

GEMSTONES¹

(Data in million dollars unless otherwise noted)

Domestic Production and Use: The combined value of U.S. natural and synthetic gemstone output decreased by 35% in 2008 from that of 2007. The natural gemstone production value increased about 10% from that of 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, Oregon, Tennessee, Arizona, California, North Carolina, Arkansas, Alabama, Montana, Idaho, and Maine produced 87% of U.S. natural gemstones. The production value of laboratory-created (synthetic) gemstones decreased 42% from that of the previous year. This drop in production resulted from a large decrease in Moissanite production value. Laboratory-created gemstones were manufactured by four firms in North Carolina, Florida, Massachusetts, and Arizona, in decreasing order of production. Major gemstone uses were carvings, gem and mineral collections, and jewelry.

Salient Statistics—United States:	2004	2005	2006	2007	2008^e
Production: ²					
Natural ³	14.5	13.4	11.3	11.9	13.0
Laboratory-created (synthetic)	30.7	51.1	52.1	73.5	42.8
Imports for consumption	15,500	17,200	18,300	20,100	22,700
Exports, including reexports ⁴	7,230	8,850	9,930	12,300	16,400
Consumption, apparent ⁵	8,220	8,410	8,430	7,880	6,420
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 (2004-07 by value): Israel, 47%; India, 19%; Belgium, 16%; South Africa, 5%; and other, 13%. Diamond imports accounted for 95% of the total value of gem imports.

Tariff:	Item	Number	Normal Trade Relations 12-31-08
	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 2008, the U.S. market for unset gem-quality diamonds was estimated to have exceeded \$19.0 billion, accounting for more than an estimated 35% of world demand. The domestic market for natural, unset nondiamond gemstones was estimated to be about \$1.15 billion. The United States is expected to continue dominating global gemstone consumption.

Canadian diamond production continued increasing in 2008 to about 18 million carats. Diamond exploration also continued in Canada, and many new deposits have been found. Canada produced more than 19% of the world's natural gemstone diamonds in 2008. The success of the Canadian gem diamond industry has stimulated interest in exploration for commercially feasible diamond deposits in the United States; however, at present, there are no operating commercial diamond mines in the United States.

Mine production of diamond in 2008 increased for Angola, the Central African Republic, Guinea, and Sierra Leone, while production decreased for Brazil, and production in Australia, Botswana, Canada, China, Congo (Kinshasa), Côte d'Ivoire, Ghana, Guyana, Namibia, Russia, South Africa, and Tanzania remained the same compared with that of 2007, based on submissions from country sources.

World Gem Diamond Mine Production,⁷ Reserves, and Reserve Base:

	Mine production		Reserves and reserve base ⁸
	<u>2007</u>	<u>2008^e</u>	
Angola	8,700	10,000	World reserves and reserve base of diamond-bearing deposits are substantial. No reserves or reserve base data are available for other gemstones.
Australia	231	230	
Botswana	25,000	25,000	
Brazil	300	200	
Canada	18,000	18,000	
Central African Republic	370	470	
China	100	100	
Congo (Kinshasa)	5,400	5,400	
Côte d'Ivoire	210	210	
Ghana	720	720	
Guinea	815	1,100	
Guyana	350	350	
Namibia	2,200	2,200	
Russia	23,300	23,300	
Sierra Leone	360	600	
South Africa	6,100	6,100	
Tanzania	230	230	
Other countries ⁹	<u>210</u>	<u>210</u>	
World total (rounded)	93,000	94,000	

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.

⁸[See Appendix C for definitions.](#)

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