

# Mineral Industry Surveys

**For information, contact:**

Amy C. Tolcin, Zinc Commodity Specialist (Acting)  
 National Minerals Information Center  
 U.S. Geological Survey  
 989 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-4940 Fax: (703) 648-7757  
 Email: atolcin@usgs.gov

Hodan A. Fatah (Data)  
 Telephone: (703) 648-4971  
 Fax: (703) 648-7975  
 Email: hfatah@usgs.gov

**Internet:** <https://www.usgs.gov/centers/nmic>

## ZINC IN OCTOBER 2019

Domestic mine production (recoverable) of zinc in October 2019 was 57,800 metric tons (t) (tables 1, 2). Average daily mine production in October was 1,870 t, 15% lower than that in the previous month and 25% lower than that in October 2018 (fig. 1).

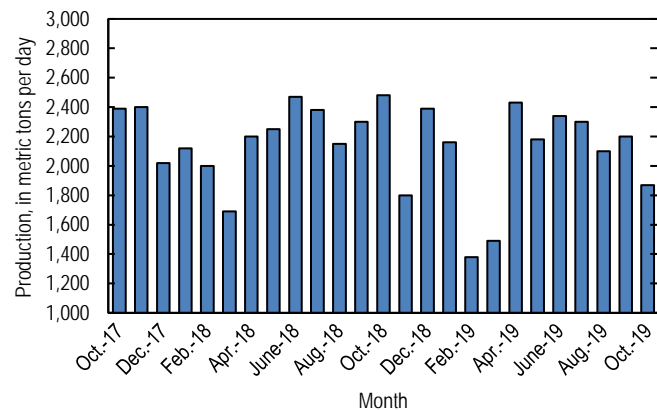


Figure 1. Average daily domestic zinc mine production (recoverable) from October 2017 through October 2019.

**Stocks and Prices**

Global London Metal Exchange Ltd. (LME) stocks of Special High Grade (SHG) zinc were 54,500 t at the end of October 2019, 18% lower than stocks at the end of September and 62% lower than stocks at the end of October 2018 (fig. 2, table 7).

The monthly average Platts Metals Week North American SHG zinc price in October 2019 was \$1.20 per pound, 5%

higher than that in the previous month but 8% lower than that in October 2018. The October 2019 average LME cash price for SHG zinc was \$2,444.99 per metric ton (\$1.11 per pound), 5% more than that in September but 8% lower than that in October 2018 (fig. 3, table 6).

The North American premium to the LME cash price in October 2019 averaged 8.8 cents per pound, essentially unchanged from that in the previous month and 4% more than that in October 2018 (fig. 3, table 6).

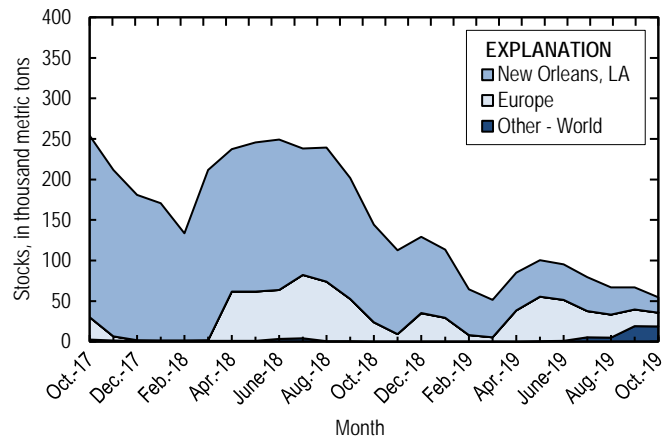


Figure 2. Global LME stocks of Special High Grade zinc, monthend, from October 2017 through October 2019. Source: London Metal Exchange Ltd.

