	1,610	4,500,000
1967	852,000	66,700	201,000	15,300	167,000	1,130,000	305	1,490	4,840,000
1968	926,000	72,500	276,000	29,900	1,200,000	1,230,000	298	1,400	4,970,000
1969	944,000	64,000	295,000	8,440	1,190,000	1,260,000	323	1,430	5,340,000
1970	796,000	70,000	236,000	261	1,230,000	1,080,000	338	1,420	5,460,000
1971	695,000	73,400	294,000	12,100	1,160,000	1,140,000	356	1,430	5,520,000
1972	574,000	66,900	469,000	3,920	1,000,000	1,290,000	391	1,520	5,440,000
1973	529,000	75,500	536,000	13,200	741,000	1,360,000	456	1,670	5,710,000
1974	504,000	71,200	493,000	17,300	583,000	1,170,000	793	2,620	5,780,000
1975	397,000	52,500	340,000	6,260	515,000	839,000	859	2,600	5,850,000
1976	453,000	62,200	631,000	3,190	547,000	1,030,000	816	2,340	5,690,000
1977	408,000	45,900	504,000	215	518,000	1,000,000	758	2,040	5,920,000
1978	407,000	34,800	622,000	723	483,000	1,050,000	683	1,710	5,850,000
1979	472,000	53,200	524,000	279	561,000	1,000,000	822	1,850	5,990,000
1980	340,000	29,400	410,000	302	468,000	811,000	825	1,630	5,950,000
1981	347,000	50,200	612,000	323	536,000	841,000	983	1,760	5,950,000
1982	228,000	74,300	456,000	341	500,000	795,000	848	1,430	6,130,000
1983	236,000	69,400	618,000	427	489,000	933,000	913	1,490	6,280,000
1984	253,000	78,100	639,000	760	478,000	980,000	1,070	1,680	6,520,000
1985	261,000	72,600	611,000	1,010	460,000	961,000	890	1,350	6,760,000
1986	253,000	62,900	665,000	1,940	441,000	999,000	838	,	6,840,000
1987	261,000	83,000	706,000	1,080	437,000	1,050,000	924	1,330	7,190,000
1988	241,000	88,000	749,000	482	426,000	1,090,000	1,330	,	6,770,000
1989	260,000	98,000	712,000	5,530	431,000	1,060,000	1,810		6,820,000
1990	263,000	96,000	632,000	1,240	428,000	991,000	1,640		7,150,000
1991	253,000	122,000	549,000	1,250	426,000	,	1,160	,	7,270,000
1992	272,000	128,000	644,000	565	423,000	1,050,000	1,290		7,250,000
1993	240,000	141,000	724,000	1,410	403,000	1,110,000	1,020		6,910,000
1994	217,000	139,000	793,000	6,310	366,000	1,180,000	1,090		7,050,000
1995	232,000	131,000	856,000	3,080	350,000	1,230,000	1,230		7,280,000
1996	226,000	140,000	827,000	1,970		1,210,000	1,130		7,480,000
1997	226,000	140,000	876,000	3,630	313,000	1,260,000	1,420		7,540,000
1998	234,000	134,000	879,000	2,330	267,000	1,290,000	1,130		7,570,000
1999	241,000	131,000	1,060,000	1,880	261,000	1,430,000	1,180		7,960,000
2000	228,000	143,000	915,000	2,770	215,000	1,330,000	1,230		8,770,000
2000	203,000	108,000	813,000	1,180	195,000	1,150,000	969		8,910,000
2001	205,000	100,000	013,000	1,100	195,000	1,150,000	709	072	0,910,000

## ZINC STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY [All values in metric tons (t) zinc content unless otherwise noted] Last modification: October 25, 2012

	Last modification: October 25, 2012									
	Primary	Secondary				Apparent	Unit value	Unit value	World	
Year	production	production	Imports	Exports	Stocks	consumption	( <b>\$/t</b> )	( <b>98</b> \$/t)	production	
2002	182,000	113,000	874,000	1,160	181,000	1,170,000	852	772	8,880,000	
2003	187,000	150,000	758,000	1,680	168,000	1,110,000	896	793	9,520,000	
2004	194,000	156,000	868,000	3,300	135,000	1,250,000	1,160	999	9,600,000	
2005	195,000	156,000	700,000	784	116,000	1,080,000	1,480	1,240	10,000,000	
2006	113,000	156,000	895,000	2,530	75,300	1,190,000	3,500	2,830	10,300,000	
2007	121,000	157,000	758,000	8,070	62,700	1,040,000	3,400	2,670	11,100,000	
2008	125,000	161,000	725,000	3,250	65,600	1,010,000	1,960	1,480	11,800,000	
2009	94,000	109,000	686,000	2,960	92,300	893,000	1,720	1,310	11,500,000	
2010	120,000	129,000	671,000	4,200	115,000	907,000	2,250	1,680	12,200,000	
2011	110,000	138,000	716,000	19,000	121,000	939,000	2,340	1,700	12,800,000	
NTA NT /	.1 1 1									

NA Not available.

