

Mineral Industry Surveys

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ZINC IN DECEMBER 2005

Domestic mine production (recoverable) of zinc in December of 62,300 metric tons (t) was about 22% more than that in November and about 10% more than that in December 2004, according to the U.S. Geological Survey. Estimated smelter production of 18,100 t of refined zinc was about 5% less than that in November and about 10% less than that in December 2004. Apparent consumption of 76,200 t of zinc was about 13% higher than that in November and 22% lower than that in December 2004.

The Platts Metals Week average composite price for North American Special High Grade zinc increased to 88.01 cents per pound in December. The price was 12% (9.54 cents per pound) higher than in November and 50% (29.48 cents per pound) higher than in December 2004. The average London Metal Exchange Ltd. (LME) cash price increased to \$1,821.44 per metric ton of zinc, a 13% increase compared with the November price, and 54% higher than that in December 2004. During December, global LME zinc stocks dropped by 44,250 t to 393,550 t.

Korea Zinc announced plans to close its Big River zinc smelter at Sauget, IL, in February. The smelter has a 90,000-metric-ton-per-year zinc production capacity. In a related story, there has been confirmation that ASARCO Incorporated's

(Asarco) Tennessee zinc mines will not reopen. Asarco is under Chapter 11 bankruptcy protection, and these mines produced low-iron-content zinc concentrates that were needed for the Big River smelter to operate (CRU International Ltd., 2005).

The International Lead Zinc Study Group predicted world zinc mine production to finish the year 2005 up by 3.5% compared with that of 2004, and further predicted mine production in 2006 would increase by another 4.2% (CRU International Ltd., 2005).

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in December, under the monthly Basic Ordering Agreement DLA-Zinc-004, was 300 t (approximately 330 short tons), with an approximate value of \$0.55 million (Defense National Stockpile Center, 2006).

References Cited

- CRU International Ltd., 2005, CRU Monitor—Lead & Zinc Concentrates: CRU International Ltd., December, 12 p.
Defense National Stockpile Center, 2006, Stockpile announces zinc BOA sales for December 2005: Fort Belvoir, VA, Defense National Stockpile Center news release, January 6, 1 p.

TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2004	2005			
	January-December	October	November	December	January-December
Production:					
Mine, zinc content of concentrate	739,000	66,800	53,200 ^r	64,700	747,000
Mine, recoverable zinc	713,000	64,400	51,200 ^r	62,300	720,000
Smelter, refined zinc	212,000 ^r	17,000	19,000	18,100	190,000
Consumption:					
Refined zinc, reported	421,000	34,700	33,800 ^r	34,100	405,000
Ores ^e (zinc content)	727	61	61	61	727
Zinc-base scrap ^e (zinc content)	191,000	15,900	15,900	15,900	191,000
Copper-base scrap ^e (zinc content)	176,000	14,700	14,700	14,700	176,000
Aluminum-and magnesium-base scrap ^e (zinc content)	1,430	120	120	120	1,430
Total ^e	790,000	65,400	64,500 ^r	64,800	774,000
Apparent consumption, metal ²	1,160,000	59,300	67,300	76,200	939,000 ³
Stocks of refined (slab) zinc, end of period:					
Producer ⁴	XX	7,020 ^e	9,590 ^e	10,700 ^e	XX
Consumer ⁵	XX	55,900	54,500	54,000	XX
Merchant	XX	10,200	10,200	10,200	XX
Total	XX	73,200	74,400	74,900	XX
Shipments of zinc metal from Government stockpile	31,500	3,010	2,830	299	20,400
Imports for consumption:					
Refined (slab) zinc	812,000	46,400	55,300	NA	603,000 ⁶
Oxide (gross weight)	103,000	7,670	11,000	NA	103,000 ⁶
Ore and concentrate (zinc content)	231,000	16,700	20,900	NA	153,000 ⁶
Exports:					
Refined (slab) zinc	3,300	36	21	NA	782 ⁶
Oxide (gross weight)	14,400	1,370	1,410	NA	13,700 ⁶
Ore and concentrate (zinc content)	745,000	50,500	49,300	NA	776,000 ⁶
Waste and scrap (gross weight)	53,900	5,070	4,570	NA	50,500 ⁶
Price:					
London Metal Exchange, average, dollars per metric ton	\$1,047.35	\$1,487.91	\$1,610.61	\$1,821.44	\$1,381.37
Platts Metals Week North American Special High Grade, average, cents per pound	52.47	72.66	78.47	88.01	67.14

^eEstimated. ^rRevised. NA Not available. XX Not applicable.