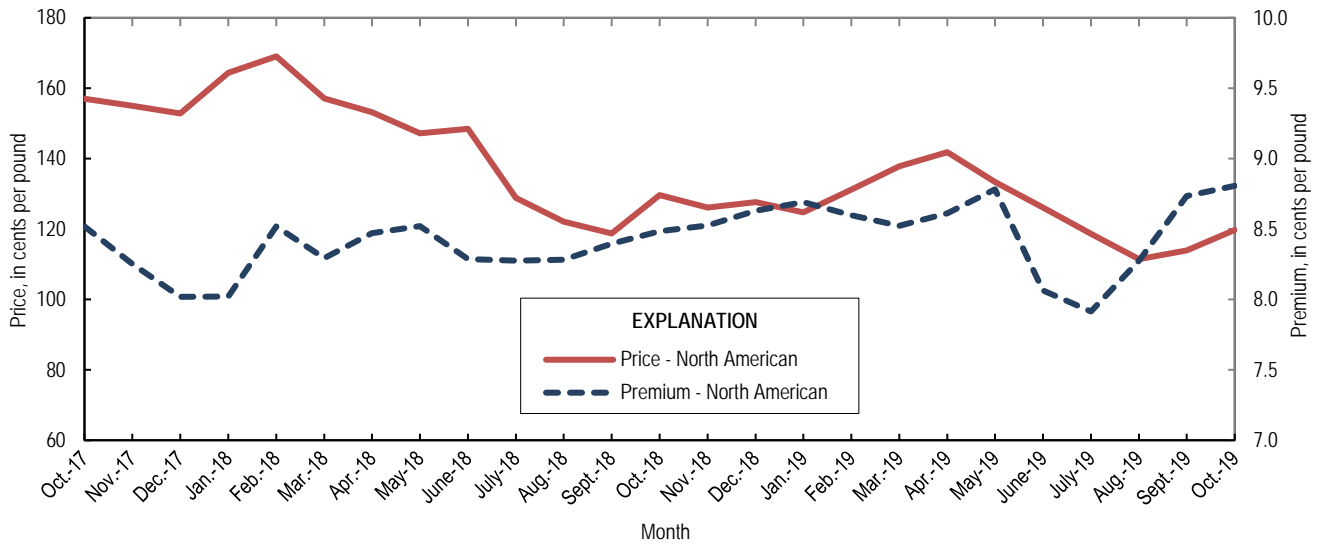


Figure 3. Average monthly North American price and premium for Special High Grade zinc from October 2017 through October 2019. Source: Platts Metals Week.

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/nmic/minerals-information-publication-list-services>.

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

(Metric tons, unless otherwise specified)

|  | 2018                              | 2019      |          |                                  |
|--|-----------------------------------|-----------|----------|----------------------------------|
|  | January–<br>December <sup>p</sup> | September | October  | January–<br>October <sup>2</sup> |
| <b>Production:</b>   |                                   |           |          |                                  |
| Mine, zinc content of concentrate <sup>3</sup>                 | 824,000                           | 68,100    | 59,600   | 641,000                          |
| Mine, recoverable zinc <sup>3</sup>                            | 799,000                           | 66,100    | 57,800   | 623,000                          |
| Smelter, refined zinc <sup>e</sup>                             | 116,000                           | 9,900     | 9,900    | 95,000                           |
| Consumption of refined zinc, apparent <sup>4</sup>             | 868,000                           | 91,100    | 77,800   | 781,000                          |
| <b>Imports for consumption:</b>                                |                                   |           |          |                                  |
| Ore and concentrate (zinc content)                             | 32                                | --        | --       | 10                               |
| Refined zinc   | 775,000                           | 81,500    | 68,200   | 690,000                          |
| <b>Exports:</b>  |                                   |           |          |                                  |
| Ore and concentrate (zinc content)                             | 806,000                           | 128,000   | 60,300   | 805,000                          |
| Refined zinc   | 23,300                            | 251       | 346      | 4,570                            |
| <b>Price:<sup>5</sup></b>                                      |                                   |           |          |                                  |
| London Metal Exchange cash, average,<br>dollars per metric ton | 2,924.55                          | 2,319.16  | 2,444.99 | 2,587.77                         |
| Platts Metals Week North American, average,<br>cents per pound | 141.05                            | 113.93    | 119.71   | 125.88                           |

<sup>c</sup>Estimated. <sup>p</sup>Preliminary. -- 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>May include revisions to previously published data.

