

Mineral Industry Surveys

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ZINC IN FEBRUARY 2007

Domestic mine production (recoverable) of zinc in February 2007 was 55,400 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in February was 1,979 t, 2% higher than that in January and 8% higher than that in February 2006. Year-to-date mine production for 2007 was 5% higher than that of 2006. Reported consumption of 26,200 t was 21% lower than that in January and 24% lower than that in February 2006.

The Platts Metals Week average price for North American Special High Grade Zinc for the month of February was 161.17 cents per pound, 12% lower than the January average price and an increase of 51% from the February 2006 average price. The average London Metal Exchange Ltd. (LME) cash price of zinc for February decreased to \$3,308.59 per metric ton, 13% lower than the price in January and a 49% increase compared with the price in February 2006. During February 2007, global LME zinc stocks fell by 5,000 t to 93,525 t.

ZincOx Resources plc (Surrey, United Kingdom) has completed pre-feasibility studies on its integrated U.S. zinc and iron recycling project, which includes constructing a new facility in Ohio and modifying the Big River Zinc plant in Sauget, IL. The plant in Ohio will treat electric arc furnace dust (EAFD) in a rotary hearth furnace to produce lead and zinc in an oxide concentrate (HZO) and direct reduced iron (DRI). The

DRI will be melted into slag and pig iron and will be sold to industry. The HZO will be sent to Big River, where it will be dissolved in a leach plant and then purified in a solvent extraction circuit to recover other valuable metals. Big River is designed to produce 90,000 metric tons per year (t/yr) of Special High Grade zinc, and the Ohio facility is designed to treat 200,000 t/yr of EAFD. The refurbishment of Big River and the construction of the Ohio plant reportedly will be complete in 16 months and 18 months, respectively (ZincOx Resources plc, 2007).

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in February, under the monthly basic Ordering Agreement DLA-Zinc-004, was approximately 363 t (400 short tons), with an approximate value of \$1.2 million (Defense National Stockpile Center, 2007).

References Cited

- Defense National Stockpile Center, 2007, Stockpile announces BOA sales for February 2007: Fort Belvoir, VA, Defense National Stockpile Center news release, March 5, 1 p.
- ZincOx Resources plc, 2007, New U.S. recycling project and expansion at Big River Zinc: Surrey, United Kingdom, ZincOx Resources plc news release, February 20, 2 p.

TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2006	2007		
	January- December	January	February	January- February
Production:				
Mine, zinc content of concentrate	727,000 ^r	62,600 ^r	57,600	120,000
Mine, recoverable zinc	699,000 ^r	60,300 ^r	55,400	116,000
Smelter, refined zinc ^{e,2}	248,000	21,200	19,000	40,300
Consumption:				
Refined zinc, reported	404,000	33,000 ^r	26,200	59,200
Ores ^e (zinc content)	732	61	61	122
Zinc-base scrap ^e (zinc content)	191,000	15,900	15,900	31,800
Copper-base scrap ^e (zinc content)	176,000	14,700	14,700	29,300
Aluminum-and magnesium-base scrap ^e (zinc content)	1,440	120	120	240
Total ^e	773,000	63,800	56,900	121,000
Apparent consumption, metal ³	1,130,000	95,900 ^r	96,400	192,000 ⁴
Stocks of refined (slab) zinc, end of period:				
Producer ^{e, 5}	XX	8,810	7,620	XX
Consumer ⁶	XX	50,900 ^r	46,000	XX
Merchant	XX	10,200	10,200	XX
Total	XX	69,900 ^r	63,900	XX
Shipments of zinc metal from Government stockpile	33,000	472	590	1,060
Imports for consumption:				
Refined (slab) zinc	851,000	70,700	NA	70,700 ⁷
Oxide (gross weight)	125,000	17,900	NA	17,900 ⁷
Ore and concentrate (zinc content)	383,000	89,000	NA	89,000 ⁷
Exports:				
Refined (slab) zinc	2,530	5	NA	5 ⁷
Oxide (gross weight)	28,800	3,630	NA	3,630 ⁷
Ore and concentrate (zinc content)	825,000	8,120	NA	8,120 ⁷
Waste and scrap (gross weight)	88,300	8,000	NA	8,000 ⁷
Price:				
London Metal Exchange, average, dollars per metric ton	3,274.42	3,786.21	3,308.59	3,547.40
Platts Metals Week North American Special High Grade, average, cents per pound	158.88	183.47	161.17	173.32

^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.

