

# Mineral Industry Surveys

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## **ZINC IN OCTOBER 2007**

Domestic mine production (recoverable) of zinc in October 2007 was 63,800 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in October was 2,060 t, 1% higher than that in September 2007 and 4% lower than that in October 2006. Year-to-date mine production through October 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 October was 139.68 cents per pound, 3% higher than the September average price but 25% lower than the October 2006 average price. The average London Metal Exchange Ltd. (LME) cash price of zinc for October was \$2,974.25 per metric ton, 3% higher than the average price in September but 22% lower than the average price in October

2006. During October 2007, global LME zinc stocks rose by 16,225 t to 77,075 t.

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in October, under the monthly Basic Ordering Agreement DLA-Zinc-004, was approximately 130 t (143 short tons), with an approximate value of \$391,000 (Defense National Stockpile Center, 2007).

#### **Reference Cited**

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

# TABLE 1 SALIENT ZINC STATISTICS $^{\!1}$

(Metric tons, unless otherwise specified)

	2006		2007		
	January-			January-	
	December	September	October	October	
Production:		•			
Mine, zinc content of concentrate	727,000	63,700	67,700	648,000	
Mine, recoverable zinc	699,000	61,300	63,800	619,000	
Smelter, refined zinc <sup>e,2</sup>	269,000 <sup>r</sup>	23,400 <sup>r</sup>	23,400	231,000	
Consumption:					
Refined zinc, reported	504,000 <sup>r</sup>	23,200	23,900	247,000	
Ores <sup>e</sup> (zinc content)	732	61	61	610	
Zinc-base scrap <sup>3</sup> (zinc content)	178,000	14,800 e	14,800 <sup>e</sup>	148,000 e	
Copper-base scrap <sup>3</sup> (zinc content)	163,000	13,600 e	13,600 e	136,000 e	
Aluminum-and magnesium-base scrap <sup>3, 4</sup>					
(zinc content)	733 г	61 r,e	61 <sup>e</sup>	611 <sup>e</sup>	
Total <sup>e</sup>	846,000 <sup>r</sup>	51,700	52,400	532,000	
Apparent consumption, metal <sup>5</sup>	1,150,000 <sup>r</sup>	89,800 <sup>r</sup>	NA	743,000 r, 6	
Stocks of refined (slab) zinc, end of period:					
Producer and consumer <sup>7</sup>	XX	31,300 <sup>r</sup>	28,700	XX	
Shipments of zinc metal from Government stockpile	33,000	174	77	10,000	
Imports for consumption:					
Refined (slab) zinc	851,000	61,700	NA	524,000 6	
Oxide (gross weight)	125,000	7,540	NA	89,400 6	
Ore and concentrate (zinc content)	383,000	2,720	NA	256,000 <sup>6</sup>	
Waste and scrap (gross weight)	14,200	1,430	NA	17,000 <sup>6</sup>	
Exports:					
Refined (slab) zinc	2,530	117	NA	7,690 <sup>6</sup>	
Oxide (gross weight)	28,800	2,650	NA	26,200 <sup>6</sup>	
Ore and concentrate (zinc content)	825,000	86,300	NA	612,000 6	
Waste and scrap (gross weight)	83,800	10,100	NA	78,900 <sup>6</sup>	
Price:					
London Metal Exchange, average,					
dollars per metric ton	3,274.42	2,880.76	2,974.25	3,400.56	
Platts Metals Week North American					
Special High Grade, average, cents per pound	158.89	135.70	139.68	162.21	

<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>Includes zinc metal used to manufacture zinc oxide.
<sup>3</sup>Monthly estimates are based on reported annual data from the prior year.

<sup>&</sup>lt;sup>4</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>5</sup>Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

<sup>&</sup>lt;sup>6</sup>Includes data through September only.

<sup>7</sup>Does not include an estimate for companies that report annually.

 $\label{eq:table 2} \text{REFINED ZINC PRODUCED IN THE UNITED STATES}^{\text{e}1,2}$ 

#### (Metric tons)

Month	Production	Shipments	
2006:			
October	20,900 <sup>r</sup>	18,100	
November	20,900 <sup>r</sup>	18,100	
December	20,900 <sup>r</sup>	18,100	
January-December	269,000 r	256,000	
2007:			
January	22,200 r	23,800 r	
February	22,200 <sup>r</sup>	23,800 r	
March	22,200 <sup>r</sup>	23,800 <sup>r</sup>	
April	23,500 <sup>r</sup>	24,900 r	
May	23,500 <sup>r</sup>	24,900 <sup>r</sup>	
June	23,500 <sup>r</sup>	24,900 r	
July	23,400 <sup>r</sup>	22,700 <sup>r</sup>	
August	23,400 <sup>r</sup>	22,700 r	
September	23,400 <sup>r</sup>	22,700 <sup>r</sup>	
October	23,400 <sup>r</sup>	22,700 r	
January-October	231,000 <sup>r</sup>	237,000 <sup>r</sup>	

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

TABLE 3  $\label{eq:apparent} \mbox{APPARENT CONSUMPTION OF REFINED ZINC ACCORDING TO INDUSTRY USE \\ \mbox{AND PRODUCT}^1$ 

#### (Metric tons)

	2006			
	January-			January-
Industry and product	December <sup>r</sup>	August <sup>r</sup>	September	October
Galvanizing:				
Sheet and strip	473,000	37,200	39,700	331,000
Other	165,000	12,800	14,200	113,000
Total	638,000	50,000	53,900	444,000
Brass and bronze	182,000	14,000	15,400	125,000
Zinc-base alloy	233,000	11,800	13,500	112,000
Other uses <sup>2</sup>	97,900	6,620	7,020	61,900
Grand total	1,150,000	82,500	89,800	743,000

Revised.