<sup>3</sup>Reported zinc content in both zinc and lead concentrates.

<sup>4</sup>Smelter production plus imports for consumption minus domestic exports.

<sup>5</sup>Special High Grade Zinc.

TABLE 2  
MINE AND SMELTER PRODUCTION OF ZINC  
IN THE UNITED STATES<sup>1</sup>

(Metric tons)

| Period           | Mine <sup>2</sup> |             | Smelter <sup>c</sup> |
|------------------|-------------------|-------------|----------------------|
|                  | Zinc content      | Recoverable |                      |
| 2018:            |                   |             |                      |
| October          | 79,600            | 77,000      | 11,900               |
| November         | 55,700            | 53,900      | 11,900               |
| December         | 76,700            | 74,200      | 11,900               |
| January–December | 824,000           | 799,000     | 116,000              |
| 2019:            |                   |             |                      |
| January          | 68,900            | 66,900      | 8,600                |
| February         | 39,800            | 38,600      | 8,600                |
| March            | 47,600            | 46,100      | 8,600                |
| April            | 75,300            | 73,000      | 9,900                |
| May              | 69,500            | 67,500      | 9,900                |
| June             | 71,800            | 70,300      | 9,900                |
| July             | 73,500            | 71,400      | 9,900                |
| August           | 67,100            | 65,100      | 9,900                |
| September        | 68,100            | 66,100      | 9,900                |
| October          | 59,600            | 57,800      | 9,900                |
| January–October  | 641,000           | 623,000     | 95,000               |

<sup>c</sup>Estimated.

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

<sup>2</sup>Includes the zinc content in both lead and zinc concentrates.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF ZINC<sup>1</sup>

(Gross weight, unless otherwise specified)

| Material                           | 2018                      |                      | 2019                      |                      |                              |                      |
|------------------------------------|---------------------------|----------------------|---------------------------|----------------------|------------------------------|----------------------|
|                                    | Quantity<br>(metric tons) | Value<br>(thousands) | October                   |                      | January–October <sup>2</sup> |                      |
|                                    |                           |                      | Quantity<br>(metric tons) | Value<br>(thousands) | Quantity<br>(metric tons)    | Value<br>(thousands) |
| Ore and concentrate (zinc content) | 32                        | \$23                 | --                        | --                   | 10                           | \$7                  |
| Unwrought:                         |                           |                      |                           |                      |                              |                      |
| Refined zinc                       | 775,000                   | 2,350,000            | 68,200                    | \$165,000            | 690,000                      | 1,850,000            |
| Zinc alloys                        | 4,390                     | 14,300               | 12                        | 34                   | 1,420                        | 4,120                |
| Wrought:                           |                           |                      |                           |                      |                              |                      |
| Bars, rods, profiles, wire         | 3,470                     | 13,900               | 344                       | 1,110                | 2,540                        | 8,940                |
| Plates, sheets, strip, foil        | 5,410                     | 16,400               | 283                       | 1,260                | 2,550                        | 10,700               |
| Ash and residues:                  |                           |                      |                           |                      |                              |                      |
| Hard zinc spelter                  | 19                        | 31                   | --                        | --                   | 20                           | 17                   |
| Zinc dross and skimmings           | 4,300                     | 8,200                | 377                       | 578                  | 3,210                        | 5,100                |
| Other (zinc content)               | 1,250                     | 823                  | 108                       | 62                   | 1,320                        | 784                  |
| Other:                             |                           |                      |                           |                      |                              |                      |
| Powders, flakes, dust              | 26,600                    | 106,000              | 2,450                     | 8,850                | 21,900                       | 81,900               |
| Waste and scrap                    | 12,900                    | 22,000               | 994                       | 1,490                | 8,650                        | 15,400               |
| Chemicals:                         |                           |                      |                           |                      |                              |                      |
| Lithopone                          | 272                       | 822                  | 87                        | 302                  | 1,010                        | 3,530                |
| Zinc oxide                         | 115,000                   | 334,000              | 9,370                     | 24,000               | 84,200                       | 233,000              |
| Zinc chloride                      | 208                       | 1,840                | 1                         | 7                    | 107                          | 1,010                |
| Zinc sulfate                       | 98,800                    | 106,000              | 7,010                     | 6,100                | 59,300                       | 54,800               |
| Zinc sulfide                       | 2,730                     | 10,400               | 103                       | 558                  | 890                          | 3,320                |

