

CEMENT

(Data in thousand metric tons, unless noted)¹

Domestic Production and Use: One State agency and 45 companies operated 118 plants in 37 States to produce 73.5 million tons of portland cement, 3.5 million tons of masonry cement, and minor quantities of other cement in 1995. The value of the production was about \$4.7 billion. At yearend, the capacity of 110 plants producing portland cement clinker, including 3 white cement facilities, reached a level of approximately 233,000 tons daily. Allowing for an average of about 40 days downtime for maintenance and rebricking kilns, the apparent annual clinker production capacity, excluding Puerto Rico, was 76.0 million tons. An additional eight plants operated grinding mills only for imported, purchased, or interplant transfers of clinker. Estimated finish grinding capacity, excluding Puerto Rico, was 91 million tons. The 5 largest companies composed 40% of the clinker production capacity, and the 10 largest accounted for 65%. Fifty percent of the portland cement production came from the following six States in declining order: California, Texas, Pennsylvania, Missouri, Michigan, and Florida. Uses of cement by type of customer were 68% for ready-mix concrete; 14% for manufacturers of concrete products such as block, pipe, and prestressed precast concrete; 9% by highway contractors; 6% by building material dealers; and 3% by other contractors, Government agencies, and miscellaneous users.

Salient Statistics—United States: ²	1991	1992	1993	1994	1995^e
Production, portland, masonry, and other	67,193	69,585	73,807	77,900	77,000
Shipments from mills, including					
masonry cement	72,108	77,814	81,404	89,733	90,000
Imports for consumption	7,893	6,166	7,060	11,303	15,824
Exports	633	746	625	633	600
Consumption, apparent ³	74,000	75,400	80,514	91,160	92,000
Price, average mill value, dollars per ton	55.54	54.61	56.36	61.88	62.00
Stocks, mill yearend	6,009	5,272	4,788	4,805	4,800
Employment, mine and mill ^e	18,000	18,100	18,000	18,000	18,000
Net import reliance ⁴ as a percent of apparent consumption	10	7	8	13	17

Recycling: None.

Import Sources (1991-94): Canada, 39%; Spain, 11%; Greece 8%; Venezuela 7%; Mexico, 6%; and other, 29%.

Tariff:	Item	Number	Most favored nation (MFN)	Non-MFN⁵
			12/31/95	12/31/95
	Cement clinker	2523.10.0000	Free	\$1.32/mt.
	White nonstaining portland cement	2523.21.0000	18¢/mt	\$1.76/mt.
	Other portland cement	2523.29.0000	Free	\$1.32/mt.
	Aluminous cement	2523.30.0000	Free	\$1.32/mt.
	Other hydraulic cement	2523.90.0000	Free	\$1.32/mt.

Depletion Allowance: Certain raw materials for cement production, such as limestone, bauxite, and gypsum, have depletion allowances.

Government Stockpile: None.

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Events, Trends, and Issues: In 1995, U.S. demand for cement was about 90 million tons, slightly above that of 1994. Imports of cement were up by approximately 40%. The continued strong cement demand led some cement plants to increase cement production by upgrading or modernizing existing facilities. Due to shortages of cement in some areas, cement plants sought to supplement their cement supply by using granulated slag as a replacement for portland cement.

The U.S. Environmental Protection Agency (EPA) issued its final determination on Cement Kiln Dust (CKD). This action was required by the Resource Conservation and Recovery Act. The EPA concluded that additional control of CKD was warranted in order to protect the public from human health risks and to prevent environmental damage resulting from current disposal of this waste. Under Subtitle C of RCRA, the EPA was to develop a tailored set of standards for CKD that would control releases to ground water.

World Production and Capacity:

	Cement production		Yearend clinker capacity	
	<u>1994</u>	<u>1995^e</u>	<u>1994</u>	<u>1995^e</u>
United States (includes Puerto Rico)	77,900	77,000	76,000	76,000
Brazil	26,000	28,000	31,000	31,000
China	400,000	410,000	360,000	362,000
France	20,200	24,000	27,000	27,000
Germany	40,400	40,400	49,000	49,000
India	54,000	55,000	64,000	64,000
Italy	40,000	45,000	45,000	45,000
Japan	91,500	92,000	93,000	93,000
Korea, South	52,100	53,000	45,000	45,000
Russia	50,000	55,000	140,000	140,000
Spain	26,000	30,000	30,000	30,000
Turkey	30,000	32,000	27,000	27,000
Other countries	<u>461,000</u>	<u>445,000</u>	<u>411,000</u>	<u>415,000</u>
World total (rounded)	1,370,000	1,390,000	1,400,000	1,400,000

World Resources: Although domestic resources of raw materials are adequate, they are sometimes remote from cement market areas. Countries deficient in one or more raw materials have experienced little difficulty importing their requirements.

Substitutes: Aluminum, steel, fiberglass, wood, stone, and clay products may be used in the building and construction markets.

^eEstimated.

¹See Appendix A for conversion to short tons.

²Excludes Puerto Rico and the Virgin Islands.

³Adjusted to eliminate duplication of imports shipped by domestic cement manufacturers.

⁴Defined as imports - exports + adjustments for Government and industry stock changes.

⁵See Appendix B.