

## GEMSTONES<sup>1</sup>

(Data in million dollars unless otherwise noted)

**Domestic Production and Use:** The combined value of U.S. natural and synthetic gemstone output in 2017 was an estimated \$71 million, a 6% increase compared with that of 2016. 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, Oregon, Arizona, Idaho, Nevada, Colorado, California, Montana, North Carolina, Arkansas, Utah, and Maine produced 92% of U.S. natural gemstones. Synthetic gemstones were manufactured by five firms in North Carolina, California, New York, South Carolina, and Arizona, in decreasing order of production value. Major gemstone uses were carvings, gem and mineral collections, and jewelry. The apparent consumption in the table below is much lower than the actual consumption because the value of exports includes the value of reexports.

<b>Salient Statistics—United States:</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017<sup>e</sup></b>
Production: <sup>2</sup>					
Natural <sup>3</sup>	9.6	9.5	8.5	11.7	13.0
Laboratory-created (synthetic)	56.9	51.0	55.1	54.9	58.0
Imports for consumption	24,700	26,400	25,100	25,200	25,100
Exports, including reexports <sup>4</sup>	19,400	21,300	18,500	19,500	19,000
Consumption, apparent <sup>5</sup>	5,370	5,160	6,660	5,770	6,170
Price	Variable, depending on size, type, and quality				
Employment, mine, number <sup>e</sup>	1,100	1,100	1,100	1,120	1,120
Net import reliance <sup>6</sup> 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 (2013–16 by value):** Israel, 36%; India, 34%; Belgium, 16%; South Africa, 4%; and other, 10%. Diamond imports accounted for 90% of the total value of gem imports.

<b>Tariff:</b>	<b>Item</b>	<b>Number</b>	<b>Normal Trade Relations 12–31–17</b>
	Coral and similar materials, unworked	0508.00.0000	Free.
	Imitation gemstones	3926.90.4000	2.8% ad val.
	Pearls, imitation, not strung	7018.10.1000	4.0% ad val.
	Pearls, Imitation, glass beads	7018.10.2000	Free.
	Pearls, natural, graded, temporarily strung	7101.10.3000	Free.
	Pearls, natural, not elsewhere specified or included	7101.10.6000	Free.
	Pearls, cultured	7101.21.0000	Free.
	Diamond, unworked or sawn	7102.31.0000	Free.
	Diamond, ½ carat or less	7102.39.0010	Free.
	Diamond, cut, more than ½ carat	7102.39.0050	Free.
	Other gemstones, unworked	7103.10.2000	Free.
	Other gemstones, other	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 gemstones, otherwise 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.

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**Events, Trends, and Issues:** In 2017, the U.S. imports for consumption for gem-quality diamonds were estimated to be about \$22.6 billion, which was a 3% decrease compared with \$23.2 billion in 2016. U.S. imports for consumption for natural, nondiamond gemstones was estimated to be about \$2.50 billion, which was a 23% increase compared with \$2.0 billion in 2016. The United States accounted for more than 35% of the world's diamond consumption and is expected to continue to dominate global gemstone demand.

Increases in U.S. synthetic gemstone production were the result of a new synthetic diamond manufacturing firm in California reaching full-scale production and having a full year of production. A South Carolina synthetic diamond manufacturing firm added new manufacturing equipment that greatly increased its capacity in 2016, which was in operation for its first full year during 2017.

A Canada-based company was expected to resume mining off the coast of Namibia in 2018. The Ministry of Mines and Energy of Namibia renewed the license for a period of 10 years. Marine diamond production has exceeded land-based diamond mining in Namibia in recent years. In 2016, Namibia produced 1.72 million carats of which only 403,000 carats were produced on land.

### **World Gem Diamond Mine Production and Reserves:**

	Mine production <sup>7</sup>		Reserves <sup>8</sup>
	2016	2017 <sup>e</sup>	
United States	(9)	(9)	World reserves of diamond-bearing deposits are substantial. No reserve data are available for other gemstones.
Angola	8,120	8,100	
Australia	280	280	
Botswana	14,400	14,000	
Brazil	184	180	
Canada	13,000	13,000	
Congo (Kinshasa)	4,640	4,600	
Ghana	142	140	
Guinea	90	90	
Guyana	140	140	
Lesotho	342	340	
Namibia	1,720	1,700	
Russia	22,600	23,000	
Sierra Leone	439	440	
South Africa	6,650	6,700	
Tanzania	205	210	
Zimbabwe	210	210	
Other countries	<u>230</u>	<u>230</u>	
World total (rounded)	73,400	73,000	

**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 gem 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 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.

<sup>e</sup>Estimated.

<sup>1</sup>Excludes industrial diamond and garnet. See Diamond (Industrial) and Garnet (Industrial).

<sup>2</sup>Estimated minimum production.

<sup>3</sup>Includes production of freshwater shell.

<sup>4</sup>Reexports account for between 67% and 92% of the totals.

<sup>5</sup>Defined as production (natural and synthetic) + imports – exports (including reexports).

<sup>6</sup>Defined as imports – exports and reexports.

<sup>7</sup>Data in thousands of carats of gem diamond.

<sup>8</sup>See [Appendix C](#) for resource and reserve definitions and information concerning data sources.

<sup>9</sup>Less than ½ unit.