

GEMSTONES¹

(Data in million dollars unless otherwise noted)

Domestic Production and Use: The combined value of U.S. natural and synthetic gemstone output in 2020 was an estimated \$99 million, a 4% decrease compared with that of 2019. Domestic gemstone production included agate, beryl, coral, diamond, garnet, jade, jasper, opal, pearl, quartz, sapphire, shell, topaz, tourmaline, turquoise, and many other gem materials. In descending order of production value, Arizona, Oregon, California, Nevada, Montana, Maine, Arkansas, Colorado, Utah, Idaho, Tennessee, North Carolina, and New York produced 95% of U.S. natural gemstones. Synthetic gemstones were manufactured by five companies in California, North Carolina, New York, Maryland, and Arizona, in decreasing order of production value. U.S. synthetic gemstone production decreased by 4% compared with that in 2019. Major gemstone end uses were carvings, gem and mineral collections, and jewelry.

Salient Statistics—United States:	2016	2017	2018	2019	2020^e
Production: ²					
Natural ³	11.7	9.2	9.5	9.2	8.8
Laboratory-created (synthetic)	54.9	55.1	65	94	90
Imports for consumption	25,200	24,900	27,700	24,400	17,000
Exports, excluding reexports	2,940	2,440	1,850	1,050	1,500
Consumption, apparent ⁴	22,300	22,500	25,900	23,500	16,000
Price	Variable, depending on size, type, and quality				
Employment, mine, number ^e	1,120	1,120	1,120	1,120	1,120
Net import reliance ⁵ as a percentage of apparent consumption	99	99	99	99	99

Recycling: Gemstones are often recycled by being resold as estate jewelry, reset, or recut, but this report does not account for those stones.

Import Sources (2016–19, by value): Diamond: India, 39%; Israel, 32%; Belgium, 13%; South Africa, 4%; and other, 12%. Diamond imports accounted for an average of 90% of the total value of gem imports.

Tariff:	Item	Number	Normal Trade Relations 12–31–20
	Coral and similar materials, unworked	0508.00.0000	Free.
	Imitation gemstones	3926.90.4000	2.8% ad val.
	Pearls, imitation, pearl beads, not strung	7018.10.1000	4.0% ad val.
	Imitation gemstones, glass beads	7018.10.2000	Free.
	Pearls, natural, graded and temporarily strung	7101.10.3000	Free.
	Pearls, natural, other	7101.10.6000	Free.
	Pearls, cultured	7101.21.0000	Free.
	Diamonds, unworked or sawn	7102.31.0000	Free.
	Diamonds, ½ carat or less	7102.39.0010	Free.
	Diamonds, cut, more than ½ carat	7102.39.0050	Free.
	Other nondiamond gemstones, unworked	7103.10.2000	Free.
	Other nondiamond gemstones, uncut	7103.10.4000	10.5% ad val.
	Rubies, cut	7103.91.0010	Free.
	Sapphires, cut	7103.91.0020	Free.
	Emeralds, cut	7103.91.0030	Free.
	Other nondiamond gemstones, cut	7103.99.1000	Free.
	Other nondiamond gemstones, worked	7103.99.5000	10.5% ad val.
	Synthetic gemstones, cut but not set	7104.90.1000	Free.
	Synthetic gemstones, other	7104.90.5000	6.4% ad val.

Depletion Allowance: 14% (domestic and foreign).

Government Stockpile: None.

Events, Trends, and Issues: During 2020, the global COVID-19 pandemic affected the U.S. gemstone and jewelry industries. As the restrictions, lockdowns, and store closings were imposed, many jewelry stores initially saw reduced sales but later in the year successfully shifted sales to their websites. Monthly U.S. gemstone imports declined from March through August, with the largest decrease year-on-year of 96% happening in April. U.S. apparent consumption of gemstones decreased by 32%. All major U.S. gemstone trade shows were canceled from March through August.

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In 2020, U.S. imports for consumption of gem-quality diamonds were estimated to be about \$15 billion, which was a 31% decrease compared with \$21.7 billion in 2019. U.S. imports for consumption of natural, nondiamond gemstones were estimated to be about \$2.1 billion, which was a 22% decrease compared with \$2.7 billion in 2019. Despite the COVID-19 pandemic, the United States was once again the leading global market in terms of consumer demand. The United States is expected to continue to dominate global gemstone demand.

During 2020, the COVID-19 pandemic affected the global diamond industry with temporary diamond mine closings around the world and disruptions of the supply chain. Demand for diamonds plummeted during the pandemic, halting sales. Only demand for large, high-quality diamonds remained stable, and their prices increased steadily during the year. The pandemic forced mining companies to cancel or delay sales, and major diamond trade shows were canceled owing to health and travel restrictions. Rough diamond prices declined by between 15% and 27% at the few sales that took place, and the rough diamond market was not operating normally during the second quarter. In India, where about 80% of the world's diamonds are polished, cutting centers experienced major disruptions as gem workers contracted the virus. Imports of rough diamonds in India decreased from \$1.5 billion in February to \$1 million in April. Antwerp experienced a 20% drop in rough imports and a 46% decline in exports of polished diamonds. Worldwide, many temporary mine closures resulting from the pandemic, had yet to reopen and were at risk of becoming permanent. Many mining companies sought credit protection or were restructuring their credit. The global diamond jewelry market had an estimated value of \$80 billion in 2019 and was expected to decline by 19% in 2020.

Total world diamond production during 2020 decreased by 10% from 2019 levels. This decline was attributed to pandemic mine closures and mines becoming depleted.

World Gem Diamond Mine Production and Reserves:

	Mine production ⁶		Reserves ⁷
	2019	2020 ^e	
United States	—	—	World reserves of diamond-bearing deposits are substantial. No reserves data are available for other gemstones.
Angola	8,230	8,000	
Australia	260	200	
Botswana	16,600	13,000	
Brazil	166	100	
Canada	18,600	17,000	
Congo (Kinshasa)	2,670	3,000	
Guinea	183	150	
Lesotho	1,110	1,000	
Namibia	2,020	1,900	
Russia	25,400	24,000	
Sierra Leone	649	550	
South Africa	5,740	4,000	
Tanzania	313	300	
Zimbabwe	211	200	
Other countries	224	230	
World total (rounded)	82,400	74,000	

World Resources:⁷ Most diamond ore bodies have a diamond content that ranges from less than 1 carat per ton to about 6 carats per ton of ore. The major diamond reserves are in southern Africa, Australia, Canada, and Russia.

Substitutes: Glass, plastics, and other materials are substituted for natural gemstones. Synthetic gemstones (manufactured materials that have the same chemical and physical properties as natural gemstones) are common substitutes. Simulants (materials that appear to be gems but differ in chemical and physical characteristics) also are frequently substituted for natural gemstones.

^eEstimated. — Zero.

¹Excludes industrial diamond and industrial garnet. See Diamond (Industrial) and Garnet (Industrial).

²Estimated minimum production.

³Includes production of freshwater shell.

⁴Defined as production (natural and synthetic) + imports – exports (excluding reexports).

⁵Defined as imports – exports (excluding reexports).

⁶Data in thousands of carats of gem diamond.

⁷See Appendix C for resource and reserve definitions and information concerning data sources.