

U.S. Portland Cement Industry:

Plant Information Summary

December 31, 2013



America's Cement Manufacturers™

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U.S. Executive Summary

The U.S. cement industry is comprised of 106 cement plants (99 clinker-producing plants and 7 grinding facilities) operating just under 100 mmt of clinker capacity and roughly 126 mmt of finish grinding capability annually. The 2013 plant survey reflects the industry emerging from the economic downturn as total capacity is 3.7 mmt less than the 2010 plant summary and 19 kilns totaling 5.7 mmt of capacity remain idle. From the 2010 survey, daily clinker capacity decreased 11,121 metric tons to 307,077. Typical annual down days for scheduled kiln maintenance, repair, or cleanup increased to 39.7 from 36.2 days in the 2010 survey.

Major changes within the industry in the 2010-2014 horizon included Argos's acquisition of two Lafarge plants (2010) and all of Vulcan Materials' cement operations (2014), which included a plant in Newberry, FL and a grinding facilities in Florida and Georgia. In 2012, Eagle Materials acquired two plants from Lafarge in Missouri and Oklahoma. In 2014, Martin Marietta acquired Texas Industries' ownership change of 3 plants totaling 5.8 mmt of capacity and one grinding operation. Capacity expansions included Ash Grove Cement's Foreman, AR plant (2010), Vulcan Materials' Newberry, FL plant (2010), Giant Cement Holdings' Bath, PA plant (2010), Texas Industries' New Braunfels plant (2012), as well as the addition of a Greenfield in Paulden, AZ by Drake Cement, a new entrant into the industry. Plant closures included Holcim's Catskill, NY plant (2011), Lafarge's Fredonia, KS plant (2012), and Essroc Cement's Essexville, MI grinding plant.

The U.S. cement industry lost 3.102 mmt of finish grinding capacity since the previous survey. Since the 2010 survey, Essroc Cement Co.'s Essexville grinding plant ceased operations and Essroc's grinding-only facility in Nazareth, PA was combined with their clinker-producing plant, bringing the number of grinding-only plants to seven.

U.S. cement manufacturing is primarily a fossil fuel fired industry with 91.7% of all plants using coal, petroleum coke, or some combination of the two as primary kiln fuel. Nine plants reported using alternative fuels as primary kiln feed. There were 64 plants, or roughly 67% of total industry capacity, which reported using some form of alternative fuel alone or in combination with other fuels as a secondary kiln fuel source.

As of December 31, 2013, there are 30 clinker producing companies in the United States. Based on data reported in this survey year, Cemex is the largest U.S. cement company with a 14.6% share of industry clinker capacity. Holcim (US) Inc. ranks second with a 13.9% share followed by Ash Grove Cement Company with a 7.3% share. The top five cement companies roughly account for 52% of total industry clinker capacity.

Results presented in this report were obtained from the annual survey of cement plant operations conducted by the Market Intelligence Group of the Portland Cement Association. All clinker capacity, finished grinding capacity, and ownership are reported as of December 31, 2013. Plant modernization and expansion plans reflect only publically announced plans. Types of cement produced and fuels used pertain to production during the entire year. Inactive kiln capacity, if reported, which has not been retired, is included in all summarized capacity data.

TABLE 1
U.S. HISTORICAL DATA SUMMARY

(Tonnage reported in Metric Tons)

	1974	1987	1988	1989	1990	1991	1992	1993	1994
--	------	------	------	------	------	------	------	------	------

Daily Clinker Capacity *(Tons)*

Annual Clinker Capacity *(000 Tons)*

Total
 Gray
 White

 Wet
 Dry

Finish Grinding Capacity *(000 Tons)*

Total
 Gray
 White
 Grinding Only

Number of Kilns

Total
 Wet
 Dry

Average Capacity Per Kiln

(000 Tons)

Average Kiln Startup/Modernization

Number of Kilns
 Kiln Capacity

Primary Kiln Fuel *(Inc. gray & white plants)*

% of plants - coal&coke
 % of plants - natural gas
 % of plants - oil
 % of plants - multiple fuel

Number of Plants

Total
 Gray
 White
 Grinding Only

Concentration Ratio⁽¹⁾

of Top 5 Firms
 of Top 10 Firms

⁽¹⁾ Company capacity as percent of total finish grinding capacity

*Plant Information Summary went to biennial publication after 2004 and once every three years in 2013.

