

# Mineral Industry Surveys

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### ZINC IN NOVEMBER 2007

Domestic mine production (recoverable) of zinc in November 2007, excluding that of Tennessee, was 53,900 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in November was 1,800 t, 14% lower than that in October 2007 but 5% higher than that in November 2006. Year-to-date mine production through November 2007 was 4% higher than that of the same period of 2006.

The Platts Metals Week average price for North American Special High Grade Zinc for November was 119.43 cents per pound, 14.5% lower than the October average price and 43% lower than the November 2006 average price. The average London Metal Exchange Ltd. (LME) cash price of zinc for November was \$2,540.66 per metric ton, 14.6% lower than the average price in October and 42% lower than the average price

in November 2006. During November 2007, global LME zinc stocks rose by 2,675 t to 79,750 t.

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in November, under the monthly Basic Ordering Agreement DLA-Zinc-004, was approximately 60 t (66 short tons), with an approximate value of \$165,000 (Defense National Stockpile Center, 2007).

### **Reference Cited**

Defense National Stockpile Center, 2007, Stockpile announces BOA sales for November 2007: Fort Belvoir, VA, Defense National Stockpile Center news release, December 5, 1 p.

# $\begin{tabular}{ll} TABLE~1\\ SALIENT~ZINC~STATISTICS$^1\\ \end{tabular}$

(Metric tons, unless otherwise specified)

	2006		2007	
	January-			January-
	December	October	November	November
Production:				
Mine, zinc content of concentrate <sup>2</sup>	727,000	68,600 <sup>r</sup>	56,100	708,000
Mine, recoverable zinc <sup>2</sup>	699,000	64,600 <sup>r</sup>	53,900	676,000
Smelter, refined zinc <sup>e, 3</sup>	269,000	23,400	23,400	254,000
Consumption:				
Refined zinc, reported	504,000	23,900	21,100	268,000
Ores <sup>e</sup> (zinc content)	732	61	61	671
Zinc-base scrap <sup>4</sup> (zinc content)	178,000	14,800 e	14,800 e	163,000 e
Copper-base scrap <sup>4</sup> (zinc content)	163,000	13,600 <sup>e</sup>	13,600 e	149,000 <sup>e</sup>
Aluminum-and magnesium-base scrap <sup>4, 5</sup>				
(zinc content)	733	61 <sup>e</sup>	61 <sup>e</sup>	671 <sup>e</sup>
Total <sup>e</sup>	846,000	52,400	49,600	582,000
Apparent consumption, metal <sup>6</sup>	1,150,000	103,000	NA	846,000 7
Stocks of refined (slab) zinc, end of period:				_
Producer and consumer <sup>8</sup>	XX	28,700	21,800	XX
Shipments of zinc metal from Government stockpile	33,000	77	110	10,100
Imports for consumption:				
Refined (slab) zinc	851,000	77,100	NA	601,000 7
Oxide (gross weight)	125,000	14,000	NA	103,000 7
Ore and concentrate (zinc content)	383,000	3,150	NA	259,000 7
Waste and scrap (gross weight)	14,200	1,750	NA	18,800 7
Exports:				
Refined (slab) zinc	2,530	39	NA	7,730 7
Oxide (gross weight)	28,800	3,510	NA	29,800 7
Ore and concentrate (zinc content)	825,000	124,000	NA	737,000 7
Waste and scrap (gross weight)	83,800	9,320	NA	88,200 7
Price:				
London Metal Exchange, average,				
dollars per metric ton	3,274.42	2,974.25	2,540.66	3,322.38
Platts Metals Week North American				
Special High Grade, average, cents per pound	158.89	139.68	119.43	158.32

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. XX Not applicable.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; except prices; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Does not include mine production from Tennessee.

<sup>&</sup>lt;sup>3</sup>Includes zinc metal used to manufacture zinc oxide.

<sup>&</sup>lt;sup>4</sup>Monthly estimates are based on reported annual data from the prior year.

<sup>&</sup>lt;sup>5</sup>Aluminum-and magnesium-base scrap data have fallen due to a change in assumption on the estimated zinc content of magnesium-base scrap.

<sup>&</sup>lt;sup>6</sup>Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change

<sup>&</sup>lt;sup>7</sup>Includes data through October only.

<sup>&</sup>lt;sup>8</sup>Does not include an estimate for companies that report annually.

