

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 DECEMBER 2019

Domestic mine production (recoverable) of zinc in December 2019 was 57,200 metric tons (t) (tables 1, 2). Average daily mine production in December was 1,840 t, 10% higher than that in the previous month but 23% lower than that in December 2018 (fig. 1). Recoverable zinc mine production in 2019 was 730,000 t, 9% lower than that in 2018.

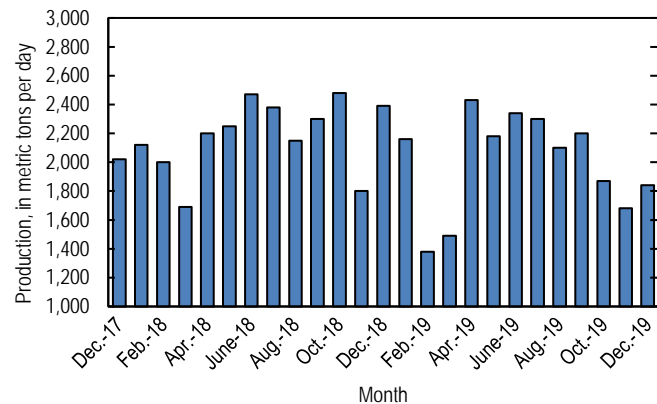


Figure 1. Average daily domestic zinc mine production (recoverable) from December 2017 through December 2019.

Stocks and Prices

Global London Metal Exchange Ltd. (LME) stocks of Special High Grade (SHG) zinc were 51,200 t at the end of December 2019, 14% lower than stocks at the end of November and 60% lower than stocks at the end of December 2018 (fig. 2, table 7).

The monthly average Platts Metals Week North American SHG zinc price in December 2019 was \$1.12 per pound, 6% lower than that in the previous month and 13% lower than that in December 2018; the average annual price for 2019 was \$1.24 per pound, 12% lower than that in 2018. The December 2019 average LME cash price for SHG zinc was \$2,273.40 per metric ton (\$1.03 per pound), 7% lower than that in November and 13% lower than that in December 2018; the average annual

price for 2019 was \$2,548.63 per metric ton (\$1.16 per pound), 13% lower than that in 2018 (fig. 3, table 6).

The North American premium to the LME cash price in December 2019 averaged 8.6 cents per pound, slightly less than that in the previous month and essentially unchanged from that in December 2018; the average annual premium in 2019 was 8.5 cents per pound, slightly more than that in 2018 (fig. 3, table 6).

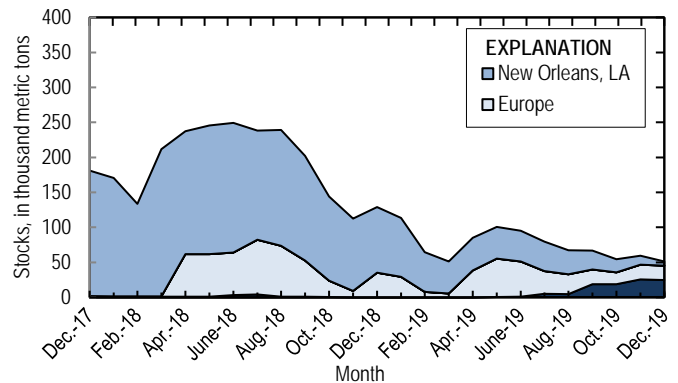


Figure 2. Global LME stocks of Special High Grade zinc, monthend, from December 2017 through December 2019. Source: London Metal Exchange Ltd.

Update

On March 5, American Zinc Recycling LLC (Pittsburgh, PA) announced that it had restarted production at its 141,000-metric-ton-per-year (155,000-short-ton-per-year) secondary zinc smelter in Mooresboro, NC. The smelter, which had been mostly idle since early 2016, produced SHG zinc from Waelz oxide, a crude zinc oxide recovered from the recycling of electric arc furnace dust (American Zinc Recycling LLC, 2020).

Reference Cited

American Zinc Recycling LLC, 2020, American Zinc Recycling restarts production at facility in Rutherford County, N.C., produces Special High Grade zinc solely from recycled sources: Pittsburgh, PA, American Zinc Recycling LLC news release, March 5. (Accessed March 31, 2020, at <https://azr.com/restarts-production-at-facility-in-rutherford-county-nc/>.)