<sup>1</sup>Compiled by C.A. DiFrancesco (retired), J. Plachy (retired), P.N. Gabby (deceased), D.I. Bleiwas, and A.C. Tolcin. Data are calculated, estimated, or reported. See notes for more information.

# **Zinc Worksheet Notes**

## **Data Sources**

The sources of data for the zinc worksheet are the mineral statistics publications of the U.S. Bureau of Mines (USBM) and the U.S. Geological Survey (USGS)— Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); Mineral Commodity Summaries (MCS); Statistical Compendium (SC); and USBM Open-File Report 72-92 (Jolly, 1992) (OFR 72-92). The years of publication and corresponding years of data coverage are listed in the References section below.

### **Primary Production**

Primary U.S. zinc production data report the amount of refined zinc in slab form. Data are from the SC for 1900–83, 1985–86, and 1988–89, the OFR 72-92 for 1984 and 1987, and the MCS for 1990 to the most recent year.

#### **Secondary Production**

Secondary production includes slab zinc produced from old scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Data are from the SC for 1907–34, 1935–40, 1941–87, and 1989, the OFR 72-92 for 1988, and the MCS for 1990 to the most recent year. Data were not available for 1900–06. The increase in production from 1990–91 reflects an expansion of capacity and its utilization at the secondary slab zinc smelter at Monaca, PA.

#### Imports

Import data report the amounts of slab zinc imported into the United States in various shapes and forms. Import data exclude all manufactured zinc products. Data are from the SC for 1900–01, 1903–09, 1911–53, 1955–61, 1963–76, and 1978–89, the OFR 72-92 for 1902, 1910, 1954, 1962, and 1977, and the MYB for 1990 to the most recent year.

#### Exports

Export data report the amounts of slab zinc exported from the United States in various shapes and forms. Export data exclude all manufactured zinc products. Data are from the SC for 1900–02, 1904–09, 1911–65, 1967–70, 1972–78, and 1980–89, the OFR 72-92 for 1903, 1910, 1966, 1971, and the MYB for 1990 to the most recent year.

#### Stocks

Stocks are the sum of available data on slab zinc held in government, industry, consumer, and merchant stocks. From 2002 to the most recent year, stocks total does not include merchant stocks. Data were not available for 1900–14. Data are from the SC for 1928–90, and the MR and MYB for 1915–27 and 1991 to the most recent year. Values may change because of introduction of new data categories (merchant stocks) and/or expansion of data collection and legislation (Government stocks). Consumer stocks were first reported in the SC in 1932. Government stocks were reported beginning in 1968 in the SC. Government stock data for 1991 to the most recent year were from the MYB. Merchant stocks were first reported in the SC beginning in 1979 and were not reported in 1991. Stocks data for 1991 was estimated using the average of stocks estimates for 1990 and 1992. Large stock decreases in 1972–74 resulted largely from sales of zinc from Government stocks. Sales from Government stocks began on a continuing basis from 1993 through 2004 when only 66,400 metric tons (t) remained from approximately 1 million metric tons in 1968.

## **Apparent Consumption**

U.S. apparent consumption of slab zinc came from the SC, which lists U.S. reported consumption data of slab zinc for 1900–17, 1919–45, 1947–82 and U.S. apparent consumption data of slab zinc for 1984–87, and 1989; for 1991 to the most recent year, apparent consumption came from the MYB. Data for 1918, 1946, 1983, 1988, and 1990 were from the OFR 72-92. The first year of introduction for data relating to stocks not published in previous years (such as 1968) was not included in the estimates to avoid misrepresenting apparent consumption.

## Unit Value (\$/t)

Unit value is the value in dollars of 1 t of zinc slab apparent consumption. Unit value (\$/t) was estimated from a price series in the SC for the period 1900–90 and from the MYB for U.S. prices for high-grade zinc for 1991–2001. Unit value is the Platts Metals Week price for Special High Grade zinc from 2002 to the most recent year.

## 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.

#### **World Production**

World zinc production data were for zinc content of smelter production for 1900–12, 1914–17, and 1929–42. World mine production data were used for 1913, 1918–28, and 1943 to the most recent year. Data are from the MYB and MR.

#### References

Jolly, J.J., 1992, Materials Flow of Zinc in the United States 1850–1990: U.S. Bureau of Mines Open-File Report 72-92, 53 p.

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# **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 Zinc Commodity Specialist