

Mineral Industry Surveys

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ZINC IN AUGUST 2007

Domestic mine production (recoverable) of zinc in August 2007 was 69,500 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in August was 2,240 t, 10% higher than that in July 2007 and 13% higher than that in August 2006. Year-to-date mine production for 2007 was 6% higher than that of 2006.

The Platts Metals Week average price for North American Special High Grade Zinc for the month of August was 152.67 cents per pound, 9% lower than the July average price and a decrease of 7% from the August 2006 average price. The average London Metal Exchange Ltd. (LME) cash price of zinc for August was \$3,250.58 per metric ton, 8% lower than the average price in July and a 3% decrease compared with the

average price in August 2006. During August 2007, global LME zinc stocks fell by 850 t to 65,375 t.

The Defense National Stockpile Center aggregated cash disposal (sale) of zinc in August, under the monthly Basic Ordering Agreement DLA-Zinc-004, was approximately 73 t (81 short tons), with an approximate value of \$171,000 (Defense National Stockpile Center, 2007).

Reference Cited

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

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

(Metric tons, unless otherwise specified)

| | 2006 | | 2007 | | |
|---|----------------------|---------------------|-----------------|----------------------|--|
| | January- | | | January- | |
| | December | July | August | August | |
| Production: | | • | Ţ. | | |
| Mine, zinc content of concentrate | 727,000 | 65,500 | 72,200 | 516,000 | |
| Mine, recoverable zinc | 699,000 | 63,100 | 69,500 | 493,000 | |
| Smelter, refined zinc ² | 252,000 | 22,100 | 22,100 | 172,000 | |
| Consumption: | _ | | | | |
| Refined zinc, reported | 419,000 | 22,300 | 22,600 | 199,000 | |
| Ores ^e (zinc content) | 732 | 61 | 61 | 488 | |
| Zinc-base scrap ³ (zinc content) | 178,000 ^r | 14,800 e, r | 14,800 e | 119,000 e | |
| Copper-base scrap ³ (zinc content) | 163,000 ^r | 13,600 e, r | 13,600 e | 109,000 e | |
| Aluminum-and magnesium-base scrap ^{3, 4} | | | | | |
| (zinc content) | 520 | 43 ^e | 43 ^e | 346 ^e | |
| Total ^e | 761,000 ^r | 50,800 ^r | 51,100 | 427,000 | |
| Apparent consumption, metal ⁵ | 1,130,000 | 70,800 | NA | 558,000 ⁶ | |
| Stocks of refined (slab) zinc, end of period: | _ | | | | |
| Producer and consumer ⁷ | XX | 34,000 | 32,800 | XX | |
| Shipments of zinc metal from Government stockpile | 33,000 | NA ⁸ | 3,190 | 9,760 | |
| Imports for consumption: | _ | | | | |
| Refined (slab) zinc | 851,000 | 48,900 | NA | 407,000 ⁶ | |
| Oxide (gross weight) | 125,000 | 12,400 | NA | 75,500 ⁶ | |
| Ore and concentrate (zinc content) | 383,000 | 6,110 | NA | 249,000 6 | |
| Waste and scrap (gross weight) | 14,200 | 3,100 | NA | 14,000 6 | |
| Exports: | _ | | | | |
| Refined (slab) zinc | 2,530 | 123 | NA | 7,180 ⁶ | |
| Oxide (gross weight) | 28,800 | 3,620 | NA | 20,500 ⁶ | |
| Ore and concentrate (zinc content) | 825,000 | 95,500 | NA | 236,000 6 | |
| Waste and scrap (gross weight) | 83,800 | 8,130 | NA | 60,200 ⁶ | |
| Price: | _ | | | | |
| London Metal Exchange, average, | | | | | |
| dollars per metric ton | 3,274.42 | 3,545.58 | 3,250.58 | 3,518.82 | |
| Platts Metals Week North American | | | | | |
| Special High Grade, average, cents per pound | 158.89 | 167.11 | 152.67 | 168.34 | |

^eEstimated. NA Not available. XX Not applicable.

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

²Includes zinc metal used to manufacture zinc oxide.

³Monthly estimates are based on reported annual data from the prior year.

⁴Aluminum-and magnesium-base scrap data have fallen due to a change in assumption on the estimated zinc content of magnesium-base scrap.

⁵Smelter production plus imports minus exports plus shipments from Government stockpile plus stock change.

⁶Includes data through July only.

⁷Does not include an estimate for companies that report annually.

