

Mineral Industry Surveys

For information, contact:

Amy C. Tolcin, Mineral Commodity Specialist (Acting)
National Minerals Information Center
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4490, Fax: (703) 648-7757
Email: atolcin@usgs.gov

Joseph J. Kohler (Data)
Telephone: (703) 648-7954
Fax: (703) 648-7792
Email: jkohler@usgs.gov

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

TITANIUM IN THE FOURTH QUARTER 2020

Industry participation is key to the publication of aggregated totals of domestic titanium statistics. In the fourth quarter of 2020, domestic production, consumption, shipments, and stocks of sponge, ingot, slab, and mill products were withheld to avoid disclosing company proprietary data owing to limited responses (table 1).

The U.S. Geological Survey's (USGS) National Minerals Information Center canvasses the nonfuel mining and mineral processing industry in the United States for data on mineral production, consumption, recycling, stocks, and shipments. Reporting is voluntary, and the USGS greatly appreciates the data provided by companies participating in the surveys throughout the United States. The data that companies provide are the foundation upon which the USGS builds its minerals information publications. Unless authorization is granted for release, the data furnished are aggregated to avoid disclosing company proprietary data and are treated as confidential by the Department of the Interior.

Companies may report on a monthly, quarterly, semiannual, and (or) annual basis, depending on the frequency of the

surveys. Canvass forms are mailed shortly after the end of the reporting period and are requested to be returned within about 30 days. In addition to reporting by paper canvass forms, companies can electronically submit data to contribute to this valuable effort. Companies already registered with the USGS can sign up to report electronically by selecting the "Sign up" link at <https://mids.er.usgs.gov>. To notify the USGS of a new operation, or for further information on registering for electronic submissions, visit <https://mids.er.usgs.gov>. The USGS titanium metal quarterly survey has a canvas code of G37. For more information on how to participate in the titanium surveys, please contact Amy Tolcin using the contact information listed above.

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/>.

TABLE 1
COMPONENTS OF U.S. TITANIUM METAL SUPPLY AND DEMAND¹

(Metric tons)

	2019		2020				
	4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Production:							
Sponge	W	W	W	W	W	W	W
Ingot	W	W	W	W	W	W	W
Mill products	W	W	W	W	W	W	W
Exports:							
Waste and scrap	4,120	15,000	3,690	2,820	3,940	3,640	14,100
Sponge	63	869	259	263	160	30	713
Ingot	2,030	7,260	1,930	991	467	314	3,700
Other unwrought	596	2,350	450	372	361	388	1,570
Bar, rod, profiles, wire	1,940	7,380	1,960	1,240	1,010	972	5,180
Bloom, sheet bar, slab	387	1,330	324	287	502	434	1,550
Other wrought	3,000	12,100	2,690	2,250	1,600	1,490	8,030
Total	12,100	46,300	11,300	8,230	8,040	7,270	34,800
Imports:							
Waste and scrap	7,510	30,100	6,860	5,370	2,130	1,430	15,800
Sponge ²	6,820	30,000	8,670	6,740	2,150	1,630	19,200
Ingot	462	2,100	317	300	52	545	1,210
Powder	59	189	43	73	40	38	194
Other unwrought	131	1,070	264	185	98	97	644
Wrought	2,220	8,990	2,190	1,360	1,150	1,350	6,050
Castings	23	76	31	13	10	4	58
Other	189	888	172	156	128	134	590
Total	17,400	73,400	18,600	14,200	5,760	5,240	43,700
Stocks, end of period:							
Sponge, industry	W	W	W	W	W	W	W
Scrap	W	W	W	W	W	W	W
Ingot	W	W	W	W	W	W	W
Consumption:							
Sponge	W	W	W	W	W	W	W
Scrap	W	W	W	W	W	W	W
Ingot	W	W	W	W	W	W	W
Shipments:							
Ingot and slab (producer net shipments)	W	W	W	W	W	W	W
Mill products (net shipments):							
Forging and extrusion billet	W	W	W	W	W	W	W
Other	W	W	W	W	W	W	W
Total	W	W	W	W	W	W	W
Castings	W	W	W	W	W	W	W
Receipts, scrap:							
Home	W	W	W	W	W	W	W
Purchased	W	W	W	W	W	W	W
Total	W	W	W	W	W	W	W

W Withheld to avoid disclosing company proprietary data.