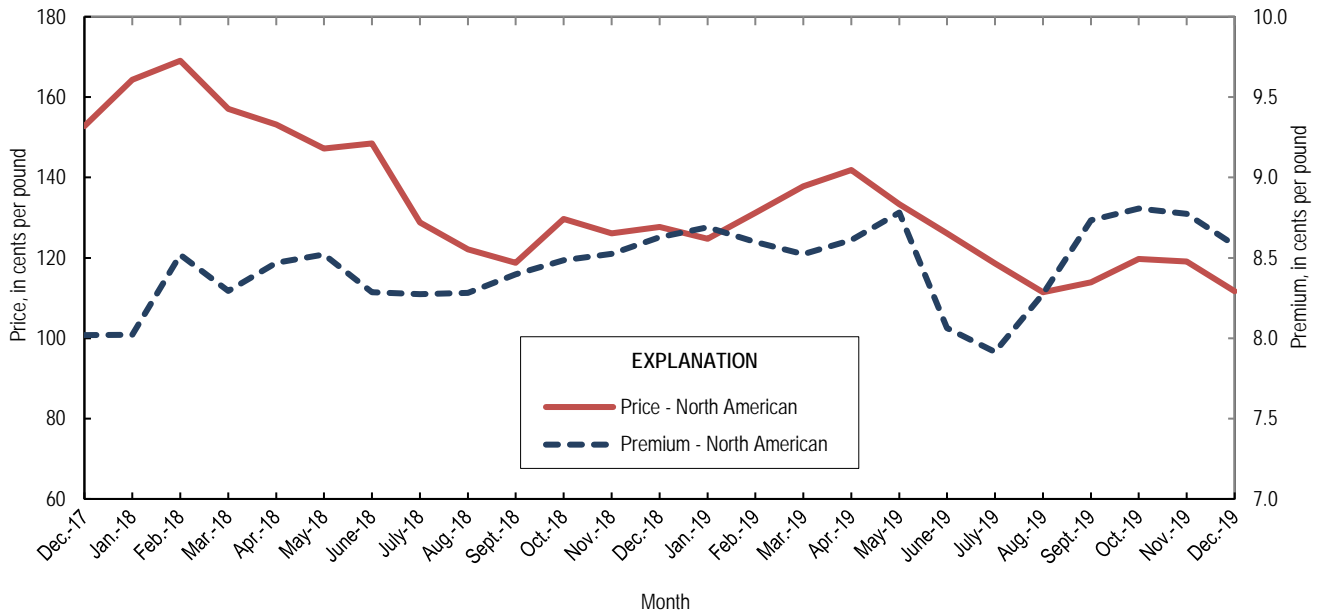


Figure 3. Average monthly North American price and premium for Special High Grade zinc from December 2017 through December 2019. Source: Platts Metals Week.

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TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2018	2019		
	January– December ^p	November	December	January– December ²
Production:				
Mine, zinc content of concentrate ³	824,000	51,700	58,900	752,000
Mine, recoverable zinc ³	799,000	50,300	57,200	730,000
Smelter, refined zinc ^e	116,000	9,900	9,900	115,000
Consumption of refined zinc, apparent ⁴	868,000	70,700	88,000	939,000
Imports for consumption:				
Ore and concentrate (zinc content)	32	--	--	10
Refined zinc	775,000	61,100	78,300	830,000
Exports:				
Ore and concentrate (zinc content)	806,000	45,000	19,100	869,000
Refined zinc	23,300	333	272	5,170
Price:⁵				
London Metal Exchange cash, average, dollars per metric ton	2,924.55	2,432.43	2,273.40	2,548.63
Platts Metals Week North American, average, cents per pound	141.05	119.11	111.70	124.13

⁶Estimated. ^pPreliminary. -- Zero.

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

²May include revisions to previously published data.

³Reported zinc content in both zinc and lead concentrates.

⁴Smelter production plus imports for consumption minus domestic exports.

⁵Special High Grade Zinc.

TABLE 2
MINE AND SMELTER PRODUCTION OF ZINC
IN THE UNITED STATES¹

(Metric tons)

Period	Mine ²		Smelter ^e
	Zinc content	Recoverable	
2018:			
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
November	51,700	50,300	9,900
December	58,900	57,200	9,900
January–December	752,000	730,000	115,000

^eEstimated.

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

²Includes the zinc content in both lead and zinc concentrates.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

(Gross weight, unless otherwise specified)

Material	2018		2019			
	Quantity (metric tons)	Value (thousands)	December		January–December ²	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	32	\$23	--	--	10	\$7
Unwrought:						
Refined zinc	775,000	2,350,000	78,300	\$194,000	830,000	2,190,000
Zinc alloys	4,390	14,300	34	126	1,530	4,480
Wrought:						
Bars, rods, profiles, wire	3,470	13,900	253	861	3,020	10,600
Plates, sheets, strip, foil	5,410	16,400	220	985	3,010	12,700
Ash and residues:						
Hard zinc spelter	19	31	--	--	20	17
Zinc dross and skimmings	4,300	8,200	308	525	3,750	5,980
Other (zinc content)	1,250	823	--	--	1,320	784
Other:						
Powders, flakes, dust	26,600	106,000	1,610	5,920	25,500	94,900
Waste and scrap	12,900	22,000	724	1,350	10,400	18,200
Chemicals:						
Lithopone	272	822	59	343	1,170	4,240
Zinc oxide	115,000	334,000	7,240	18,800	99,300	272,000
Zinc chloride	208	1,840	83	376	196	1,450
Zinc sulfate	98,800	106,000	5,130	3,960	71,700	64,300
Zinc sulfide	2,730	10,400	47	127	956	3,590

-- Zero.

