

# Mineral Industry Surveys

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## For information, contact:

Edward P. Klimasauskas, Zinc Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4975  
Fax: (703) 648-7757  
E-mail: [eklimasauskas@usgs.gov](mailto:eklimasauskas@usgs.gov)

Samir Hakim (Data)  
Telephone: (703) 648-4998  
Fax: (703) 648-7975  
E-mail: [shakim@usgs.gov](mailto:shakim@usgs.gov)

**Internet:** <http://minerals.usgs.gov/minerals>

## ZINC IN FEBRUARY 2005

Domestic mine production (recoverable) of zinc in February of 56,300 metric tons (t) was about 5% more than that in January and about 6% more than in February 2004, according to the U.S. Geological Survey. Estimated smelter production of 25,600 t was about 4% more than in January but was about 5% less than in February 2004. Apparent consumption of 82,200 t was about 7% lower than in January and about 17% lower than in February 2004.

The Platts Metals Week average composite price for North American Special High Grade zinc increased to 64.49 cents per pound in February. The price was about 4.8% (about 2.95 cents per pound) higher than in January and about 19.8% (about 10.65 cents per pound) higher than in February 2004.

### Update

The labor contract at the Big River Zinc Corporation's electrolytic zinc refinery in Sauget, IL, expired on April 29. Last year the original 3-year contract was extended for 1 year by the company and the Professional Association of Contract Employees, representing 220 hourly workers at the refinery. Big River produces about 100,000 metric tons per year (t/yr) of refined zinc, zinc alloys, zinc powders, zinc sulfate monohydrate, and zinc oxide (Platts Metals Week, 2005a).

Failing to persuade Brazilian diversified miner Companhia Vale do Rio Doce Ltd. and state-owned Chinese metals company Minmetals to take control of Noranda Inc., Brascan Corp. decided to make Noranda more attractive to investors. The minority shareholder in Noranda bought out its own Falconbridge Ltd. subsidiary's minority shareholders and create a new company to be known as NorandaFalconbridge Ltd. Upon completion of the merger, the new company will have a more simplified share structure that could make it more attractive as a possible takeover target. NorandaFalconbridge will have a production capacity of over 550,000 t/yr of refined

copper, 530,000 t/yr of zinc, 100,000 t/yr of nickel, and a fully integrated aluminum unit from bauxite mining to finished aluminum products (Platts Metals Week, 2005b).

Australia's Zinifex Ltd. declared *force majeure* on zinc concentrate shipments from its Century Mine in northwest Queensland, the world's second leading producer of zinc concentrate after the Red Dog Mine in Alaska. An electrical fault at the semiautogenous grinding mill forced closure of the concentration circuit (Mining Journal, 2005). During the 11-day closure, Zinifex lost 17,700 t of contained zinc production and 1,400 t of contained lead production, costing the company about \$11 million (Metal Bulletin Daily, 2005).

In order to support domestic producers of zinc metal, Russia announced that it would abolish export and import duties on zinc concentrates. The 5% export tariff was being abolished indefinitely, while the 5% import duty was repealed for 9 months (Metal-Pages, 2005<sup>§1</sup>).

### References Cited

- Metal Bulletin Daily, 2005, Century closure costs Zinifex A\$14 million: Metal Bulletin Daily, no. 8887.4, April 1, p. 2.  
Mining Journal, 2005, Zinifex declares force majeure at Century: Mining Journal, March 24, p. 3.  
Platts Metals Week, 2005a, Big River Zinc's labor pact ends Apr 29: Platts Metals Week, v. 76, no. 12, March 21, p. 9.  
Platts Metals Week, 2005b, Noranda, Falconbridge to merge; Brascan eyeing options: Platts Metals Week, v. 76, no. 11, March 14, p. 1, 7.

### Internet Reference Cited

- Metal-Pages, 2005 (April 12), Russia halts Zn tariffs (12-apr-2005), accessed April 12, 2005, via URL <http://www.metal-pages.com>.

<sup>1</sup>A reference that includes a section mark (§) is found in the Internet Reference Cited section.

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

(Metric tons, unless otherwise specified)

