

GEMSTONES¹

(Data in million dollars unless otherwise noted)

Domestic Production and Use: The combined value of U.S. natural and synthetic gemstone output increased slightly in 2007 from that of 2006. The value of natural gemstone production increased by about 6% during 2007. Domestic gemstone production included agate, beryl, coral, garnet, jade, jasper, opal, pearl, quartz, sapphire, shell, topaz, tourmaline, turquoise, and many other gem materials. In decreasing order, Tennessee, Oregon, Arizona, California, Arkansas, Alabama, Montana, Idaho, and Nevada produced 83% of U.S. natural gemstones. The value of laboratory-created (synthetic) gemstones production increased slightly during the year. Laboratory-created gemstones were manufactured by five firms in North Carolina, Florida, Massachusetts, Michigan, and Arizona, in decreasing order of production. Major gemstone uses were jewelry, carvings, and gem and mineral collections.

Salient Statistics—United States:	2003	2004	2005	2006	2007^e
Production: ²					
Natural ³	12.5	14.5	13.4	11.3	12.0
Laboratory-created (synthetic)	33.4	30.7	51.1	52.1	52.3
Imports for consumption	13,600	15,500	17,200	18,300	19,600
Exports, including reexports ⁴	5,490	7,230	8,850	9,930	11,400
Consumption, apparent ⁵	8,160	8,220	8,410	8,430	8,260
Price	Variable, depending on size, type, and quality				
Employment, mine, number ^e	1,200	1,200	1,200	1,200	1,200
Net import reliance ⁶ as a percentage of apparent consumption	99	99	99	99	99

Recycling: Insignificant.

Import Sources (2003-06 by value): Israel, 47%; India, 19%; Belgium, 17%; South Africa, 5%; and other, 12%. Diamond imports accounted for 95% of the total value of gem imports.

Tariff:	Item	Number	Normal Trade Relations 12-31-07
	Imitation precious stones	7018.10.2000	Free.
	Pearls, imitation, not strung	7018.10.1000	4.0% ad val.
	Pearls, natural	7101.10.0000	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.
	Precious stones, unworked	7103.10.2000	Free.
	Precious stones, simply sawn	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 precious stones, cut but not set	7103.99.1000	Free.
	Other precious stones	7103.99.5000	10.5% ad val.
	Synthetic, cut but not set	7104.90.1000	Free.

Depletion Allowance: 14% (Domestic and foreign).

Government Stockpile: The National Defense Stockpile (NDS) does not contain an inventory of gemstones. However, a very small portion of the industrial diamond stone inventory is of near-gem quality. Additionally, the beryl and quartz crystal inventories contain some gem-quality material that could be used by the gem industry. The U.S. Department of Defense is currently selling some NDS materials that may be near-gem quality.

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Events, Trends, and Issues: In 2007, the U.S. market for unset gem-quality diamonds was estimated to have exceeded \$17.7 billion, accounting for more than an estimated 35% of world demand. The domestic market for natural, unset nondiamond gemstones was estimated to be about \$1.03 billion. The United States is expected to dominate global gemstone consumption throughout this decade.

Canada's Ekati Mine completed its eighth full year in 2006, with diamond production of 2.52 million carats. The Diavik Diamond Mine completed its fourth full year in 2006, with diamond production of 9.8 million carats. Canada's third diamond mine, the Jericho Diamond Mine, began production of rough diamonds during the first quarter of 2006 and declared commercial production on July 1, 2006. The Jericho mine's production for the year was 296,000 carats. Diamond exploration is continuing in Canada, and many new deposits have been found. Canada produced about 14% of the world's natural gemstone diamond production in 2006. The success of Canadian diamond mines has stimulated interest in exploration for commercially feasible diamond deposits in the United States. Currently, there are no operating commercial diamond mines in the United States.

Mine production of diamond in 2007 for Canada, Congo (Kinshasa), and Russia increased, while production for South Africa decreased, and production in Angola, Australia, Botswana, Brazil, the Central African Republic, China, Côte d'Ivoire, Ghana, Guinea, Guyana, Namibia, Sierra Leone, and Tanzania remained the same compared with that of 2006, based on submissions from country sources.

World Mine Production,⁷ Reserves, and Reserve Base:

	Mine production		Reserves and reserve base ⁸
	2006	2007 ^e	
Angola	7,000	7,000	World reserves and reserve base of diamond-bearing deposits are substantial. No reserves or reserve base data are available for other gemstones.
Australia	7,310	7,300	
Botswana	24,000	24,000	
Brazil	300	300	
Canada	12,400	12,600	
Central African Republic	315	320	
China	100	100	
Congo (Kinshasa)	5,600	5,780	
Côte d'Ivoire	200	200	
Ghana	780	780	
Guinea	355	360	
Guyana	300	300	
Namibia	2,200	2,200	
Russia	23,400	35,800	
Sierra Leone	360	360	
South Africa	6,240	6,080	
Tanzania	195	200	
Other countries ⁹	245	250	
World total (rounded)	91,300	104,000	

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. The major gem diamond reserves are in southern Africa, Australia, Canada, and Russia.

Substitutes: Plastics, glass, 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.

^eEstimated.

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

²Estimated minimum production.

³Includes production of freshwater shell.

⁴Reexports account for about 78% of the totals.

⁵Reexports excluded from apparent consumption calculation.

⁶Defined as imports – exports and reexports + adjustments for Government and industry stock changes.

⁷Data in thousands of carats of gem diamond.

⁸See Appendix C for definitions.

⁹In addition to countries listed, Gabon, India, Indonesia, Liberia, and Venezuela are known to produce gem diamonds.