⁸Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

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

(Metric tons)

| Month | Production | Shipments |
|--------------------|------------|-----------|
| 2006: ³ | | |
| August | 20,500 | 21,600 |
| September | 20,500 | 21,600 |
| October | 19,500 | 18,100 |
| November | 19,500 | 18,100 |
| December | 19,500 | 18,100 |
| January-December | 252,000 | 256,000 |
| 2007: | | |
| January | 20,600 | 22,400 |
| February | 20,600 | 22,400 |
| March | 20,600 | 22,400 |
| April | 22,000 | 23,400 |
| May | 22,000 | 23,400 |
| June | 22,000 | 23,400 |
| July | 22,100 | 21,300 |
| August | 22,100 | 21,300 |
| January-August | 172,000 | 180,000 |

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

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

(Metric tons)

| | 2006 | | | |
|-------------------------|-----------|--------|--------|----------|
| | January- | | | January- |
| Industry and product | December | June | July | July |
| Galvanizing: | | | | |
| Sheet and strip | 477,000 | 36,700 | 32,800 | 253,000 |
| Other | 159,000 | 12,200 | 10,600 | 79,200 |
| Total | 636,000 | 48,900 | 43,400 | 332,000 |
| Brass and bronze | 172,000 | 13,600 | 11,500 | 94,300 |
| Zinc-base alloy | 238,000 | 11,100 | 9,730 | 80,700 |
| Other uses ² | 85,600 | 6,510 | 6,170 | 50,400 |
| Grand total | 1,130,000 | 80,200 | 70,800 | 558,000 |

¹Data are rounded to no more than three significant digits; may not add to totals shown. ²Includes zinc used in making zinc dust, desilvering lead, powder, alloys, anodes, chemicals, castings, light metal alloys, rolled zinc, and miscellaneous uses not elsewhere specified.

²Includes zinc metal used to manufacture zinc oxide.

³Partially estimated.

 $\label{eq:table 4} \textbf{AVERAGE ZINC PRICES}^1$

| | North | | |
|------------------|----------|---------|---------------------------------------|
| | American | LME^2 | cash |
| Period | ¢/lb. | ¢/lb. | \$/t |
| 2006: | | | |
| August | 163.83 | 151.77 | 3,346.00 |
| September | 166.60 | 154.32 | 3,402.25 |
| October | 186.07 | 173.37 | 3,822.07 |
| 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 |
| January-August | 168.34 | 159.61 | 3,518.82 |
| 1 | | | · · · · · · · · · · · · · · · · · · · |

¹Special High Grade.

Source: Platts Metals Week.

TABLE 5 U.S. EXPORTS OF ZINC¹

| | | | 2007 | | | | |
|--|---------------|-------------|---------------|-------------|---------------|-------------|--|
| | 2006 | | Ju | July | | o date | |
| | Quantity | Value | Quantity | Value | Quantity | Value | |
| Material | (metric tons) | (thousands) | (metric tons) | (thousands) | (metric tons) | (thousands) | |
| Refined (slab) zinc | 2,530 | \$3,800 | 123 | \$115 | 7,180 | \$5,540 | |
| Ore and concentrate (zinc content) | 825,000 | 1,060,000 | 95,500 | 51,700 | 236,000 | 228,000 | |
| Waste and scrap (gross weight) | 83,800 | 95,800 | 8,130 | 7,940 | 60,200 | 61,400 | |
| Powders, flakes, dust (zinc content) | 16,400 | 33,300 | 1,440 | 2,470 | 12,000 | 23,600 | |
| Oxide (gross weight) | 28,800 | 47,900 | 3,620 | 6,830 | 20,500 | 39,000 | |
| Chloride (gross weight) | 1,510 | 1,930 | 71 | 91 | 1,110 | 1,380 | |
| Sulfate (gross weight) | 42,800 | 22,500 | 37 | 54 | 121 | 290 | |
| Compounds, other (gross weight) ² | 1,740 | 3,750 | 486 | 899 | 3,470 | 5,720 | |

Data are rounded to no more than three significant digits.

Source: U.S. Census Bureau.

²London Metal Exchange.

