

Mineral Industry Surveys

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MANUFACTURED ABRASIVES IN THE SECOND QUARTER 2025

The U.S. Geological Survey (USGS) collects quarterly data on manufactured abrasives through its survey of producers. Manufactured abrasives included in this report are metallic abrasives, fused aluminum oxide, and silicon carbide. Where indicated, data from the United States and Canada are combined to avoid disclosing proprietary information. Except where noted, the quantities cited in this report are in metric units. All unit value calculations in this report are based on unrounded data.

Metallic Abrasives

During the second quarter of 2025, an estimated 38,000 metric tons (t) of steel shot and grit valued at an estimated \$35.9 million was produced, and an estimated 39,500 t valued at an estimated \$42.8 million was shipped in the United States. This was compared with an estimated 48,800 t valued at \$40.8 million produced and an estimated 55,700 t valued at \$59.3 million shipped during the second quarter of 2024. At least one company produced shot and grit from reclaimed material. During the second quarter of 2025, production of other types of metallic shot and grit (primarily cut wire shot) were estimated to be 478 t valued at \$1.46 million, and shipments were estimated to be 564 t valued at \$2.40 million. This was compared to production of other types of metallic shot and grit that were each estimated to be 614 t valued at \$3.24 million, and shipments of that were each estimated to be 638 t valued at \$3.39 million in the second quarter of 2024. Total second quarter 2025 production of metallic abrasives was 38,500 t valued at \$37.4 million, for an average unit value of \$970 per metric ton. Total second quarter 2025 shipments of metallic abrasives were 40,100 t valued at \$45.2 million, for an average unit value of \$1,130 per metric ton (table 1).

Imports of all types of metallic abrasives during the second quarter of 2025 were 3,860 t valued at \$7.41 million, for an average unit value of \$1,920 per metric ton (table 2).

Exports of all types of metallic abrasives during the second

quarter of 2025 were 4,650 t valued at \$8.55 million, for an average unit value of \$1,840 per metric ton (table 2).

Fused Aluminum Oxide

Combined production of regular-grade crude fused aluminum oxide in the United States and Canada during the second quarter of 2025 was estimated to be 5,000 t with an estimated value of \$7.40 million, compared with 5,000 t with an estimated value of \$1.06 million during the second quarter of 2024 and 5,000 t with an estimated value of \$1.49 million during the first quarter of 2025. These production quantity figures were rounded to the nearest 5,000 t (table 1).

Imports of crude fused aluminum oxide during the second quarter of 2025 were 15,700 t valued at \$10.9 million, for an average unit value of \$695 per metric ton. Imports of ground and refined fused aluminum oxide for the same period were 16,000 t valued at \$23.9 million, for an average unit value of \$1,500 per metric ton (table 2).

Exports of crude fused aluminum oxide in the second quarter of 2025 were 2.43 t valued at \$6.27 million, for an average unit value of \$2,590 per metric ton (table 2).

Silicon Carbide

Total production of abrasive-grade silicon carbide in the United States during the second quarter of 2025 was estimated to be 10,000 t, with an estimated value of \$5.48 million, compared with 10,000 t with an estimated value of \$6.77 million during the second quarter of 2024 and 10,000 t with an estimated value of \$6.79 million during the first quarter of 2025. These production quantity figures were rounded to the nearest 5,000 t (table 1).

Imports of crude silicon carbide during the second quarter of 2025 were 11,000 t valued at \$11.3 million, for an average unit value of \$1,030 per metric ton. Imports of ground and refined silicon carbide for the same period were 3,330 t valued at \$21.2 million, for an average unit value of \$6,380 per metric ton (table 2).

Exports of crude silicon carbide during the second quarter of 2025 were 933 t with a value of \$1.90 million, for an average unit value of \$2,040 per metric ton. Exports of ground and refined silicon carbide for the same period were 810 t valued at \$4.64 million, for an average unit value of \$5,730 per metric ton (table 2).

A worksheet has been added to the Excel table files that includes a button to remove text and numerical footnotes from data cells. This will allow users to only have numbers in data cells. Please see the worksheet titled RemoveTextButton for instructions on how to use the tool. Note: you must download the Excel file in order to use the tool.

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Table 1. Estimated production and shipments of aluminum oxide, silicon carbide, and metallic abrasives.

[Data are rounded to no more than three significant digits; may not add to totals shown. Revised data are marked with a superscript "r".]