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY OR LOCALITY<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

| Material and country or locality           | General imports |         |                              | Imports for consumption |         |                              |
|--|-----------------|---------|------------------------------|-------------------------|---------|------------------------------|
|  | 2018            | 2019    |                              | 2018                    | 2019    |                              |
|  |                 | October | January–October <sup>2</sup> |                         | October | January–October <sup>2</sup> |
| <b>Ore and concentrate (zinc content):</b> |                 |         |                              |                         |         |                              |
| Canada                                     | (3)             | --      | 10                           | (3)                     | --      | 10                           |
| China                                      | 32              | --      | --                           | 32                      | --      | --                           |
| Total                                      | 32              | --      | 10                           | 32                      | --      | 10                           |
| <b>Refined zinc:</b>                       |                 |         |                              |                         |         |                              |
| Australia                                  | --              | --      | --                           | 676                     | --      | --                           |
| Belgium                                    | --              | --      | --                           | 4,340                   | --      | 219                          |
| Brazil                                     | 601             | 2,350   | 7,050                        | 601                     | 2,350   | 7,050                        |
| Canada                                     | 524,000         | 37,400  | 436,000                      | 524,000                 | 37,400  | 436,000                      |
| China                                      | 22              | (3)     | 49                           | 5,380                   | 877     | 3,560                        |
| India                                      | 2,840           | --      | --                           | 2,840                   | --      | --                           |
| Korea, Republic of                         | --              | --      | --                           | 6,810                   | --      | 174                          |
| Mexico                                     | 101,000         | 9,980   | 114,000                      | 101,000                 | 9,980   | 114,000                      |
| Namibia                                    | --              | --      | --                           | 122                     | --      | --                           |
| Netherlands                                | --              | --      | --                           | 6,040                   | 1,620   | 3,050                        |
| Peru                                       | 46,300          | 8,250   | 50,600                       | 46,300                  | 8,250   | 50,600                       |
| Poland                                     | 641             | --      | 268                          | 641                     | --      | 268                          |
| South Africa                               | 5,480           | --      | --                           | --                      | --      | --                           |
| Spain                                      | 20,000          | --      | 14,500                       | 76,100                  | 7,720   | 75,400                       |
| Taiwan                                     | 36              | 6       | 62                           | 36                      | 6       | 62                           |
| Other                                      | 3               | --      | 6                            | 3                       | --      | 6                            |
| Total                                      | 701,000         | 58,000  | 622,000                      | 775,000                 | 68,200  | 690,000                      |
| <b>Oxide:</b>                              |                 |         |                              |                         |         |                              |
| Australia                                  | 127             | 28      | 241                          | 127                     | 28      | 241                          |
| Belgium                                    | 6               | --      | 29                           | 6                       | --      | 29                           |
| Brazil                                     | 127             | --      | 5                            | 127                     | --      | 5                            |
| Canada                                     | 51,200          | 4,440   | 38,100                       | 51,200                  | 4,440   | 38,100                       |
| China                                      | 422             | 38      | 139                          | 422                     | 38      | 139                          |
| El Salvador                                | --              | --      | 20                           | --                      | --      | 20                           |
| France                                     | 16              | --      | 12                           | 16                      | --      | 12                           |
| Germany                                    | 1,150           | 81      | 1,130                        | 1,150                   | 81      | 1,130                        |
| Greece                                     | 120             | --      | 220                          | 120                     | --      | 220                          |
| Hong Kong                                  | 58              | --      | 5                            | 58                      | --      | 5                            |
| India                                      | 119             | (3)     | 64                           | 119                     | (3)     | 64                           |
| Italy                                      | 19              | --      | 22                           | 19                      | --      | 22                           |
| Japan                                      | 776             | 80      | 823                          | 776                     | 80      | 823                          |
| Korea, Republic of                         | 76              | (3)     | 73                           | 76                      | (3)     | 73                           |
| Mexico                                     | 49,800          | 3,660   | 32,500                       | 49,800                  | 3,660   | 32,500                       |
| Netherlands                                | 8,400           | 576     | 7,680                        | 8,400                   | 576     | 7,680                        |
| Peru                                       | 2,540           | 437     | 2,700                        | 2,540                   | 437     | 2,700                        |
| Philippines                                | 46              | --      | --                           | 46                      | --      | --                           |
| Russia                                     | --              | --      | 20                           | --                      | --      | 20                           |
| United Kingdom                             | 105             | 25      | 424                          | 105                     | 25      | 424                          |
| Other                                      | 59              | --      | 1                            | 59                      | --      | 1                            |
| Total                                      | 115,000         | 9,370   | 84,200                       | 115,000                 | 9,370   | 84,200                       |