¹Data are rounded to no more than three significant digits; except prices; may not add to totals shown.

²Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

³Data based on reported consumption, stocks, and estimated trade data.

⁴Data from U.S. Geological Survey and American Bureau of Metal Statistics.

⁵Includes an estimate for companies that report annually.

⁶Includes data through November only.

TABLE 2
REFINED ZINC PRODUCED IN THE UNITED STATES¹

(Metric tons)

Month	Beginning stocks ²	Production	Shipments	Ending stocks ²
2004:				
December	3,850	21,200	20,100	5,010
January-December	XX	212,000	212,000	XX
2005:				
January	5,010	14,700	15,500	4,290
February	4,290	15,600	15,100	4,820
March	4,820	18,500	17,500	5,790
April	5,790	16,400	15,300	6,810
May	6,810	15,900	16,400	6,360
June	6,360	12,500	10,800	8,070
July	8,070	14,700	15,300	7,400
August	7,400	14,900	15,400	6,960
September	6,960	14,300	16,900	4,390
October	4,390	17,000	17,400	4,010
November	4,010	19,000	18,900	4,040
December	4,040	18,100	16,600	5,590
January-December	XX	192,000	191,000	XX

³Estimated. XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes stocks held at locations other than smelters.

Sources: U.S. Geological Survey and American Bureau of Metal Statistics.

TABLE 3
APPARENT CONSUMPTION OF REFINED ZINC
ACCORDING TO INDUSTRY USE AND PRODUCT¹

(Metric tons)

Industry and product	2004	2005			
	January-December	October	November	December ²	January-December ²
Galvanizing:					
Sheet and strip	477,000	25,100	28,700 [†]	31,900	392,000
Other	167,000	6,000	7,800 [†]	9,500	121,000
Total	644,000	31,100	36,500 [†]	41,500	513,000
Brass and bronze	188,000	9,900	10,000 [†]	12,000	147,000
Zinc-base alloy	244,000	12,800	14,800 [†]	16,400	203,000
Other uses ³	85,800	5,400	5,900	6,300	76,900
Grand total	1,160,000	59,300	67,300	76,200	939,000

[†]Revised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Data based on reported consumption, stocks, and estimated trade data.

³Includes zinc used in making zinc dust, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, rolled zinc, and miscellaneous uses not elsewhere specified.

TABLE 4
AVERAGE ZINC PRICES¹

Period	North	LME ² cash	
	American ¢/lb.	¢/lb.	\$/t
2004:			
December	58.53	53.52	1,179.83
January-December	52.47	47.51	1,047.35
2005:			
January	61.54	56.51	1,245.81
February	64.49	60.14	1,325.81
March	66.49	62.47	1,377.33
April	63.03	58.96	1,299.81
May	60.46	56.39	1,243.23
June	61.73	57.85	1,275.33
July	57.96	54.16	1,194.08
August	62.94	58.88	1,298.05
September	67.89	63.37	1,397.08
October	72.66	67.49	1,487.91
November	78.47	73.06	1,610.61
December	88.01	82.62	1,821.44
January-December	67.14	62.66	1,381.37

¹Special High Grade.

²London Metal Exchange.

Source: Platts Metals Week.

TABLE 5
U.S. EXPORTS OF ZINC¹

Material	2004		2005 ²			
	Quantity (metric tons)	Value (thousands)	November		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	3,300	\$5,330	21	\$38	782	\$1,490
Ore and concentrate (zinc content)	745,000	413,000	49,300	27,600	776,000	473,000
Waste and scrap (gross weight)	53,900	48,300	4,570	5,200	50,500	55,100
Powders, flakes, dust (zinc content)	7,640	13,500	793	1,540	8,360	16,500
Oxide (gross weight)	14,400	19,800	1,410	2,870	13,700	22,400
Chloride (gross weight)	1,870	2,200	119	116	1,710	2,100
Sulfate (gross weight)	3,060	1,860	219	161	2,540	1,680
Compounds, other (gross weight)	194	711	95	49	1,030	829

¹Data are rounded to no more than three significant digits.