 ${\bf TABLE~2}$  REFINED ZINC PRODUCED IN THE UNITED STATES  $^{\rm e,~1,~2}$ 

### (Metric tons)

Month	Production	Shipments
2006:		
November	20,900	18,100
December	20,900	18,100
January-December	269,000	256,000
2007:		
January	22,200	23,800
February	22,200	23,800
March	22,200	23,800
April	23,500	24,900
May	23,500	24,900
June	23,500	24,900
July	23,400	22,700
August	23,400	22,700
September	23,400	22,700
October	23,400	22,700
November	23,400	22,700
January-November	254,000	260,000

<sup>&</sup>lt;sup>e</sup>Estimated.

TABLE 3  ${\sf APPARENT\ CONSUMPTION\ OF\ REFINED\ ZINC\ ACCORDING\ TO\ INDUSTRY\ USE\ AND\ PRODUCT^{\rm I} }$ 

### (Metric tons)

	2006			
	January-	nuary-		January-
Industry and product	December	September	October	October
Galvanizing:				
Sheet and strip	473,000	39,700	45,300	376,000
Other	165,000	14,200	17,000	130,000
Total	638,000	53,900	62,200	506,000
Brass and bronze	182,000	15,400	17,700	143,000
Zinc-base alloy	233,000	13,500	15,700	128,000
Other uses <sup>2</sup>	97,900	7,020	7,510	69,400
Grand total	1,150,000	89,800	103,000	846,000

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes zinc metal used to manufacture zinc oxide.

<sup>&</sup>lt;sup>2</sup>Includes 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 PRICES<sup>1</sup>

	North		
	American	LME <sup>2</sup>	cash
Period	¢/lb.	¢/lb.	\$/t
2006:			
November	210.78	198.73	4,381.27
December	211.83	199.79	4,404.51
January-December	158.89	148.53	3,274.42
2007:			
January	183.47	171.74	3,786.21
February	161.17	150.08	3,308.59
March	158.48	148.36	3,270.82
April	170.47	161.32	3,556.53
May	182.45	173.70	3,829.39
June	170.92	163.42	3,602.85
July	167.11	160.82	3,545.58
August	152.67	147.44	3,250.58
September	135.70	130.67	2,880.76
October	139.68	134.91	2,974.25
November	119.43	115.24	2,540.66
January-November	158.32	150.70	3,322.38

<sup>&</sup>lt;sup>1</sup>Special High Grade.

Source: Platts Metals Week.

TABLE 5 U.S. EXPORTS OF ZINC $^1$ 

			2007				
	20	2006		October		Year to date	
	Quantity	Value	Quantity	Value	Quantity	Value	
Material	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	2,530	\$3,800	39	\$40	7,730	\$6,090	
Ore and concentrate (zinc content)	825,000	1,060,000	124,000	243,000	737,000	1,010,000	
Waste and scrap (gross weight)	83,800	95,800	9,320	8,620	88,200	88,500	
Powders, flakes, dust (gross weight) <sup>2</sup>	16,400	33,300	1,680	2,750	16,300	31,300	
Oxide (gross weight)	28,800	47,900	3,510	5,720	29,800	54,900	
Chloride (gross weight)	1,510	1,930	89	127	1,410	1,730	
Sulfate (gross weight)	42,800	22,500	114	114	334	557	
Compounds, other (gross weight) <sup>3</sup>	1,740	3,750	380	665	4,830	8,080	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>2</sup>London Metal Exchange.

<sup>&</sup>lt;sup>2</sup>Zinc dust contains at least 85% by weight of metallic zinc.

<sup>&</sup>lt;sup>3</sup>Includes zinc sulfide (Schedule B 2830.90.1000 and 2830.90.1500), chromates of zinc or of lead (Schedule B 2841.90.4500), and lithopone and other pigments and preparations based on zinc sulfide (Schedule B 3206.42.0000).

 $\label{eq:table 6} \textbf{U.S. IMPORTS FOR CONSUMPTION OF ZINC}^1$ 

			2007				
	20	2006		October		Year to date	
	Quantity	Value	Quantity	Value	Quantity	Value	
Material	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	851,000	\$2,050,000	77,100	\$229,000	601,000	\$1,910,000	
Ore and concentrate (zinc content)	383,000	183,000	3,150	6,300	259,000	147,000	
Waste and scrap (gross weight)	14,200	18,700	1,750	1,810	18,800	28,200	
Powders, flakes, dust (gross weight) <sup>2</sup>	30,100	107,000	2,700	11,100	26,700	124,000	
Oxide (gross weight)	125,000	243,000	14,000	29,700	103,000	264,000	
Chloride (gross weight)	1,260	1,780	120	186	649	2,900	
Sulfate (gross weight)	44,400	34,100	2,680	3,090	24,800	26,600	
Compounds, other (gross weight) <sup>3</sup>	7,980	9,620	716	1,180	6,460	9,530	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

Source: U.S. Census Bureau.