²Includes zinc metal used to manufacture zinc oxide.

³Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

⁴Data based on reported consumption, stocks, and estimated trade data.

⁵Data from U.S. Geological Survey and American Bureau of Metal Statistics.

⁶Includes an estimate for companies that report annually.

⁷Includes data through January only.

TABLE 2
REFINED ZINC PRODUCED IN THE UNITED STATES^{1,2}

(Metric tons)

Month	Beginning stocks ³	Production ^e	Shipments ^e	Ending stocks ³
2006:				
February	6,750	19,000	20,200	5,530
March	5,530	22,100	21,100	6,580
April	6,580	19,300	18,800	7,150
May	7,150	19,100	19,900	6,300
June	6,300	19,200	19,000	6,510
July	6,510	22,100	22,300	6,340
August	6,340	19,200	19,100	6,450
September	6,450	24,100	23,400	7,110
October	7,110	23,800	23,700	7,160
November	7,160	19,000	19,500	6,750
December	6,750	20,200	19,300	7,660
January-December	XX	248,000	246,000	XX
2007:				
January	7,660	21,200	20,100	8,810
February	8,810	19,000	20,200	7,620

^eEstimated. XX Not applicable.

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

²Includes zinc metal used to manufacture zinc oxide.

³Includes 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	2006	2007		
	January-December	January ^f	February ²	January-February
Galvanizing:				
Sheet and strip	467,000	39,900	41,200	81,100
Other	160,000	13,800	14,900	28,700
Total	627,000	53,700	56,100	110,000
Brass and bronze	173,000	14,400	14,700	29,100
Zinc-base alloy	240,000	20,600	21,900	42,500
Other uses ³	85,800	7,200	3,700	10,900
Grand total	1,130,000	95,900	96,400	192,000

^fRevised.

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 American	LME ² cash	
	¢/lb.	¢/lb.	\$/t
2006:			
February	106.84	100.65	2,218.90
March	116.80	109.61	2,416.44
April	148.56	139.88	3,083.75
May	172.59	161.68	3,564.51
June	157.93	146.27	3,224.66
July	163.73	151.45	3,338.80
August	163.83	151.77	3,346.00
September	166.60	154.32	3,402.25
October	186.07	173.37	3,822.07
November	210.78	198.73	4,381.27
December	211.83	199.79	4,404.51
January-December	158.88	148.53	3,274.42
2007:			
January	183.47	171.74	3,786.21
February	161.17	150.08	3,308.59
January-February	172.32	160.91	3,547.40

¹Special High Grade.

²London Metal Exchange.

Source: Platts Metals Week.

TABLE 5
U.S. EXPORTS OF ZINC¹

Material	2006		2007			
	Quantity (metric tons)	Value (thousands)	January		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	2,530	\$3,800	5	\$7	5	\$7
Ore and concentrate (zinc content)	825,000	1,060,000	8,120	8,940	8,120	8,940
Waste and scrap (gross weight)	88,300	103,000	8,000	7,620	8,000	7,620
Powders, flakes, dust (zinc content)	16,400	33,300	1,460	3,400	1,460	3,400
Oxide (gross weight)	28,800	47,900	3,630	7,580	3,630	7,580
Chloride (gross weight)	1,510	1,930	--	--	--	--
Sulfate (gross weight)	42,800	22,500	--	--	--	--
Compounds, other (gross weight)	706	2,200	39	135	39	135

