

# Mineral Industry Surveys

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## ZINC IN MARCH 2009

Domestic mine production (recoverable) of zinc in March 2009 was 55,200 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in March was 1,780 t, 8% lower than that in February and 18% lower than that in March 2008.

The Platts Metals Week average price for North American Special High Grade (SHG) zinc for March 2009 was 58.03 cents per pound, 9% higher than the February average price but 51% lower than the March 2008 average price. The average London Metal Exchange Ltd. (LME) cash price of SHG zinc for March 2009 increased to \$1,216.31 per metric ton, 9% higher than the average price in February but 52% lower than the average price in March 2008. During March 2009, global LME stocks of SHG zinc declined by 13,275 t to 344,450 t.

Canadian zinc metal producer Noranda Income Fund (Toronto, Ontario, Canada) announced that sulfuric acid storage capacity at its CEZinc refinery in Salaberry-de-Valleyfield, Quebec, was nearly full, and its sales agent, Xstrata Copper Canada, was unable to arrange additional sales or temporary storage for excess sulfuric acid. As a result, Noranda cut its sulfuric acid and zinc production rates by 20% beginning in March (equivalent to 8,000 t of sulfuric acid and 4,800 t of zinc per month) (Noranda Income Fund, 2009).

Doe Run Peru (Lima, Peru) idled 95% of operations at its La Oroya metallurgical complex reportedly owing to financial issues. In a statement made on March 24, the company said that La Oroya had stopped receiving copper, lead, and zinc concentrates since early in the month. As a result, the zinc refinery halted production on March 8, the lead refinery on March 17, and the copper refinery on March 22 (Platts Metals Week, 2009a).

Kazakh mining and metal producer Kazakhmys plc suspended production at its Balkhash zinc refinery. Kazakhmys also produced zinc concentrate from ore sourced from several of its zinc-copper mines located in Ust-Kamenogorsk. The company stated that it was more profitable to sell its zinc concentrate than process it into metal at Balkhash owing to considerable demand

for zinc concentrate in Central Asia and China (Platts Metals Week, 2009b).

Swiss commodities firm Glencore International AG (Baar) suspended production at the Iscaycruz Mine, its leading Peruvian zinc-lead mine, owing to low zinc prices. In 2008, the mine produced 175,000 t of zinc and 13,700 t of lead, which was roughly equal to one-half of its total zinc and lead output in Peru. The company also owns two other zinc-lead mines in Peru—the Rosaura and Yauliyacu Mines. Rosaura, the smallest of the three mines, was idled late in 2008. Yauliyacu continued to operate at a normal production level (Reuters, 2009).

HudBay Minerals Inc. (Toronto) terminated plans to acquire all outstanding shares of Canadian-based zinc and base metal mining company Lundin Mining Corp. (Toronto). HudBay sought to acquire Lundin Mining in order to expand HudBay's production profile and to broaden the geographic diversity of its assets. HudBay's mining and smelting operations are in Canada, and Lundin Mining operates mines in Congo (Kinshasa), Ireland, Portugal, Spain, and Sweden. The takeover was set to close in late January; however, just prior to the takeover date, the Ontario Securities Commission ruled that HudBay's shareholders must be allowed to vote on the plan, which led to the company's decision to terminate the takeover. HudBay reportedly believed that its shareholders would not approve the plan (HudBay Minerals, Inc., 2009).

## References Cited

- HudBay Minerals, Inc., 2009, HudBay Minerals and Lundin Mining agree to terminate arrangement agreement: Toronto, Ontario, Canada, HudBay Minerals, Inc. news release, February 23, 3 p.
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- Reuters, 2009, Glencore says work halted at its largest Peru mine: Reuters, March 30, 1 p. (Accessed March 30, 2009 via <http://www.reuters.com>.)

TABLE 1  
SALIENT ZINC STATISTICS<sup>1</sup>

(Metric tons, unless otherwise specified)