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

²Estimated by the U.S. Geological Survey.

TABLE 2
U.S. EXPORTS OF TITANIUM PRODUCTS¹

(Metric tons)

	HTS ² Code	2019		2020				
		4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Metal:								
Waste and scrap	8108.30.0000	4,120	15,000	3,690	2,820	3,940	3,640	14,100
Unwrought:								
Sponge	8108.20.0010	63	869	259	263	160	30	713
Ingot	8108.20.0030	2,030	7,260	1,930	991	467	314	3,700
Other	8108.20.0090	596	2,350	450	372	361	388	1,570
Wrought:								
Bar, rod, profiles, wire	8108.90.6031	1,940	7,380	1,960	1,240	1,010	972	5,180
Bloom, sheet bar, slab	8108.90.6020	387	1,330	324	287	502	434	1,550
Other	8108.90.8000	3,000	12,100	2,690	2,250	1,600	1,490	8,030
Ferrotitanium and ferrosilicon titanium	7202.91.0000	370	1,520	595	439	400	446	1,880
Ores and concentrates	2614.00.0000	7,430	12,200	3,280	17,800	3,830	3,560	28,500
Pigment:								
80% or more titanium dioxide	3206.11.0000	108,000	392,000	104,000	76,700	80,500	109,000	371,000
Other titanium dioxide	3206.19.0000	2,710	13,000	3,660	3,480	2,820	3,420	13,400
Unfinished titanium dioxide ³	2823.00.0000	1,590	5,730	1,180	1,340	1,200	1,120	4,840

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

²Harmonized Tariff Schedule of the United States.

³Unmixed and not surface treated.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF TITANIUM METAL¹

(Metric tons)

	HTS ² Code	2019		2020				
		4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Waste and scrap:								
	8108.30.0000							
Canada		484	1,750	527	250	135	226	1,140
China		129	383	149	171	161	42	524
France		1,030	3,640	1,000	573	62	35	1,670
Germany		1,290	5,120	1,170	927	714	226	3,030
Italy		480	2,210	433	306	16	26	781
Japan		1,230	4,830	1,140	1,020	431	311	2,900
Korea, Republic of		311	1,230	265	268	62	102	698
Mexico		389	1,650	333	135	215	116	799
Singapore		110	715	165	159	29	9	361
United Kingdom		1,370	5,780	903	889	180	172	2,140
Other		685	2,800	777	672	125	164	1,740
Total		7,510	30,100	6,860	5,370	2,130	1,430	15,800
Unwrought:								
Sponge:								
	8108.20.0010							
Japan		5,810	26,600	7,760	6,080	1,650	1,440	16,900
Kazakhstan ^e		797	2,940	675	564	482	158	1,880
Poland		--	105	--	--	--	--	--
Russia		14	73	40	14	--	--	53
Ukraine		144	243	162	86	--	20	268
Other		54	89	37	1	14	10	62
Total		6,820	30,000	8,670	6,740	2,150	1,630	19,200
Ingot:								
	8108.20.0030							
Kazakhstan		188	391	72	101	15	51	238
Russia		267	1,530	241	199	36	494	970
Other		8	180	5	--	1	(3)	6
Total		462	2,100	317	300	52	545	1,210
Powder	8108.20.0015	59	189	43	73	40	38	194
Other	8108.20.0095	131	1,070	264	185	98	97	644
Wrought:								
Bar, rod, profiles, wire	8108.90.6031	576	2,340	610	379	352	256	1,600
Bloom, sheet bar, slab	8108.90.6020	577	1,560	33	19	26	154	232
Plate, sheet, strip, foil	8108.90.6045	908	4,040	1,420	744	623	797	3,580
Tube and pipe	8108.90.6060	79	505	75	96	97	56	324
Other	8108.90.6075	82	543	57	121	48	91	316
Total		2,220	8,990	2,190	1,360	1,150	1,350	6,050
Other articles of titanium:								
Castings	8108.90.3030	23	76	31	13	10	4	58
Other	8108.90.3060	189	888	172	156	128	134	590
Ferrotitanium and ferrosilicon titanium	7202.91.0000	927	3,390	1,080	804	238	727	2,850