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

Material	2006		2007			
	Quantity (metric tons)	Value (thousands)	January		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	851,000	\$2,050,000	70,700	\$272,000	70,700	\$272,000
Ore and concentrate (zinc content)	383,000	183,000	89,000	26,100	89,000	26,100
Waste and scrap (gross weight)	14,200	18,700	2,010	2,800	2,010	2,800
Powders, flakes, dust (zinc content)	30,100	107,000	2,290	11,700	2,290	11,700
Oxide (gross weight)	125,000	243,000	17,900	44,800	17,900	44,800
Chloride (gross weight)	1,260	1,780	--	--	--	--
Sulfate (gross weight)	44,400	34,100	--	--	--	--
Compounds, other (gross weight)	4,970	4,000	355	227	355	227

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 7
SHIPMENTS OF ZINC METAL FROM THE NATIONAL
DEFENSE STOCKPILE¹

(Metric tons)

Period	Shipments	Ending inventory ²
2006:		
February	4,590	41,600
March	4,500	37,100
April	3,590	33,500
May	4,640	28,800
June	3,380	25,500
July	994	24,500
August	3,690	20,800
September	5,460	15,300
October	1,900	13,400
November	NA ³	15,500
December	237	15,300
January-December	34,000	XX
2007:		
January	472	14,800
February	590	14,200
January-February	1,060	XX

NA Not available. XX Not applicable.

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

²Includes excess material and material committed for sale/pending shipment.

³Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

Source: Defense National Stockpile Center.

TABLE 8
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY¹

(Metric tons)

Material and country	General imports			Imports for consumption		
	2006	2007		2006	2007	
		January	Year to date		January	Year to date
Ore and concentrate (zinc content):						
Australia	2,850	--	--	2,850	--	--
Canada	2,750	--	--	2,750	--	--
Ireland	17,000	--	--	17,000	--	--
Mexico	88,100	139	139	88,100	139	139
Peru	273,000	88,900	88,900	273,000	88,900	88,900
Total	383,000	89,000	89,000	383,000	89,000	89,000
Blocks, pigs, or slab:						
Australia	15,000	7,000	7,000	47,100	7,000	7,000
Brazil	8,790	1,000	1,000	13,000	1,000	1,000
Canada	535,000	35,000	35,000	535,000	35,000	35,000
China	2,000	1,980	1,980	57,300	2,800	2,800
India	12,200	1,930	1,930	12,200	1,930	1,930
Japan	251	--	--	6,200	--	--
Korea, Republic of	--	--	--	66,800	222	222
Mexico	103,000	9,260	9,260	103,000	9,260	9,260
Norway	--	--	--	1,160	25	25
Peru	1,080	--	--	1,360	--	--
Other	6,020	13,500	13,500	7,790	13,500	13,500
Total	683,000	69,600	69,600	851,000	70,700	70,700
Dross, ashes, fume (zinc content)						
Grand total	31,100	2,410	2,410	31,100	2,410	2,410
Grand total						
	1,100,000	161,000	161,000	1,270,000	162,000	162,000
Oxide (gross weight):						
Canada	49,100	3,700	3,700	49,100	3,700	3,700
China	277	37	37	277	37	37
Italy	24,500	5,050	5,050	24,500	5,050	5,050
Japan	1,290	79	79	1,290	79	79
Mexico	31,900	2,850	2,850	31,900	2,850	2,850
Netherlands	7,820	5,760	5,760	7,820	5,760	5,760
Other	10,100	391	391	10,100	391	391
Total	125,000	17,900	17,900	125,000	17,900	17,900
Other (gross weight):						
Waste and scrap	14,200	2,010	2,010	14,200	2,010	2,010
Sheets	2,050	114	114	2,050	114	114
Powders, flakes, dust (zinc content)	30,100	2,290	2,290	30,100	2,290	2,290

-- Zero.

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

Source: U.S. Census Bureau.