	2008	2009		
	January- December	February	March	January- March
<b>Production:</b>				
Mine, zinc content of concentrate <sup>2</sup>	778,000	55,900 <sup>r</sup>	57,200	185,000
Mine, recoverable zinc <sup>2</sup>	748,000	54,000 <sup>r</sup>	55,200	179,000
Smelter, refined zinc <sup>e, 3</sup>	286,000	16,300	16,300	49,000
<b>Consumption:</b>				
Apparent, refined zinc <sup>4</sup>	1,000,000	69,600	86,300	235,000
<b>Reported:</b>				
Refined zinc	248,000	20,500	19,400	58,700
Ores <sup>e</sup> (zinc content)	732	61	61	183
Zinc-base scrap <sup>e</sup> (zinc content)	178,000	14,800	14,800	44,400
Copper-base scrap <sup>e</sup> (zinc content)	148,000	12,400	12,400	37,100
Aluminum- and magnesium-base scrap <sup>e</sup> (zinc content)	603	50	50	151
Total <sup>e</sup>	575,000	47,800	46,700	141,000
<b>Stocks of refined zinc, end of period:</b>				
Producer and consumer <sup>5</sup>	XX	34,700	35,100	XX
Shipments of zinc metal from Government stockpile	250	--	1	1
<b>Imports for consumption:</b>				
Refined zinc	725,000	53,500	70,500	185,000
Oxide (gross weight)	114,000	4,190	6,180	16,400
Ore and concentrate (zinc content)	63,200	--	--	5,410
Waste and scrap (gross weight)	17,000	670	884	2,020
<b>Exports:</b>				
Refined zinc	3,250	226	165	559
Oxide (gross weight)	39,900	998	986	3,500
Ore and concentrate (zinc content)	725,000	24,300	15,400	59,700
Waste and scrap (gross weight)	91,000	3,020	3,420	8,240
<b>Price:<sup>6</sup></b>				
London Metal Exchange cash, average, dollars per metric ton	1,874.20	1,111.75	1,216.31	1,171.72
Platts Metals Week North American, average, cents per pound	88.93	53.44	58.03	56.14

<sup>e</sup>Estimated. <sup>r</sup>Revised. XX Not applicable. -- Zero.

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

<sup>2</sup>Partially estimated.

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

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

<sup>5</sup>Does not include an estimate for companies that report annually.

<sup>6</sup>Special High Grade Zinc.

TABLE 2  
APPARENT CONSUMPTION OF REFINED ZINC ACCORDING  
TO INDUSTRY USE AND PRODUCT<sup>1</sup>

(Metric tons)

	2008	2009		January- March
	January- December	February	March	
Galvanizing:				
Sheet and strip	438,000	30,300	37,700	103,000
Other	168,000	11,100	14,900	39,500
Total	606,000	41,400	52,600	142,000
Brass and bronze	165,000	12,400	13,500	38,100
Zinc-base alloy	149,000	9,690	13,100	34,600
Other uses <sup>2</sup>	81,600	6,140	7,030	19,900
Grand total	1,000,000	69,600	86,300	235,000

<sup>1</sup>Revised.

<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, casting, light metal alloys, rolled zinc, and miscellaneous uses not elsewhere specified.

TABLE 3  
SHIPMENTS OF ZINC METAL FROM THE NATIONAL  
DEFENSE STOCKPILE<sup>1</sup>

(Metric tons)

Period	Shipments	Ending inventory <sup>2</sup>
2008:		
March	89	7,640
April	--	7,640
May	41	7,600
June	--	7,600
July	101	7,500
August <sup>3</sup>	--	7,500
September	--	7,500
October	8 <sup>4</sup>	7,490
November	--	7,490
December	--	7,490
January-December	250	XX
2009:		
January	--	7,490
February	--	7,490
March	1 <sup>4</sup>	7,490
January-March	1	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Includes only uncommitted inventory.

<sup>3</sup>On August 6, 2008, the Defense National Stockpile Center announced that sales of zinc from the National Defense Stockpile were suspended until further notice.

<sup>4</sup>Inventory reconciliation.

Source: Defense National Stockpile Center.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF ZINC<sup>1</sup>

(Gross weight, unless otherwise specified)

Material	2008		2009			
	Quantity (metric tons)	Value (thousands)	March		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	63,200	\$73,200	--	--	5,410	\$3,330
Unwrought:						
Refined (slab) zinc	725,000	1,480,000	70,500	\$81,800	185,000	216,000
Zinc alloys	7,170	14,900	200	305	668	897
Wrought:						
Bars, rods, profiles, wire	2,330	6,860	167	322	399	850
Plates, sheets, strip, foil	3,330	17,100	606	2,790	1,160	5,690
Other:						
Dross, ashes, fume (zinc content)	13,200	17,200	699	803	1,620	1,530
Powders, flakes, dust	28,500	81,200	1,750	2,970	4,930	8,750
Waste and scrap	17,000	20,300	884	641	2,020	1,580
Chemicals:						
Oxide	114,000	192,000	6,180	7,420	16,400	20,900
Chloride	462	1,780	9	78	60	237
Sulfate	41,900	45,700	2,970	2,140	7,490	5,780
Compounds, other <sup>2</sup>	4,600	7,650	327	301	670	1,110

-- Zero.

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

<sup>2</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).