^eEstimated. -- Zero.

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

²Harmonized Tariff Schedule of the United States.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF TITANIUM CONCENTRATES¹

(Metric tons)

	HTS ² Code	2019		2020				
		4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
Ilmenite:	2614.00.6020							
Australia		9,620	113,000	67,000	18,300	--	26,200	112,000
Madagascar		47,200	250,000	65,800	48,000	101,000	3,900	218,000
Mozambique		--	172,000	--	34,800	--	34,500	69,200
Norway		--	--	--	--	190	--	190
Senegal		49,400	131,000	20,800	--	21,500	--	42,200
Ukraine		--	60,300	20,000	--	20,000	--	40,000
Total		106,000	726,000	174,000	101,000	142,000	64,600	481,000
Titanium slag:	2620.99.5000							
Canada		10,000	74,000	8	27,000	10,000	46,600	83,700
Kenya		--	--	5,000	--	--	--	5,000
Norway		8	30,100	--	15,000	15,000	15,000	45,000
South Africa		64,100	369,000	72,700	78,500	69,300	80,300	301,000
Total		74,100	473,000	77,700	121,000	94,300	142,000	435,000
Rutile:	2614.00.6040							
Australia		27,600	78,400	14,200	7,250	120	--	21,600
Kenya		5,000	37,600	13,200	--	--	--	13,200
South Africa		62,000	188,000	20,100	35,200	35,500	29,600	120,000
Other		10,100	20,200	2,570	343	52	296	3,260
Total		105,000	324,000	50,100	42,800	35,600	29,900	158,000
Synthetic rutile:	2614.00.3000							
Australia		--	12,000	--	--	--	41	41
South Africa		5,000	5,000	--	--	--	--	--
Other		1,200	1,340	--	40	40	7	87
Total		6,200	18,300	--	40	40	48	128
Titaniferous iron ore, Canada ³	2614.00.6020	--	41	--	--	--	35,500	35,500

-- Zero.

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

²Harmonized Tariff Schedule of the United States.

³Includes materials consumed for purposes other than the production of titanium commodities, principally heavy aggregate and steel-furnace flux.

Titaniferous iron ore from Canada is classified as ilmenite under the Harmonized Tariff Schedule of the United States and is not included in the previous ilmenite totals.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF TITANIUM PIGMENT¹

(Metric tons)