TABLE 7 SHIPMENTS OF ZINC METAL FROM THE NATIONAL DEFENSE STOCKPILE  $^{\rm I}$ 

### (Metric tons)

		Б 11
		Ending
Period	Shipments	inventory <sup>2</sup>
2006:		
November	NA <sup>3</sup>	15,500
December	237	15,300
January-December	33,000	XX
2007:		
January	472	14,800
February	590	14,200
March	375	13,900
April	516	13,300
May	957	12,400
June	3,660	8,720
July	NA <sup>3</sup>	11,300 4
August	3,190	8,100 4
September	174	7,920 4
October		7,840 4
November	110	7,730 4
January-November	10,100	XX

NA Not available. XX Not applicable.

Source: Defense National Stockpile Center.

<sup>&</sup>lt;sup>2</sup>Zinc dust contains at least 85% by weight of metallic zinc.

 $<sup>^{3}</sup>$ Includes zinc sulfide (HTS 2830.90.1000 and 2830.90.1500), chromates of zinc or of lead (HTS 2841.90.4500), and lithopone and other pigments and preparations based on zinc sulfide (HTS 3206.42.0000).

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes excess material and material committed for sale/pending shipment.

<sup>&</sup>lt;sup>3</sup>Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

<sup>&</sup>lt;sup>4</sup>Total uncommitted inventory. As of July 2007, the Defense National Stockpile Center no longer maintains its inventory by class.

 ${\it TABLE~8}$  U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY  $^{\rm I}$ 

## (Metric tons)

		General imports		Imports for consumption		
	2007			.=	2007	
Material and country	2006	October	Year to date	2006	October	Year to date
Ore and concentrate (zinc content):						
Australia	2,850			2,850		
Canada	2,750		31	2,750		31
Ireland	17,000		99,200	17,000		99,200
Mexico	88,100	3,150	3,600	88,100	3,150	3,600
Peru	273,000		156,000	273,000		156,000
Total	383,000	3,150	259,000	383,000	3,150	259,000
Blocks, pigs, or slab:						
Australia	15,000		7,000	47,100		8,040
Brazil	8,790		1,000	13,000		1,000
Canada	535,000	52,200	441,000	535,000	52,200	441,000
China	2,000		2,840	57,300	25	8,110
Finland				51		374
India	12,200		4,190	12,200		4,190
Japan	251			6,200		25
Kazakhstan	6,000	17,000	45,000	6,000	17,000	45,000
Korea, Republic of	´	·		66,800	300	9,470
Mexico	103,000	7,620	77,900	103,000	7,620	77,900
Norway				1,160		25
Peru	1,080		1,080	1,360		1,080
Russia			4,670	-,		4,670
Other	21		2	1,740		2
Total	683,000	76,800	585,000	851,000	77,100	601,000
Dross, ashes, fume (zinc content)	31,100	1,440	16,100	31,100	1,440	16,100
Grand total	1,100,000	81,400	860,000	1,270,000	81,700	876,000
Oxide (gross weight):	1,100,000	01,100	000,000	1,270,000	01,700	070,000
Canada	49,100	4,300	40,600	49,100	4,300	40,600
China	277	22	321	277	22	321
Germany	800	132	1,040	800	132	1,040
Italy	24,500	5,500	15,600	24,500	5,500	15,600
Japan	1,290	140	967	1,290	140	967
Mexico	31,900	2,580	26,500	31,900	2,580	26,500
Netherlands	7,820	1,110	12,600	7,820	1,110	12,600
Spain	1,150	1,110	979	1,150	1,110	979
Sweden	7,500		3,800	7,500		3,800
Other	618	224	1.040	618	224	1.040
Total	125,000	14,000	103,000	125,000	14,000	103,000
Other (gross weight):	123,000	14,000	103,000	123,000	14,000	103,000
	14 200	1 750	10 000	14 200	1.750	18,800
Waste and scrap	14,200	1,750	18,800	14,200	1,750	,
Plates, sheets, strip, and foil	2,050	359	1,850	2,050	359	1,850
Powders, flakes, dust (gross weight) <sup>2</sup> Zero.	30,100	2,700	26,700	30,100	2,700	26,700

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Zinc dust contains at least 85% by weight of metallic zinc.