

GEMSTONES¹

(Data in million dollars unless otherwise noted)

Domestic Production and Use: The combined value of U.S. natural and synthetic gemstone output in 2019 was an estimated \$65 million, a 9% increase compared with that of 2018. 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 decreasing order of production value, Arizona, Oregon, Nevada, California, Montana, Maine, Arkansas, Colorado, Utah, Idaho, North Carolina, Tennessee, and New York produced 96% of U.S. natural gemstones. Synthetic gemstones were manufactured by four firms in North Carolina, California, Maryland, and Arizona, in decreasing order of production value. Major gemstone uses were carvings, gem and mineral collections, and jewelry.

Salient Statistics—United States:	2015	2016	2017	2018	2019^e
Production: ²					
Natural ³	8.5	11.7	9.2	9.5	10
Laboratory-created (synthetic)	55.1	54.9	55.1	50.0	55
Imports for consumption	25,100	25,200	24,900	27,700	26,000
Exports, excluding reexports	3,030	2,940	2,440	1,850	1,200
Consumption, apparent ⁴	22,100	22,300	22,500	25,900	25,000
Price	Variable, depending on size, type, and quality				
Employment, mine, number ^e	1,100	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 (2015–18 by value): Diamond: India, 37%; Israel, 33%; Belgium, 14%; South Africa, 4%; and other, 12%. Typically, diamond imports account for 90% to 95% of the total value of gem imports.

Tariff:	Item	Number	Normal Trade Relations 12–31–19
	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: In 2019, U.S. imports for consumption of gem-quality diamonds were estimated to be about \$23 billion, which was an 8% decrease compared with \$25.1 billion in 2018. U.S. imports for consumption of natural, nondiamond gemstones were estimated to be about \$3.0 billion, which was a 14% increase compared with \$2.64 billion in 2018. U.S. synthetic gemstone production increased by 10% compared with that in 2018. The increase

GEMSTONES

in synthetic production was because of the combination of a 5% increase in the value of U.S. synthetic diamond production and a 16% increase in the value of U.S. synthetic moissanite production compared with those of 2018. No synthetic diamond production was reported in South Carolina during 2019.

The United States accounted for more than 35% of the world's diamond consumption and was once again the leading global market in terms of consumer demand. The United States is expected to continue to dominate global gemstone demand. Consumption also increased in Asia. During the first three quarters of 2019, globally, the leading gemstone sales by value were diamond, emerald, ruby, sapphire, and tanzanite. Worldwide rough gem-grade diamond sales decreased by 39% during the first three quarters compared with the same period of 2018.

Total world diamond production during 2019 increased slightly from 2018 levels. Production is expected to continue to remain steady in the near term and then decline slightly, until 2025, when several large mines are expected to reach the end of their mine life, and only a few new projects are being developed.

World Gem Diamond Mine Production and Reserves:

	Mine production ⁶		Reserves ⁷
	<u>2018</u>	<u>2019^e</u>	
United States	(8)	(8)	World reserves of diamond-bearing deposits are substantial. No reserves data are available for other gemstones.
Angola	7,570	7,500	
Australia	281	280	
Botswana	17,100	18,000	
Brazil	251	250	
Canada	23,200	23,000	
China	99	100	
Congo (Kinshasa)	3,030	3,000	
Guinea	234	240	
Lesotho	1,290	1,300	
Namibia	2,400	2,500	
Russia	24,200	25,000	
Sierra Leone	590	600	
South Africa	7,930	8,000	
Tanzania	328	400	
Zimbabwe	326	400	
Other countries	<u>242</u>	<u>400</u>	
World total (rounded)	89,000	91,000	

World Resources: Most diamond-bearing 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.

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.

⁸Less than ½ unit.