	2004		2005		
	January-December	December	January	February	January-February
<b>Production:</b>					
Mine, zinc content of concentrate	739,000 <sup>r</sup>	59,000	56,100 <sup>r</sup>	58,700	115,000
Mine, recoverable zinc	713,000 <sup>r</sup>	56,500	53,700 <sup>r</sup>	56,300	110,000
Smelter, refined zinc	320,000	20,200 <sup>e</sup>	24,600 <sup>e</sup>	25,600 <sup>e</sup>	50,300 <sup>e</sup>
<b>Consumption:</b>					
Refined zinc, reported	421,000	33,400	33,600 <sup>r</sup>	33,900	67,500
Ores <sup>e</sup> (zinc content)	727	61	61	61	121
Zinc-base scrap <sup>e</sup> (zinc content)	191,000	15,900	15,900	15,900	31,800
Copper-base scrap <sup>e</sup> (zinc content)	176,000	14,700	14,700	14,700	29,300
Aluminum-and magnesium-base scrap <sup>e</sup> (zinc content)	1,430	120	120	120	239
Total <sup>e</sup>	790,000	64,100	64,300 <sup>r</sup>	64,700	129,000
Apparent consumption, metal <sup>2</sup>	1,160,000	98,200	88,700	82,200	171,000 <sup>3</sup>
<b>Stocks of refined (slab) zinc, end of period:</b>					
Producer <sup>4</sup>	XX	6,430	9,860	11,000	XX
Consumer <sup>5</sup>	XX	56,300	57,200	57,200	XX
Merchant	XX	10,200	10,200	10,200	XX
Total	XX	73,000	77,300	78,500	XX
Shipments of zinc metal from Government stockpile	28,900	--	--	--	--
<b>Imports for consumption:</b>					
Refined (slab) zinc	812,000	62,700	58,000	NA	58,000 <sup>6</sup>
Oxide (gross weight)	103,000	6,910	8,030	NA	8,030 <sup>6</sup>
Ore and concentrate (zinc content)	231,000	29,600	3,490	NA	3,490 <sup>6</sup>
<b>Exports:</b>					
Refined (slab) zinc	3,300	96	252	NA	252 <sup>6</sup>
Oxide (gross weight)	14,400	1,600	811	NA	811 <sup>6</sup>
Ore and concentrate (zinc content)	745,000	33,300	22,300	NA	22,300 <sup>6</sup>
Waste and scrap (gross weight)	53,900	4,020	3,220	NA	3,220 <sup>6</sup>
<b>Price:</b>					
London Metal Exchange, average, dollars per metric ton	\$1,050.00	\$1,180.00	\$1,250.00	\$1,330.00	\$1,290.00
Platts Metals Week North American Special High Grade, average, cents per pound	52.47	58.53	61.54	64.49	63.01

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. 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>Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

<sup>3</sup>Data based on reported consumption, stocks, and estimated trade data.

<sup>4</sup>Data from U.S. Geological Survey and American Bureau of Metal Statistics.

<sup>5</sup>Includes an estimate for companies that report annually.

<sup>6</sup>Includes data through January only.

TABLE 2  
REFINED ZINC PRODUCED IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Month	Beginning stocks <sup>2</sup>	Production	Shipments	Ending stocks <sup>2</sup>
2004:				
February	6,440	26,900	28,100	5,230
March	5,230	28,900	28,200	5,960
April	5,960 <sup>e</sup>	29,600	28,300	7,300
May	7,300 <sup>e</sup>	28,600	28,300	7,660
June	7,660 <sup>e</sup>	28,600 <sup>e</sup>	29,900	6,340
July	6,340 <sup>e</sup>	29,200 <sup>e</sup>	29,200	6,390
August	6,390 <sup>e</sup>	29,300 <sup>e</sup>	29,300	6,370
September	6,370 <sup>e</sup>	24,100 <sup>e</sup>	23,400	7,020
October	7,020 <sup>e</sup>	23,800 <sup>e</sup>	23,700	7,070
November	7,070 <sup>e</sup>	23,500 <sup>e</sup>	23,800	6,780
December	6,780 <sup>e</sup>	20,200 <sup>e</sup>	20,500	6,430
January-December	XX	320,000	321,000	XX
2005:				
January	6,430 <sup>e</sup>	24,600 <sup>e</sup>	21,200	9,860
February	9,860 <sup>e</sup>	25,600 <sup>e</sup>	24,500	11,000
January-February	XX <sup>e</sup>	50,300 <sup>e</sup>	45,700	XX

<sup>e</sup>Estimated. XX Not applicable.

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

<sup>2</sup>Includes 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 PRODUCT<sup>1</sup>

(Metric tons)

Industry and product	2004		2005		
	January-December <sup>2</sup>	December	January	February <sup>2</sup>	January-February
Galvanizing:					
Sheet and strip	477,000	40,500	36,300 <sup>r</sup>	33,500	69,800
Other	167,000	14,400	12,300	11,100	23,400
Total	644,000	54,900	48,600 <sup>r</sup>	44,600	93,200
Brass and bronze	188,000	15,200	14,200	13,300	27,500
Zinc-base alloy	244,000	20,900	19,000	17,700	36,700
Other uses <sup>3</sup>	85,800	7,300	6,900	6,500	13,400
Grand total	1,160,000	98,200	88,700	82,200	171,000

<sup>r</sup>Revised

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

<sup>2</sup>Data based on reported consumption, stocks, and estimated trade data.

<sup>3</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 MONTHLY ZINC PRICES<sup>1</sup>

Period	North American	LME <sup>2</sup> cash	
	¢/lb.	¢/lb.	\$/t
2004:			
February	53.84	49.32	1,087.26
March	55.25	50.14	1,105.37
April	52.09	46.82	1,032.28
May	51.76	46.63	1,027.93
June	51.33	46.32	1,021.08
July	50.08	44.81	987.94
August	49.44	44.24	975.39
September	49.23	44.22	974.83
October	53.31	48.28	1,064.49
November	54.81	49.68	1,095.18
December	58.53	53.52	1,179.83
January-December	52.70	47.63	1,050.14
2005:			
January	61.54	56.51	1,245.81
February	64.49	60.14	1,325.81
January-February	63.01	58.32	1,285.81

<sup>1</sup>Special High Grade.

