

## GOLD

(Data in metric tons<sup>1</sup> of gold content, unless otherwise noted)

**Domestic Production and Use:** Gold was produced at about 70 major lode mines, a dozen or more large placer mines, nearly all in Alaska, and numerous smaller placer mines, mostly in Alaska and in the Western States. In addition, a small amount of domestic gold was recovered as a byproduct of processing base metals, chiefly copper. Thirty mines yielded about 90% of the gold produced in the United States. The value of 1998 mine production was about \$4 billion. Commercial-grade refined gold came from about two dozen producers. A few dozen companies, out of several thousand companies and artisans, dominated the fabrication of gold into commercial products. U.S. jewelry manufacturing was heavily concentrated in the New York, NY, and Providence, RI, areas with lesser concentrations in California, Florida, and Texas. Estimated uses were: jewelry and arts, 55%; other industrial, 38%; electronics, 4%; and dental, 3%.

<b>Salient Statistics—United States:</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998<sup>e</sup></b>
Production: Mine	327	317	326	360	350
Refinery: Primary	241	(2)	(2)	270	260
Secondary (old scrap)	148	(2)	(2)	100	100
Imports <sup>3</sup>	114	126	159	209	340
Exports <sup>3</sup>	395	347	471	477	460
Consumption, reported <sup>76</sup>	(2)	(2)	137	140	
Stocks, yearend, Treasury <sup>4</sup>	8,140	8,140	8,140	8,140	8,140
Price, dollars per ounce <sup>5</sup>	385	386	389	332	300
Employment, mine and mill, number <sup>8</sup>	14,100	14,700	16,900	16,300	16,000
Net import reliance <sup>6</sup> as a percent of apparent consumption	E	E	E	E	E

**Recycling:** 100 metric tons of old scrap was recycled in 1998 or 70% of the reported consumption as shown in the Salient Statistics subsection.

**Import Sources (1994-97):<sup>3</sup>** Canada, 55%; Brazil, 11%; Mexico, 8%; Chile, 6%; Colombia, 6%; and other, 14%.

**Tariff:** Most imports of unwrought gold, including bullion and doré, enter duty free.

**Depletion Allowance:** 15% (Domestic), 14% (Foreign).

**Government Stockpile:** The U.S. Department of the Treasury maintains stocks of gold (see salient statistics above) and the U.S. Department of Defense administers a Government-wide secondary precious metals recovery program.

**Events, Trends, and Issues:** Domestic gold mine production in 1998 was estimated at slightly below the record level of 1997, but high enough to maintain the United States' position as the world's second largest gold-producing nation, after South Africa. Domestic output continued to be dominated by Nevada and California, where combined production accounted for nearly 75% of the U.S. total. Between July 1997 and June 1998, six gold mines were closed, nine new gold mines were opened, and one gold mine was expanded in the United States. During this 12-month period, the average output per mine had increased, and companies merged creating fewer but larger gold mining operations in the United States. Most of the larger companies were successfully replacing their annual production with new reserves, but smaller companies were finding this more difficult. Estimates by an industry association indicate that worldwide gold exploration expenditures decreased in 1998, with 1997 marking the peak of exploration spending for the 1990's. The expenditures of U.S. gold producers continued to fall in 1998 owing to the declining gold price.

During the first 9 months of the year, the Engelhard Industries daily price of gold ranged from a low of about \$275 per troy ounce, in August, to a high of nearly \$315, in April. For most of 1998, this price range was below \$298, the low price reported for all of 1997. The traditional role of gold as a store of value was not able to lift the price of gold out of its 18-year-low trading range. The market continued to be concerned about the future role of gold in the reserves of the European Central Bank (ECB), which will commence operation on January 1, 1999. It appears that gold will account for 10% to 15% of the Bank's foreign reserves. This would leave significant quantities of gold with the European Monetary Union (EMU) national central banks, and there is uncertainty about the degree of control those banks will retain over their reserves. The final make-up of the ECB and the determination of its relationship to the national central banks will influence the gold market far beyond the member countries of the EMU.

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### World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves <sup>7</sup>	Reserve base <sup>7</sup>
	<u>1997</u>	<u>1998<sup>e</sup></u>		
United States	360	350	5,600	6,000
Australia	311	320	4,000	4,700
Brazil	59	60	800	1,200
Canada	169	155	1,500	3,500
China <sup>e</sup>	175	150	NA	NA
Russia	115	105	3,000	3,500
South Africa	492	465	18,500	38,000
Uzbekistan	75	100	2,000	3,000
Other countries	<u>660</u>	<u>695</u>	<u>9,300</u>	<u>11,800</u>
World total (may be rounded)	2,410	2,400	<sup>8</sup> 45,000	<sup>8</sup> 72,000

Of an estimated 125,000 tons of gold mined in historical times through 1998, about 15% is thought to have been lost, used in dissipative industrial uses, or otherwise unrecoverable or unaccounted for. Of the remaining 106,000 tons, an estimated 34,000 tons is official stocks held by central banks and about 72,000 tons is privately held as coin, bullion, and jewelry.

**World Resources:** Total world resources of gold are estimated at 89,000 tons, of which 15% to 20% is byproduct resources. South Africa has about one-half of all world resources, and Brazil and the United States have about 12% each. Some of the 9,000-ton U.S. resource would be recovered as byproduct gold.

**Substitutes:** Base metals clad with gold alloys are widely used in electrical/electronic and jewelry products to economize on gold; many of these products are continually redesigned to maintain high utility standards with lower gold content. Generally, palladium, platinum, and silver may substitute for gold.

<sup>e</sup>Estimated. E Net exporter. NA Not available.

<sup>1</sup>Metric ton (1,000 kilograms) = 32,150.7 troy ounces.

<sup>2</sup>Survey response not sufficiently complete for publication.

<sup>3</sup>Refined bullion, doré, ores, concentrates, and precipitates.

Excludes:

- a. Waste and scrap.
- b. Official monetary gold.
- c. Gold in fabricated items.
- d. Gold in coins. In 1991, the last year for which estimates are available, net imports amounted to 3.5 metric tons.
- e. Net bullion flow (in metric tons) to market from foreign stocks at the New York Federal Reserve Bank: 216.6 (1994), 243.9 (1995), 373.0 (1996), 142.8 (1997), and 215.3 (1998, estimated).

<sup>4</sup>Includes gold in Exchange Stabilization Fund. Stocks were valued at the official price of \$42.22 per troy ounce.

<sup>5</sup>Englehard Industries average gold price quotation for the year.

<sup>6</sup>Defined as imports - exports + adjustments for Government and industry stock changes.

<sup>7</sup>See Appendix D for definitions.

<sup>8</sup>Excludes China and some other countries for which reliable data were not available.