Source and product	2024						2025					
	2nd quarter		3d quarter		4th quarter		1st quarter–4th quarter		1st quarter		2nd quarter	
	Quantity (metric tons)	Value (thousand dollars)	Quantity (metric tons)	Value (thousand dollars)	Quantity (metric tons)	Value (thousand dollars)	Quantity (metric tons)	Value (thousand dollars)	Quantity (metric tons)	Value (thousand dollars)	Quantity (metric tons)	Value (thousand dollars)
United States, production												
Steel shot and grit	48,800	40,800	47,800	35,100	43,800	35,400	191,000	147,000	41,700	32,100	38,000	35,900
Other shot and grit ¹	614	3,240	575	2,650	536	2,230	2,360	10,900	497	1,830	478	1,460
Total	49,500	44,000	48,400	37,800	44,300	37,600	193,000	158,000	42,200	33,900	38,500	37,400
United States, shipments												
Steel shot and grit	55,700	59,300	54,800	54,100	52,200	53,800	220,000	237,000	46,900	50,600	39,500	42,800
Other shot and grit ¹	638	3,390	600	2,760	542	2,950	2,440	12,100	572	2,520	564	2,400
Total	56,400	62,700	55,400	56,800	52,700	56,800	223,000	249,000	47,500	53,100	40,100	45,200
United States and Canada, production²												
Crude aluminum oxide, regular-grade	5,000	1,060	5,000	1,210	5,000	1,840 ^r	25,000	5,020 ^r	5,000	1,490	5,000	1,400
United States, production²												
Silicon carbide ³	10,000	6,770	10,000	7,780	10,000	8,950	40,000	29,400	10,000	6,790	10,000	5,480

¹Includes cut wire shot and reclaimed shot and grit from primary producers.²Quantities are rounded to the nearest 5,000 tons to avoid disclosing proprietary data. Values are rounded to avoid disclosing proprietary data.³Includes materials for metallurgical uses and other applications.

Table 2. U.S. exports and imports for consumption of aluminum oxide, silicon carbide, and metallic abrasives.[Data are rounded to no more than three significant digits; may not add to totals shown. Revised data are marked with a superscript “r”. Source: U.S. Census Bureau (<https://usatrade.census.gov/>).]

Source and product	2024						2025					
	2nd quarter		3d quarter		4th Quarter		1st quarter–4th quarter		1st quarter		2nd quarter	
	Quantity (metric tons)	Value ¹ (thousand dollars)	Quantity (metric tons)	Value ¹ (thousand dollars)	Quantity (metric tons)	Value ¹ (thousand dollars)	Quantity (metric tons)	Value ¹ (thousand dollars)	Quantity (metric tons)	Value ¹ (thousand dollars)	Quantity (metric tons)	Value ¹ (thousand dollars)
Exports												
Metallic abrasives	4,950	8,240	4,660	7,770	4,700 ^r	10,600	19,300	35,400	4,790	8,230	4,650	8,550
Aluminum oxide, crude	2,620	9,530	2,140	7,990	2,330	6,850	9,190	31,400	1,650	5,050	2,430	6,270
Silicon carbide												
Crude	1,170	1,450	858 ^r	1,120 ^r	926 ^r	3,240 ^r	4,410	8,110 ^r	1,030	1,290	933	1,900
Ground and refined	1,420	4,830	813	5,160	1,510 ^r	3,780 ^r	5,280 ^r	19,100	1,510	5,790	810	4,640
Imports for consumption												
Metallic abrasives	4,330	8,440	3,970	7,980	4,550	7,510 ^r	16,900	32,200	4,240	8,900	3,860	7,410
Aluminum oxide												
Crude	16,900	10,500	39,100	24,900	37,000	24,100	111,000	70,700	24,500	17,100	15,700	10,900
Ground and refined	12,300	18,800 ^r	13,500	19,000	10,800	14,700	49,700 ^r	71,400 ^r	14,400	21,500	16,000	23,900
Silicon carbide												
Crude	14,500 ^r	11,300 ^r	19,600	20,100	24,000	18,500	83,900 ^r	69,700 ^r	27,000	17,700	11,000	11,300
Ground and refined	8,010	33,500	6,890	30,000	6,010 ^r	27,000 ^r	29,400 ^r	128,000	9,330	32,200	3,330	21,200

¹Export values are free alongside ship values; import values are customs values.