<sup>2</sup>London Metal Exchange.

Source: Platts Metals Week.

TABLE 5  
U.S. EXPORTS OF ZINC<sup>1</sup>

Material	2004		January 2005 <sup>2</sup>	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	3,300	\$5,330	252	\$584
Ore and concentrate (zinc content)	745,000	413,000	22,300	8,150
Waste and scrap (gross weight)	53,900	48,300	3,220	3,130
Powders, flakes, dust (zinc content)	7,640	13,500	716	1,220
Oxide (gross weight)	14,400	19,800	811	1,250
Chloride (gross weight)	1,870	2,200	226	303
Sulfate (gross weight)	3,060	1,860	250	152
Compounds, other (gross weight)	194	711	150	141

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

<sup>2</sup>Data for February 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF ZINC<sup>1</sup>

Material	2004		January 2005 <sup>2</sup>	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	812,000	\$888,000	58,000	\$70,000
Ore and concentrate (zinc content)	231,000	98,700	3,490	2,100
Waste and scrap (gross weight)	10,800	7,740	605	479
Powders, flakes, dust (zinc content)	24,800	40,200	1,750	2,800
Oxide (gross weight)	103,000	89,000	8,030	7,830
Chloride (gross weight)	705	863	106	158
Sulfate (gross weight)	29,100	14,000	3,430	1,550
Compounds, other (gross weight)	4,660	4,230	530	465

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

<sup>2</sup>Data for February 2005 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 7  
SHIPMENTS OF ZINC METAL FROM THE NATIONAL DEFENSE  
STOCKPILE<sup>1</sup>

(Metric tons)

Period	Beginning inventory	Shipments	Ending inventory
<b>2004:</b>			
February	91,900	--	91,900
March	91,900	2,920	89,000
April	89,000	3,340	85,600
May	85,600	14,700	70,900
June	70,900	1,170	69,800
July	69,800	44	69,700
August	69,700	3,360	66,400
September	66,400	--	66,400
October	66,400	--	66,400
November	66,400	--	66,400
December	66,400	--	66,400
January-December	XX	25,500	XX
<b>2005:</b>			
January	66,400	--	66,400
February	66,400	--	66,400
January-February	XX	--	XX

XX Not applicable. -- Zero.

<sup>1</sup>Data 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<sup>1,2</sup>

(Metric tons)

Material and country	General imports		Imports for consumption	
	2004	2005 January	2004	2005 January
<b>Ore and concentrate (zinc content):</b>				
Australia	27,900	--	27,900	--
Ireland	17,700	--	17,700	--
Mexico	6,530	531	6,530	531
Peru	178,000	2,960	178,000	2,960
Other	877	--	877	--
<b>Total</b>	<b>231,000</b>	<b>3,490</b>	<b>231,000</b>	<b>3,490</b>
<b>Blocks, pigs, or slab:</b>				
Australia	7,940	--	27,500	480
Brazil	26,400	4,890	26,400	4,940
Canada	501,000	37,700	501,000	37,700
China	35	--	16,500	502
Japan	--	--	690	--
Kazakhstan	2,310	--	2,310	--
Korea, Republic of	8,030	--	31,900	813
Mexico	123,000	12,700	123,000	12,700
Namibia	47,900	--	47,900	--
Peru	25,600	--	30,500	598
Poland	--	--	--	--
Other	204	--	3,970	--
<b>Total</b>	<b>743,000</b>	<b>55,300</b>	<b>812,000</b>	<b>58,000</b>
<b>Dross, ashes, fume (zinc content)</b>				
	16,100	1,010	16,100	1,010
<b>Grand total</b>	<b>990,000</b>	<b>59,800</b>	<b>1,060,000</b>	<b>62,500</b>
<b>Oxide (gross weight):</b>				
Canada	49,700	4,450	49,700	4,450
China	207	36	207	36
Italy	13,400	1,160	13,400	1,160
Japan	1,060	97	1,060	97
Mexico	33,200	1,740	33,200	1,740
Netherlands	4,700	465	4,700	465
Other	796	90	796	90
<b>Total</b>	<b>103,000</b>	<b>8,030</b>	<b>103,000</b>	<b>8,030</b>
<b>Other (gross weight):</b>				
Waste and scrap	10,800	605	10,800	605
Sheets	2,500	216	2,500	216
<b>Powders, flakes, dust (zinc content)</b>	<b>24,800</b>	<b>1,750</b>	<b>24,800</b>	<b>1,750</b>

-- Zero.

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

<sup>2</sup>Data for February 2005 were not available at time of publication.

Source: U.S. Census Bureau.