²Data for December 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

Material	2004		2005 ²			
	Quantity (metric tons)	Value (thousands)	November		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	812,000	\$888,000	55,300	\$73,300	603,000	\$787,000
Ore and concentrate (zinc content)	231,000	98,700	20,900	19,600	153,000	114,000
Waste and scrap (gross weight)	10,800	7,740	1,150	1,140	8,130	7,300
Powders, flakes, dust (zinc content)	24,800	40,200	1,870	3,960	21,400	41,600
Oxide (gross weight)	103,000	89,000	11,000	12,400	103,000	118,000
Chloride (gross weight)	705	863	65	72	635	1,070
Sulfate (gross weight)	29,100	14,000	2,810	1,600	28,500	15,100
Compounds, other (gross weight)	4,660	4,230	692	542	6,180	5,540

¹Data are rounded to no more than three significant digits.

²Data for December 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 7
SHIPMENTS OF ZINC METAL FROM THE NATIONAL
DEFENSE STOCKPILE¹

(Metric tons)

Period	Beginning inventory	Shipments	Ending inventory
2004:			
December	66,400	--	66,400
January-December	XX	31,500	XX
2005:			
January	66,400	20	66,300
February	66,300	738	65,600
March	65,600	--	65,600
April	65,600	220	65,400
May	65,400	301	65,100
June	65,100	2,960	62,100
July	62,100	2,600	59,500
August	59,500	3,680	55,800
September	55,800	3,710	52,100
October	52,100	3,010	49,100
November	49,100	2,830	46,300
December	46,300	299	46,000
January-December	XX	20,400	XX

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Defense Logistics Agency.

TABLE 8
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY^{1,2}

(Metric tons)

Material and country	General imports			Imports for consumption		
	2004	2005		2004	2005	
		November	Year to date		November	Year to date
Ore and concentrate (zinc content):						
Australia	27,900	--	8,590	27,900	--	8,590
Ireland	17,700	--	13,000	17,700	--	13,000
Mexico	6,530	80	27,300	6,530	80	27,300
Peru	178,000	20,300	101,000	178,000	20,300	101,000
Other	877	563	2,850	877	563	2,850
Total	231,000	20,900	153,000	231,000	20,900	153,000
Blocks, pigs, or slab:						
Australia	7,940	1	1	27,500	4,600	22,300
Brazil	26,400	--	38,800	26,400	--	38,900
Canada	501,000	34,900	400,000	501,000	34,900	400,000
China	35	15	15	16,500	15	1,370
Japan	--	--	--	690	--	--
Kazakhstan	2,310	--	--	2,310	--	--
Korea, Republic of	8,030	--	5,030	31,900	2,510	5,920
Mexico	123,000	12,900	132,000	123,000	12,900	132,000
Namibia	47,900	--	--	47,900	--	--
Peru	25,600	--	235	30,500	--	834
Other	204	390	505	3,970	390	955
Total	743,000	48,200	577,000	812,000	55,300	603,000
Dross, ashes, fume (zinc content)						
	16,100	1,440	14,500	16,100	1,440	14,500
Grand total	990,000	70,500	745,000	1,060,000	77,600	770,000
Oxide (gross weight):						
Canada	49,700	5,070	58,300	49,700	5,070	58,300
China	207	6	112	207	6	112
Italy	13,400	2,140	15,400	13,400	2,140	15,400
Japan	1,060	104	1,050	1,060	104	1,050
Mexico	33,200	2,410	21,800	33,200	2,410	21,800
Netherlands	4,700	163	4,320	4,700	163	4,320
Other	796	1,150	2,040	796	1,150	2,040
Total	103,000	11,000	103,000	103,000	11,000	103,000
Other (gross weight):						
Waste and scrap	10,800	1,150	8,130	10,800	1,150	8,130
Sheets	2,500	609	3,320	2,500	609	3,320
Powders, flakes, dust (zinc content)	24,800	1,870	21,400	24,800	1,870	21,400

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Data for December 2005 were not available at time of publication.

Source: U.S. Census Bureau.