	HTS ² Code	2019		2020				
		4th quarter	1st quarter– 4th quarter	1st quarter	2d quarter	3d quarter	4th quarter	1st quarter– 4th quarter
80% or more titanium dioxide:	3206.11.0000							
Australia		137	7,480	537	5,030	5,420	693	11,700
Belgium		3,320	13,700	3,790	3,350	2,300	2,580	12,000
Canada		15,800	81,600	16,300	25,100	27,300	20,400	89,100
China		3,700	13,400	5,220	8,670	7,260	6,680	27,800
Czechia		1,370	5,550	1,430	1,640	1,370	1,540	5,980
Germany		3,050	17,400	5,140	5,320	4,630	5,130	20,200
Japan		1,170	5,320	1,220	1,110	731	1,040	4,090
Mexico		741	4,100	1,450	2,500	5,010	2,990	12,000
Norway		1,000	4,170	819	1,360	2,280	1,760	6,210
Spain		3,960	12,600	2,660	3,120	4,180	4,300	14,300
Other		3,480	19,200	3,770	5,050	3,900	6,320	19,000
Total		37,700	184,000	42,400	62,200	64,400	53,400	222,000
Other titanium dioxide:	3206.19.0000							
Canada		2,510	11,600	3,330	3,380	3,310	3,280	13,300
China		347	1,490	471	660	419	220	1,770
Italy		1	476	218	181	135	143	677
Mexico		151	325	211	201	70	131	613
Other		320 ^r	1,680 ^r	337 ^r	688 ^r	313 ^r	313	1,650
Total		3,330	15,600	4,570	5,110	4,250	4,090	18,000
Unfinished titanium dioxide: ³	2823.00.0000							
Canada		2,100	5,620	807	598	771	291	2,470
China		1,400	9,050	1,750	2,270	3,290	1,510	8,810
Czechia		299	1,090	197	185	81	117	579
France		536	2,010	530	1,240	651	450	2,870
Germany		877	3,300	482	495	640	489	2,110
India		477	2,280	412	517	723	164	1,820
Korea, Republic of		276	1,240	531	791	364	365	2,050
Other		438 ^r	1,680 ^r	271 ^r	803 ^r	423 ^r	315	1,810
Total		6,400	26,300	4,980	6,890	6,940	3,700	22,500
Grand total		47,500	226,000	51,900	74,200	75,600	61,200	263,000

^rRevised.

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

²Harmonized Tariff Schedule of the United States.

³Unmixed and not surface treated.

Source: U.S. Census Bureau.

TABLE 6
PRICES FOR TITANIUM MATERIALS

(End of period)

		2019				2020			
		1st quarter	2d quarter	3d quarter	4th quarter	1st quarter	2d quarter	3d quarter	4th quarter
Concentrate:									
Ilmenite, CIF, China ¹	dollars per metric ton	170-180	180-190	190-210	190-210	210-230	210-230	230-250	230-250
Titanium slag, import ²	do.	790-872	731-861	787-1,026	805-955	640-890	630-990	590-800	540-1,000
Rutile, natural: ¹									
Bagged, f.o.b. Australian ports	do.	1,045-1,350	1,150-1,350	1,250-1,350	1,250-1,300	1,300-1,350	1,300-1,350	1,300-1,350	1,300-1,350
Bulk, f.o.b. Australian ports	do.	1,000-1,100	1,100-1,200	1,100-1,200	1,100-1,200	1,150-1,200	1,150-1,200	1,150-1,200	1,150-1,200
Metal:									
Sponge metal, Japan, import ²	dollars per kilogram	10.50	10.30	10.60	10.60	10.20	9.50	11.30	11.50
Titanium mill products	producer price index ³	174	173	174	172	173	171	173	171
Titanium scrap, turnings, unprocessed (Ti-6Al-4V) ⁴	dollars per pound	0.85-0.90	0.85-0.90	0.85-0.90	0.85-0.90	0.85-0.90	0.85-0.90	0.85-0.90	1.00-1.10
Ferrotitanium, 70% (max. 4.5% Al) per pound Ti ⁴	do.	2.90-3.10	2.90-3.10	2.90-3.10	2.90-3.10	2.90-3.10	2.20-2.25	2.20-2.25	3.00-3.30
Pigment:									
Titanium dioxide pigment, import ²	dollars per metric ton	2,680	2,780	2,770	2,740	2,790	2,660	2,690	2,650
Titanium dioxide pigment ⁵	producer price index ³	208	NA	NA	NA	NA	NA	NA	NA

do. Ditto. NA Not available.

¹Source: Fastmarkets IM.

²Unit value based on landed-duty-paid U.S. imports for consumption.

³June 1982=100. Source: U.S. Department of Labor, Bureau of Labor Statistics.

⁴Source: S&P Global Platts Metals Week.

⁵The last titanium dioxide pigment producer price index update was February 2019.