

Mineral Industry Surveys

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ZINC IN JULY 2004

Domestic mine production in July, at 63,200 metric tons (t), was about 3% higher than in June, but was nearly 6% lower than in July 2003, according to the U.S. Geological Survey. Estimated smelter production, at 29,200 t, was about 2% higher than in June and more than 32% higher than in July 2003. Apparent consumption, at 95,600 t, was about 2% less than that of the previous month, but it was about 12% more than in July 2003.

The Platts Metals Week average monthly composite price for North American Special High Grade zinc declined by more than 2% to 50.08 cents per pound in July. Compared with those of July 2003, zinc prices increased by about 24%.

Zinc prices have been declining since they peaked in February 2004, mainly because of high stocks. This was expected to change in the second half of 2004 as a strong market and the threat of rising interest rates would likely spur companies to buy zinc metal before prices go up. Continuing strong demand in the United States was holding premia at about 4½ to 5 cents per pound of zinc metal. European demand seemed strong, although it will become more apparent after the holiday period ends in August. Asian demand remained strong, largely owing to continuing Chinese strength propelled by that country's soaring galvanized sheet consumption. It was estimated that up to 70% of the Japanese production growth is due to Chinese demand (CRU International Ltd., 2004a).

Following the reopening of the electrolytic zinc smelter and Kivcet lead smelter on April 1, operation of the imperial smelting furnace at the Porto Vesme metallurgical complex along the southwestern coast of Sardinia, Italy, was restarted on July 5 and was expected to reach full capacity by yearend 2004. Operations at Porto Vesme were idled in October 2003 after Glencore International AG failed to secure lower energy prices from the Italian Government. Reopening of Porto Vesme was made possible by higher zinc prices that allowed profitable operation at the complex despite unchanged electricity rates, which were the highest in Europe (CRU International Ltd., 2004c).

Turnover at Swiss-based Xstrata plc's lead and zinc division increased by 31% during the first 6 months of 2004 compared with that of the same period in 2003 owing to higher prices and

lower treatment charges. However, corresponding higher profit was somewhat offset by lower head grades and higher unit cost. At its Australian mines, Xstrata produced 85,800 t of zinc in concentrate, compared with 88,200 t in the first 6 months of 2003. In Europe, production of zinc metal during the first half of 2004 increased to 322,000 t, up by 4% from that of the same period in 2003 owing to process improvements and optimization programs at its two smelters. The San Juan de Nieva smelter in Spain produced 244,000 t of zinc metal, while production at the Nordenham smelter in Germany increased by 3% to 77,900 t (Platts Metals Week, 2004b).

Canada's Inmet Mining Corp. was selected by Turkey's Privatization Administration as the preferred bidder for the sale of the Government's 45% interest in Cayeli Bakir Isletmeleri A.S. mining company that operates the Cayeli copper-zinc mine in eastern Turkey. If successful, Inmet will be the sole owner of the Cayeli Mine. The company's offer of \$49 million is subject to the approval of the Privatization High Council and the Turkish Competition Authority. The Cayeli Mine has emerged as a major asset for Inmet, providing 41% of operating earnings in the second quarter of 2004 on 27% revenues. For the first 6 months of 2004, the mine produced 19,700 t of zinc, a 49% increase compared with that of the same period in 2003. At the end of 2003, proven and probable reserves at Cayeli amounted to 16 million metric tons (Mt) ore, grading 5.6% zinc and 3.6% copper (Northern Miner, 2004).

Update

On August 13, 2004, Adastra Minerals Inc. decided to finalize a framework agreement with La Generale des Carrieres et des Mines (Gecamines), the State mining company of Congo (Kinshasa), concerning the Kipushi zinc-copper project located in the southern part of that country. Zinc and copper were produced at the Kipushi Mine from 1925 until 1993, when the mine was placed on care and maintenance status owing to insufficient foreign exchange to maintain operations. The mine reportedly has measured and indicated resources of 16.9 Mt of potential ore, grading 16.7% zinc and 2.2% copper (Platts Metals Week, 2004a).

Falconbridge Ltd. hoisted the first ore from the new shaft of Mine D at its Kidd Creek operations in the Canadian province of Ontario. Full production is projected for 2006, ensuring that Kidd Creek will continue to operate at a capacity of 2.4 million metric tons of ore per year. The new mine will boost production that fell behind by 35% in the second quarter 2004 compared with that of the same period in 2003. The reason for the decline was ground stability problems, stope blockage, maintenance issues, failed ventilation fans, and, most importantly, a change in the mining plan to take advantage of high-grade copper ore (CRU International, Ltd., 2004b).

References Cited

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- Platts Metals Week, 2004a, Adastra may restart Kipushi mine: Platts Metals Week, v. 75, no. 34, August 23, p. 14.
- Platts Metals Week, 2004b, Xstrata zinc-lead profits jump on higher prices: Platts Metals Week, v. 75, no. 34, August 23, p. 14.

TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2003	2004			
	January- December	May	June	July	January- July
Production:					
Mine, zinc content of concentrate	768,000	56,100	61,300	63,200	413,000
Mine, recoverable zinc	738,000	53,900	59,000	60,800	401,000
Smelter, refined zinc	272,000	28,600	28,600 ^e	29,200 ^e	199,000
Consumption:					
Refined zinc, reported	423,000	35,900	37,000	33,700	251,000
Ores ^e (zinc content)	727	61	61	61	424
Zinc-base scrap ^e (zinc content)	191,000	15,900	15,900	15,900	111,000
Copper-base scrap ^e (zinc content)	176,000	14,700	14,700	14,700	103,000
Aluminum-and magnesium-base scrap ^e (zinc content)	1,430	120	120	120	837
Total ^e	791,000	66,600	67,700	64,400	466,000
Apparent consumption, metal ²	1,050,000	105,000 ^r	97,800 ^r	95,600 ³	688,000 ³
Stocks of refined (slab) zinc, end of period:					
Producer ⁴	XX	7,660	6,340	6,390	XX
Consumer ⁵	XX	54,500	54,100	57,500	XX
Merchant	XX	10,400	9,910	10,100	XX
Total	XX	72,600	70,300	74,000	XX
Shipments of zinc metal from Government stockpile	13,600	14,700	1,170	44	25,500
Imports for consumption:					
Refined (slab) zinc	758,000	66,000	71,600	NA	400,000 ⁶
Oxide (gross weight)	98,300	9,270	7,390	NA	53,300 ⁶
Ore and concentrate (zinc content)	164,000	9,720	23,900	NA	129,000 ⁶
Exports:					
Refined (slab) zinc	1,680	183	1,470	NA	2,440 ⁶
Oxide (gross weight)	12,100	1,270	1,550	NA	7,420 ⁶
Ore and concentrate (zinc content)	841,000	16,800	4,380	NA	57,100 ⁶
Waste and scrap (gross weight)	50,200	3,580	3,230	NA	26,500 ⁶
Price:					
London Metal Exchange, average, dollars per metric ton	\$827.32	\$1,027.93	\$1,021.08	\$987.94	\$1,039.78
Platts Metals Week North American Special High Grade, average, cents per pound	40.63	51.76	51.33	50.08	52.04

^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.

²Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

³Data based on reported consumption, stocks, and estimated trade data.

⁴Data from U.S. Geological Survey and American Bureau of Metal Statistics.

⁵Includes an estimate for companies that report annually.

⁶Includes data through June only.

TABLE 2
REFINED ZINC PRODUCED IN THE UNITED STATES¹

(Metric tons)

Month	Beginning stocks ²	Production	Shipments	Ending stocks ²
2003:				
July	7,770	22,100	21,500	8,360
August	8,360	23,500	23,600	8,230
September	8,230	21,600	22,100	7,790
October	7,790	21,800	21,300	8,300
November	8,300	23,500	23,800	8,010
December	8,010	20,200	20,500	7,660
Year	XX	272,000	273,000	XX
2004:				
January	7,660	26,900	28,100	6,440
February	6,440	26,900	28,100	5,230
March	5,230	28,900	28,200	5,960
April	5,960 ^e	29,600	28,300	7,300
May	7,300 ^e	28,600	28,300	7,660
June	7,660 ^e	28,600 ^e	29,900	6,340
July	6,340 ^e	29,200 ^e	29,200	6,390
January-July	XX	199,000	200,000	XX

^eEstimated. XX Not applicable.

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

²Includes 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	2003	2004			January- July ²
	January- December	May ^f	June	July ²	
Galvanizing:					
Sheet and strip	442,000	42,800	39,800	39,100	281,000
Other	146,000	15,500	13,900	13,600	98,900
Total	588,000	58,300	53,700	52,700	380,000
Brass and bronze	167,000	17,200	16,900	16,000	115,000
Zinc-base alloy	222,000	21,700	20,200	20,200	143,000
Other uses ³	70,700	7,400	7,200	6,900	50,100
Grand total	1,050,000	105,000	97,800 ^r	95,600	688,000

^rRevised.

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 MONTHLY ZINC PRICES¹

Period	North American	LME ² cash	
	¢/lb.	¢/lb.	\$/t
2003:			
July	40.54	37.52	827.19
August	40.10	37.08	817.48
September	40.07	37.10	817.81
October	43.70	40.71	897.54
November	44.80	41.47	914.16
December	47.85	44.33	977.35
Year	40.63	37.53	827.32
2004:			
January	49.93	46.11	1,016.62
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
January-July	52.04	47.16	1,039.78

¹Special High Grade.

²London Metal Exchange.