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

²May 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 LOCALITY¹

(Metric tons, gross weight, unless otherwise specified)

Material and country or locality	General imports			Imports for consumption		
	2018	2019		2018	2019	
		December	January–December ²		December	January–December ²
Ore and concentrate (zinc content):						
Canada	(3)	--	10	(3)	--	10
China	32	--	--	32	--	--
Total	32	--	10	32	--	10
Refined zinc:						
Australia	--	--	--	676	--	--
Belgium	--	--	--	4,340	75	393
Brazil	601	2,940	11,300	601	2,940	11,300
Canada	524,000	45,800	517,000	524,000	45,800	517,000
China	22	--	49	5,380	778	5,770
India	2,840	--	--	2,840	--	--
Korea, Republic of	--	8,110	8,110	6,810	8,110	8,340
Mexico	101,000	14,600	142,000	101,000	14,600	142,000
Namibia	--	--	--	122	--	--
Netherlands	--	--	--	6,040	372	3,420
Peru	46,300	1,660	59,300	46,300	1,660	59,300
Poland	641	--	268	641	--	268
South Africa	5,480	--	--	--	--	--
Spain	20,000	--	14,500	76,100	3,990	81,900
Taiwan	36	--	62	36	--	62
Other	3	--	6	3	--	6
Total	701,000	73,100	753,000	775,000	78,300	830,000
Oxide:						
Australia	127	112	394	127	112	394
Belgium	6	--	30	6	--	30
Brazil	127	--	5	127	--	5
Canada	51,200	2,850	44,100	51,200	2,850	44,100
China	422	16	187	422	16	187
El Salvador	--	--	20	--	--	20
France	16	6	18	16	6	18
Germany	1,150	27	1,300	1,150	27	1,300
Greece	120	--	300	120	--	300
Hong Kong	58	--	5	58	--	5
India	119	--	74	119	--	74
Indonesia	--	103	103	--	103	103
Italy	19	--	42	19	--	42
Japan	776	65	927	776	65	927
Korea, Republic of	76	19	96	76	19	96
Mexico	49,800	2,850	39,000	49,800	2,850	39,000
Netherlands	8,400	963	9,270	8,400	963	9,270
Peru	2,540	225	2,990	2,540	225	2,990
Philippines	46	--	--	46	--	--
Russia	--	--	20	--	--	20
United Kingdom	105	2	425	105	2	425
Other	59	--	1	59	--	1
Total	115,000	7,240	99,300	115,000	7,240	99,300

-- Zero.

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

²May include revisions to previously published data.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF ZINC¹

(Gross weight, unless otherwise specified)

Material	2018		2019			
	Quantity (metric tons)	Value (thousands)	December		January–December ²	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	806,000	\$1,530,000	19,100	\$24,500	869,000	\$1,400,000
Unwrought:						
Refined zinc	23,300	58,000	272	840	5,170	14,300
Zinc alloys	21,800	67,200	1,640	4,610	21,600	63,500
Wrought:						
Bars, rods, profiles, wire	10,600	30,600	729	2,340	10,200	30,300
Plates, sheets, strip, foil	7,170	29,900	563	2,300	6,190	24,500
Ash and residues:						
Hard zinc spelter	8,300	16,200	1,200	1,810	9,370	16,700
Other (zinc content)	23,900	43,000	1,780	2,410	25,000	38,600
Other:						
Powders, flakes, dust	13,500	56,600	930	3,220	13,400	48,500
Waste and scrap	40,400	49,800	1,890	2,490	30,800	40,100
Chemicals:						
Lithopone	179	1,280	9	40	170	905
Zinc oxide	60,200	91,800	990	1,810	15,200	30,900
Zinc chloride	281	440	--	--	185	316
Zinc sulfate	1,000	879	3	15	486	648
Zinc sulfide	1,730	15,900	111	1,440	2,070	17,300

--Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 6
AVERAGE PRICES FOR SPECIAL HIGH GRADE ZINC

Period	North American ¹ ¢/lb.	London Metal Exchange cash ²	
		¢/lb.	\$/t
2018:			
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
November	119.11	110.33	2,432.43
December	111.70	103.12	2,273.40
January–December	124.13	115.60	2,548.63

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

²Average 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			Asia	Europe	Other	Total LME
	Chicago, IL	New Orleans, LA	Total				
2018:							
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	325	54,900	250	100,375
June	--	43,825	43,825	600	50,500	200	95,125
July	--	41,925	41,925	4,475	32,325	625	79,350
August	--	33,875	33,875	4,150	28,375	575	66,975
September	--	27,175	27,175	18,275	20,725	575	66,750
October	--	18,850	18,850	17,975	17,100	575	54,500
November	--	12,475	12,475	25,175	20,975	575	59,200
December	--	6,125	6,125	24,350	20,350	375	51,200

-- Zero.

Source: London Metal Exchange, Ltd.