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

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

(Gross weight, unless otherwise specified)

| Material                           | 2018                      |                      | 2019                      |                      |                              |                      |
|------------------------------------|---------------------------|----------------------|---------------------------|----------------------|------------------------------|----------------------|
|                                    | Quantity<br>(metric tons) | Value<br>(thousands) | October                   |                      | January–October <sup>2</sup> |                      |
|                                    |                           |                      | Quantity<br>(metric tons) | Value<br>(thousands) | Quantity<br>(metric tons)    | Value<br>(thousands) |
| Ore and concentrate (zinc content) | 806,000                   | \$1,530,000          | 60,300                    | \$89,600             | 805,000                      | \$1,300,000          |
| Unwrought:                         |                           |                      |                           |                      |                              |                      |
| Refined zinc                       | 23,300                    | 58,000               | 346                       | 1,000                | 4,570                        | 12,400               |
| Zinc alloys                        | 21,800                    | 67,200               | 1,880                     | 5,310                | 18,200                       | 53,900               |
| Wrought:                           |                           |                      |                           |                      |                              |                      |
| Bars, rods, profiles, wire         | 10,600                    | 30,600               | 913                       | 2,510                | 8,570                        | 25,000               |
| Plates, sheets, strip, foil        | 7,170                     | 29,900               | 434                       | 1,800                | 5,240                        | 20,500               |
| Ash and residues:                  |                           |                      |                           |                      |                              |                      |
| Hard zinc spelter                  | 8,300                     | 16,200               | 703                       | 983                  | 7,410                        | 13,800               |
| Other (zinc content)               | 23,900                    | 43,000               | 2,150                     | 3,090                | 20,900                       | 33,000               |
| Other:                             |                           |                      |                           |                      |                              |                      |
| Powders, flakes, dust              | 13,500                    | 56,600               | 831                       | 2,940                | 11,700                       | 42,300               |
| Waste and scrap                    | 40,400                    | 49,800               | 2,580                     | 3,320                | 26,900                       | 35,200               |
| Chemicals:                         |                           |                      |                           |                      |                              |                      |
| Lithopone                          | 179                       | 1,280                | 22                        | 120                  | 146                          | 790                  |
| Zinc oxide                         | 60,200                    | 91,800               | 2,650                     | 4,240                | 10,300                       | 24,400               |
| Zinc chloride                      | 281                       | 440                  | 12                        | 33                   | 178                          | 305                  |
| Zinc sulfate                       | 1,000                     | 879                  | 3                         | 8                    | 449                          | 605                  |
| Zinc sulfide                       | 1,730                     | 15,900               | 262                       | 1,410                | 1,820                        | 14,600               |