Source: Platts Metals Week.

TABLE 5
U.S. EXPORTS OF ZINC¹

Material	2003		2004 ²			
	Quantity (metric tons)	Value (thousands)	June		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	1,680	\$1,760	1,470	\$3,070	2,440	\$4,200
Ore and concentrate (zinc content)	841,000	337,000	4,380	2,620	57,100	21,500
Waste and scrap (gross weight)	50,200	32,600	3,230	2,540	26,500	22,900
Powders, flakes, dust (zinc content)	6,550	9,090	662	1,070	3,960	6,950
Oxide (gross weight)	12,100	15,200	1,550	2,290	7,420	10,700
Chloride (gross weight)	1,470	1,650	155	167	1,040	1,230
Sulfate (gross weight)	2,310	1,440	313	205	1,910	1,120
Compounds, other (gross weight)	183	472	35	47	85	210

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

²Data for July 2004 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

Material	2003		2004 ²			
	Quantity (metric tons)	Value (thousands)	June		Year to date	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Refined (slab) zinc	758,000	\$647,000	71,600	\$80,200	400,000	\$443,000
Ore and concentrate (zinc content)	164,000	60,000	23,900	10,700	129,000	45,900
Waste and scrap (gross weight)	10,300	5,740	803	557	5,420	3,760
Powders, flakes, dust (zinc content)	27,400	41,200	1,880	3,040	11,700	19,100
Oxide (gross weight)	98,300	72,200	7,390	7,280	53,300	44,300
Chloride (gross weight)	663	914	99	95	389	447
Sulfate (gross weight)	25,800	11,700	2,870	1,290	14,400	6,810
Compounds, other (gross weight)	1,010	951	422	400	1,350	1,300

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

²Data for July 2004 were not available at time of publication.

Source: U.S. Census Bureau.

TABLE 7
SHIPMENTS OF ZINC METAL FROM THE NATIONAL
DEFENSE STOCKPILE¹

(Metric tons)

Period	Beginning inventory	Shipments	Ending inventory
2003:			
July	107,000	3,530	104,000
August	104,000	712	103,000
September	103,000	841	102,000
October	102,000	--	102,000
November	102,000	539	102,000
December	102,000	6,270	95,200
Year	XX	13,600	XX
2004:			
January	95,200	3,340	91,900
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
January-July	XX	25,500	XX

XX Not applicable. -- Zero.

¹Data 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^{1,2}

(Metric tons)

Material and country	General imports			Imports for consumption		
	2003	2004		2003	2004	
		June	Year to date		June	Year to date
Ore and concentrate (zinc content):						
Australia	43,400	--	19,300	43,400	--	19,300
Ireland	36,500	3,620	7,350	36,500	3,620	7,350
Mexico	9,400	2,920	5,800	9,400	2,920	5,800
Peru	74,600	17,400	95,600	74,600	17,400	95,600
Other	--	--	877	--	--	877
Total	164,000	23,900	129,000	164,000	23,900	129,000
Blocks, pigs, or slab:						
Australia	22,000	--	7,940	14,400	3,670	26,800
Brazil	27,600	2,700	14,800	22,400	2,700	14,800
Canada	498,000	42,100	245,000	498,000	42,100	245,000
China	23,800	18	33	48	2,710	7,960
Japan	50	--	--	--	494	690
Kazakhstan	19,700	--	2,310	19,700	--	2,310
Korea, Republic of	34,000	--	7,730	1,340	4,420	18,000
Mexico	141,000	8,090	58,000	141,000	8,090	58,000
Peru	43,400	4,690	10,200	42,900	5,880	14,000
Poland	1,600	--	--	1,600	--	--
Other	17,100	1,520	10,700	16,200	1,520	11,700
Total	829,000	59,100	357,000	758,000	71,600	400,000
Dross, ashes, fume (zinc content)	14,100	1,240	7,880	14,100	1,240	7,880
Grand total	1,010,000	84,200	494,000	936,000	96,700	536,000
Oxide (gross weight):						
Canada	47,300	4,310	24,100	47,300	4,310	24,100
China	575	20	107	575	20	107
Italy	770	--	4,680	770	--	4,680
Japan	965	68	594	965	68	594
Mexico	40,500	2,400	21,000	40,500	2,400	21,000
Netherlands	4,820	554	2,280	4,820	554	2,280
Other	3,420	38	505	3,420	38	505
Total	98,300	7,390	53,300	98,300	7,390	53,300
Other (gross weight):						
Waste and scrap	10,300	803	5,420	10,300	803	5,420
Sheets	1,790	461	1,490	1,790	461	1,490
Powders, flakes, dust (zinc content)	27,500	1,880	11,700	27,400	1,880	11,700

-- Zero.

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

²Data for July 2004 were not available at time of publication.

Source: U.S. Census Bureau.