²Includes 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 | | | |
|--|---------------|-------------|---------------|-------------|---------------|-------------|
| | 2006 | | Ju | July | | o 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 | 48,900 | \$153,000 | 407,000 | \$1,330,000 |
| Ore and concentrate (zinc content) | 383,000 | 183,000 | 6,110 | 13,900 | 249,000 | 126,000 |
| Waste and scrap (gross weight) | 14,200 | 18,700 | 3,100 | 3,810 | 14,000 | 21,600 |
| Powders, flakes, dust (zinc content) | 30,100 | 107,000 | 3,520 | 16,900 | 18,700 | 88,500 |
| Oxide (gross weight) | 125,000 | 243,000 | 12,400 | 29,700 | 75,500 | 194,000 |
| Chloride (gross weight) | 1,260 | 1,780 | 80 | 441 | 370 | 2,110 |
| Sulfate (gross weight) | 44,400 | 34,100 | 3,530 | 3,410 | 18,800 | 19,600 |
| Compounds, other (gross weight) ² | 7,980 | 9,620 | 556 | 816 | 4,490 | 6,150 |

¹Data 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 ² |
| 2006: | | |
| August | 3,690 | 20,800 |
| September | 5,460 | 15,300 |
| October | 1,900 | 13,400 |
| November | NA ³ | 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 ³ | 11,300 4 |
| August | 3,190 | 8,100 4 |
| January-August | 9,760 | XX |

NA Not available. XX Not applicable.

Source: Defense National Stockpile Center.

²Includes 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).

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

²Includes excess material and material committed for sale/pending shipment.

³Monthly shipments are not reflected by changes in inventory due to an inventory adjustment or shipment delay.

⁴Total 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 2007 | | | Imports for consumption | | |
|--------------------------------------|----------------------|--------|--------------|-------------------------|--------|--------------|
| | | | | | | 007 |
| Material and country | 2006 | July | Year to date | 2006 | July | Year to date |
| Ore and concentrate (zinc content): | | | | | | |
| Australia | 2,850 | | | 2,850 | | |
| Canada | 2,750 | | 31 | 2,750 | | 31 |
| Ireland | 17,000 | | 94,600 | 17,000 | | 94,600 |
| Mexico | 88,100 | | 452 | 88,100 | | 452 |
| Peru | 273,000 | 6,110 | 153,000 | 273,000 | 6,110 | 153,000 |
| Total | 383,000 | 6,110 | 249,000 | 383,000 | 6,110 | 249,000 |
| 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 | 43,500 | 295,000 | 535,000 | 43,500 | 295,000 |
| China | 2,000 | | 2,840 | 57,300 | | 8,030 |
| Finland | | | | 51 | | 374 |
| India | 12,200 | 43 | 4,190 | 12,200 | 43 | 4,190 |
| Japan | 251 | | | 6,200 | | 25 |
| Kazakhstan | 6,000 | | 28,000 | 6,000 | | 28,000 |
| Korea, Republic of | | | , | 66,800 | | 9,140 |
| Mexico | 103,000 | 5,380 | 53,300 | 103,000 | 5.380 | 53,300 |
| Norway | | | | 1,160 | | 25 |
| Peru | 1,080 | 34 | 34 | 1,360 | 34 | 34 |
| Other | 21 | | 1 | 1,740 | | 1 |
| Total | 683,000 | 48,900 | 391,000 | 851,000 | 48,900 | 407,000 |
| Dross, ashes, fume (zinc content) | 31,100 | 1,120 | 12,100 | 31,100 | 1,120 | 12,100 |
| Grand total | 1,100,000 | 56,100 | 652,000 | 1,270,000 | 56,100 | 668,000 |
| Oxide (gross weight): | 1,100,000 | 20,100 | 022,000 | 1,270,000 | 20,100 | 000,000 |
| Canada | 49,100 | 4,050 | 28,800 | 49,100 | 4,050 | 28,800 |
| China | 277 | 48 | 263 | 277 | 48 | 263 |
| Germany | 800 | 132 | 695 | 800 | 132 | 695 |
| Italy | 24,500 | 5,050 | 10,100 | 24,500 | 5,050 | 10,100 |
| Japan | 1,290 | 13 | 698 | 1,290 | 13 | 698 |
| Mexico | 31,900 | 2,420 | 18,700 | 31,900 | 2,420 | 18,700 |
| Netherlands | 7,820 | 679 | 10,700 | 7,820 | 679 | 10,700 |
| Spain | 1,150 | | 979 | 1,150 | | 979 |
| Sweden | 7,500 | | 3,800 | 7,500 | | 3,800 |
| Other | 618 | 58 | 661 | 618 | 58 | 661 |
| Total | 125,000 | 12,400 | 75,500 | 125,000 | 12,400 | 75,500 |
| Other (gross weight): | 123,000 | 12,400 | 75,500 | 123,000 | 12,400 | 75,500 |
| Waste and scrap | 14,200 | 3,100 | 14,000 | 14,200 | 3,100 | 14,000 |
| Sheets | 2,050 | 3,100 | 993 | 2,050 | 3,100 | 993 |
| Powders, flakes, dust (zinc content) | | 3,520 | | | | |
| Zero. | 30,100 | 3,320 | 18,700 | 30,100 | 3,520 | 18,700 |

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.