 $<sup>^{1}\</sup>mathrm{Data}$  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>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.
<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 PRICES1

	North		
	American	LME <sup>2</sup>	cash
Period	¢/lb.	¢/lb.	\$/t
2006:			
October	186.07	173.37	3,822.07
Novem ber	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
Fe bru ary	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
January-October	162.21	154.25	3,400.56

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

Source: Platts Metals Week.

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

			2007				
	2006		Septe	September		Year to date	
	Quantity	Value	Quantity	Value	Quantity	Value	
M ate rial	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	2,530	\$3,800	117	\$117	7,690	\$6,050	
Ore and concentrate (zinc content)	825,000	1,060,000	86,300	172,000	612,000	768,000	
Waste and scrap (gross weight)	83,800	95,800	10,100	10,200	78,900	79,900	
Powders, flakes, dust (gross weight) <sup>2</sup>	16,400	33,300	1,480	3,030	14,600	28,500	
Oxide (gross weight)	28,800	47,900	2,650	4,930	26,200	49,100	
Chloride (gross weight)	1,510	1,930	49	56	1,320	1,600	
Sulfate (gross weight)	42,800	22,500	84	126	220	443	
Compounds, other (gross weight) <sup>3</sup>	1,740	3,750	500	846	4,450	7,420	

Source: U.S. Census Bureau.

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

Data are rounded to no more than three significant digits.

Zinc dust contains at least 85% by weight of metallic zinc.

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).

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

				20	07		
	20	2006		September		Year to date	
	Quantity	Value	Quantity	Value	Quantity	Value	
M ate rial	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
Refined (slab) zinc	851,000	\$2,050,000	61,700	\$180,000	524,000	\$1,680,000	
Ore and concentrate (zinc content)	383,000	183,000	2,720	5,360	256,000	141,000	
Waste and scrap (gross weight)	14,200	18,700	1,430	2,170	17,000	26,400	
Powders, flakes, dust (gross weight) <sup>2</sup>	30,100	107,000	2,370	10,300	24,000	113,000	
Oxide (gross weight)	125,000	243,000	7,540	21,000	89,400	234,000	
Chloride (gross weight)	1,260	1,780	94	269	529	2,710	
Sulfate (gross weight)	44,400	34,100	1,580	1,890	22,100	23,500	
Compounds, other (gross weight) <sup>3</sup>	7,980	9,620	664	1,100	5,740	8,350	

<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)

		Ending
Period	Shipments	inventory <sup>2</sup>
2006:	_	
October	1,900	13,400
November	NA <sup>3</sup>	15,500
December	237	15,300
January-December	33,000	XX
2007:	_	
January	472	14,800
Fe bruary	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
January-October	10,000	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>&</sup>lt;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.

 $\label{eq:table 8} \textbf{U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY}^1$ 

# (Metric tons)

	General imports			Imports for consumption		
					2007	
Material and country	2006	September	Year to date	2006	Septe mber	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		452	88,100		452
Peru	273,000	2,720	156,000	273,000	2,720	156,000
Total	383,000	2,720	256,000	383,000	2,720	256,000
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	47,900	389,000	535,000	47,900	389,000
China	2,000		2,840	57,300		8,080
Finland				51		374
India	12,200		4,190	12,200		4,190
Japan	251			6,200		25
Kazakhstan	6,000		28,000	6,000		28,000
Korea, Republic of				66,800	25	9,170
Mexico	103,000	8,980	70,200	103,000	8,980	70,200
Norway				1,160		25
Peru	1,080	67	1,080	1,360	67	1,080
Russia		4,670	4,670		4,670	4,670
Other	21	·	2	1,740	´	2
Total	683,000	61,600	508,000	851,000	61,700	524,000
Dross, ashes, fume (zinc content)	31,100	1,180	14,600	31,100	1,180	14,600
Grand total	1,100,000	65,500	778,000	1,270,000	65,600	794,000
Oxide (gross weight):			· · · · · · · · · · · · · · · · · · ·			
Canada	49,100	3,860	36,300	49,100	3,860	36,300
China	277	18	300	277	18	300
Germany	800	109	908	800	109	908
Italy	24,500		10,100	24,500		10,100
Japan	1,290	114	827	1,290	114	827
Mexico	31,900	2,710	23,900	31,900	2,710	23,900
Netherlands	7,820	718	11,500	7,820	718	11,500
Spain	1,150	,10	979	1,150	710	979
Sweden	7,500		3,800	7,500		3,800
Other	618	13	813	618	13	813
Total	125,000	7,540	89,400	125,000	7,540	89,400
Other (gross weight):	123,000	7,540	57,400	120,000	7,540	07,400
Waste and scrap	14,200	1,430	17,000	14,200	1,430	17.000
Sheets	2,050	1,450	1,500	2,050	1,450	1,500
Powders, flakes, dust (gross weight) <sup>2</sup>	30,100	2.370	24,000	30,100	2,370	24,000
Zero.	30,100	2,570	24,000	30,100	2,370	24,000

<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.