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

<sup>2</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 6  
AVERAGE PRICES FOR SPECIAL HIGH GRADE ZINC

| Period           | North                          | London Metal Exchange      |          |
|------------------|--------------------------------|----------------------------|----------|
|                  | American <sup>1</sup><br>¢/lb. | cash <sup>2</sup><br>¢/lb. | \$/t     |
| 2018:            |                                |                            |          |
| October          | 129.65                         | 121.17                     | 2,671.26 |
| November         | 126.11                         | 117.58                     | 2,592.28 |
| December         | 127.69                         | 119.06                     | 2,624.87 |
| January–December | 141.05                         | 132.66                     | 2,924.55 |
| 2019:            |                                |                            |          |
| January          | 124.74                         | 116.05                     | 2,558.49 |
| February         | 131.17                         | 122.58                     | 2,702.34 |
| March            | 137.84                         | 129.32                     | 2,850.91 |
| April            | 141.88                         | 133.26                     | 2,937.96 |
| May              | 133.37                         | 124.59                     | 2,746.79 |
| June             | 126.07                         | 118.01                     | 2,601.56 |
| July             | 118.64                         | 110.72                     | 2,440.96 |
| August           | 111.45                         | 103.17                     | 2,274.60 |
| September        | 113.93                         | 105.20                     | 2,319.16 |
| October          | 119.71                         | 110.90                     | 2,444.99 |
| January–October  | 125.88                         | 117.38                     | 2,587.77 |

<sup>1</sup>Platts Metals Week North American price. Based on the London Metal Exchange cash price plus premium.

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

Source: Platts Metals Week.



TABLE 7  
LONDON METAL EXCHANGE (LME) STOCKS OF SPECIAL HIGH GRADE ZINC, END OF PERIOD

(Metric tons)

| Period    | United States |                 |         | Europe | Other  | Total LME |
|-----------|---------------|-----------------|---------|--------|--------|-----------|
|           | Chicago, IL   | New Orleans, LA | Total   |        |        |           |
| 2018:     |               |                 |         |        |        |           |
| October   | --            | 120,400         | 120,400 | 23,525 | 250    | 144,175   |
| November  | --            | 103,575         | 103,575 | 8,975  | 25     | 112,575   |
| December  | 350           | 93,625          | 93,975  | 35,000 | 25     | 129,000   |
| 2019:     |               |                 |         |        |        |           |
| January   | 25            | 84,000          | 84,025  | 29,150 | 25     | 113,200   |
| February  | --            | 56,625          | 56,625  | 7,900  | 25     | 64,550    |
| March     | --            | 45,900          | 45,900  | 5,350  | 25     | 51,275    |
| April     | --            | 46,475          | 46,475  | 38,575 | --     | 85,050    |
| May       | --            | 44,900          | 44,900  | 54,900 | 575    | 100,375   |
| June      | --            | 43,825          | 43,825  | 50,500 | 800    | 95,125    |
| July      | --            | 41,925          | 41,925  | 32,325 | 5,100  | 79,350    |
| August    | --            | 33,875          | 33,875  | 28,375 | 4,725  | 66,975    |
| September | --            | 27,175          | 27,175  | 20,725 | 18,850 | 66,750    |
| October   | --            | 18,850          | 18,850  | 17,100 | 18,550 | 54,500    |

-- Zero.

Source: London Metal Exchange, Ltd.