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

Material and country	General imports			Imports for consumption		
	2008	2009		2008	2009	
		March	Year to date		March	Year to date
<b>Ore and concentrate (zinc content):</b>						
Canada	7,480	--	--	7,480	--	--
Mexico	2,730	--	5,410	2,730	--	5,410
Peru	53,000	--	--	53,000	--	--
Total	63,200	--	5,410	63,200	--	5,410
<b>Refined (slab) zinc:</b>						
Argentina	5,010	--	--	5,010	--	--
Australia	--	--	--	25	--	--
Belgium	908	--	--	908	--	--
Brazil	982	--	--	982	--	--
Canada	563,000	52,500	141,000	563,000	52,500	141,000
China	215	--	2	1,370	--	2
Germany	1	--	--	1	--	--
Italy	17	--	--	17	--	--
Japan	1,220	--	--	1,220	--	--
Kazakhstan	38,100	--	493	38,100	--	493
Korea, Republic of	--	--	--	702	--	--
Mexico	90,800	10,600	28,600	90,800	10,600	28,600
Peru	21,200	7,460	14,900	21,200	7,460	14,900
Spain	--	--	--	40	--	--
Sweden	2	--	--	2	--	--
Taiwan	18	1	1	18	1	1
Uzbekistan	2,260	--	--	2,260	--	--
Total	724,000	70,500	185,000	725,000	70,500	185,000
<b>Dross, ashes, fume (zinc content)</b>						
Grand total	800,000	71,200	192,000	802,000	71,200	192,000
<b>Oxide:</b>						
Australia	81	-2	338	81	-2	338
Belgium	11,600	19	19	11,600	19	19
Canada	40,400	3,000	7,910	40,400	3,000	7,910
China	346	38	57	346	38	57
Germany	1,150	37	57	1,150	37	57
Italy	25,100	--	--	25,100	--	--
Japan	1,490	208	380	1,490	208	380
Mexico	26,100	1,970	6,280	26,100	1,970	6,280
Netherlands	5,470	883	1,280	5,470	883	1,280
Norway	3	--	2	3	--	2
Peru	1,150	18	65	1,150	18	65
Spain	681	--	--	681	--	--
United Kingdom	76	9	9	76	9	9
Other	234	--	--	234	--	--
Total	114,000	6,180	16,400	114,000	6,180	16,400

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. EXPORTS OF ZINC<sup>1</sup>

(Gross weight, unless otherwise specified)

Material	2008		2009			
	Quantity (metric tons)	Value (thousands)	March		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	725,000	\$598,000	15,400	\$11,400	59,700	\$33,100
Unwrought:						
Refined (slab) zinc	3,250	3,260	165	142	559	574
Zinc alloys	8,550	22,800	399	876	968	2,020
Wrought:						
Bars, rods, profiles, wire	28,100	47,500	1,700	3,020	3,760	6,690
Plates, sheets, strip, foil	4,970	20,900	433	1,210	1,050	3,190
Other:						
Dross, ashes, fume (zinc content)	10,500	5,120	834	617	1,570	1,230
Powders, flakes, dust	13,000	28,500	762	1,350	2,350	4,300
Waste and scrap	91,000	99,100	3,420	3,400	8,240	8,140
Chemicals:						
Oxide	39,900	61,700	986	1,970	3,500	5,950
Chloride	1,830	2,110	309	421	509	658
Sulfate	578	799	51	110	104	225
Compounds, other <sup>2</sup>	7,210	11,900	450	1,240	983	2,880

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

<sup>2</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).

Source: U.S. Census Bureau.

TABLE 7  
AVERAGE PRICES FOR SPECIAL HIGH GRADE ZINC

Period	North American <sup>1</sup>	London Metal Exchange cash <sup>2</sup>	
	¢/lb.	¢/lb.	\$/t
2008:			
March	117.67	113.90	2,511.01
April	106.43	102.66	2,263.16
May	102.80	98.96	2,181.63
June	89.93	85.91	1,893.89
July	88.02	84.00	1,851.88
August	82.17	78.14	1,722.70
September	82.72	78.70	1,735.05
October	63.01	59.03	1,301.49
November	55.84	52.26	1,152.16
December	53.42	49.90	1,100.01
January-December	88.93	85.01	1,874.20
2009:			
January	56.94	53.85	1,187.11
February	53.44	50.43	1,111.75
March	58.03	55.17	1,216.31
January-March	56.14	53.15	1,171.72

<sup>1</sup>Platts Metals Week North American price. Based on the London Metal Exchange cash price plus premiums or discounts, depending on market conditions.

<sup>2</sup>Average of the cash buyer price and the cash seller and settlement price.

Source: Platts Metals Week.