TABLE 2
CAPACITY EXPANSIONS
(Clinker, Thousands of Metric Tons)

(G) Greenfield

*(P**) Postponed - no additional information available*

** Source: PCA Plant Information Summary 2013*

*** Total includes capacities with unspecified dates*

Source: PCA Market Intelligence

Based on publicly available sources believed to be reliable; however, accuracy cannot be guaranteed.

The Portland Cement Association assumes no legal responsibility for the outcome of decisions or commitments made on the basis of this information.

TABLE 3

U.S. INDUSTRY UPDATE

2010

-
-
-
-
-

2011

-

2012

-
-
-
-

2014

-
-

TABLE 4

U.S. RETIRED CEMENT FACILITIES

<u>Company</u>	<u>City</u>	<u>State</u>	<u>Grinding</u>	<u>Clinker</u>
----------------	-------------	--------------	-----------------	----------------

TABLE 5

U.S. ACTIVE VS. INACTIVE CLINKER CAPACITY

Total Reported Capacity *(000 Metric Tons)*

TABLE 6

UNITED STATES CEMENT PLANT INFORMATION SUMMARY
(Includes Gray and White Plants)

KILN AGE SUMMARY
(Capacities in 000 Tons)

<u>Age</u>	<u>Number of Kilns</u>	<u>Clinker Capacity</u> *** W E T ***	<u>Average Capacity Per Kiln</u>
AFTER 1980			
1976 - 1980			
1971 - 1975			
1966 - 1970			
1961 - 1965			
1956 - 1960			
1951 - 1955			
1946 - 1950			
1941 - 1945			
1936 - 1940			
1931 - 1935			
BEFORE 1931	=====		
Totals:		*** D R Y ***	
AFTER 1980			
1976 - 1980			
1971 - 1975			
1966 - 1970			
1961 - 1965			
1956 - 1960			
1951 - 1955			
1946 - 1950			
1941 - 1945			
1936 - 1940			
1931 - 1935			
BEFORE 1931	=====		
Totals:		*** T O T A L ***	
AFTER 1980			
1976 - 1980			
1971 - 1975			
1966 - 1970			
1961 - 1965			
1956 - 1960			
1951 - 1955			
1946 - 1950			
1941 - 1945			
1936 - 1940			
1931 - 1935			
BEFORE 1931	=====		
Totals:			
AVERAGE KILN AGE (Year)	<u>W E T</u>	<u>D R Y</u>	<u>T O T A L</u>
BASED ON NUMBER OF KILNS			
BASED ON CLINKER CAPACITY			

TABLE 7

UNITED STATES FUEL USAGE SUMMARY

(Includes Gray and White Plants)

<u>TYPE OF FUEL</u>	<u>Number of Plants</u>	<u>Clinker Capacity (000 Tons)</u>	<u>Percent of Total Capacity</u>
PRIMARY FUEL			
Coal			
Coal, Coke			
Coke			
Coal, AF			
Alternative Fuel			
Coke, AF			
Natural Gas			
Coal, Natural Gas, Coke			
Natural Gas, Coke			
Natural Gas, Coke, AF			
Total:			
SECONDARY FUEL			
Alternative Fuel			
Natural Gas			
Natural Gas, AF			
Natural Gas, Coke, AF			
Coke, AF			
Oil, AF			
Coke			
Coal, AF			
Oil			
Oil, Coke, AF			
Oil, Natural Gas, Coke, AF			
Oil, Natural Gas, Coke			
Coal, Natural Gas, AF			
Coal			
Coal, Oil, Coke, AF			
Totals:			

AF=Alternative Fuel

TABLE 8

PLANTS UTILIZING ALTERNATIVE FUELS

As a Primary Fuel:

As a Secondary Fuel:

TABLE 9

UNITED STATES CEMENT COMPANY CLINKER CAPACITIES

(Includes Gray and White Plants)

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>Company Name</u>
--------------------	--------------------------------------	------------------------------------	----------------------------

TABLE 10
UNITED STATES CEMENT COMPANY GRINDING CAPACITIES
(Includes Gray and White Plants)

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>Company Name</u>
-------------	-------------------------------	-----------------------------	---------------------

TABLE 11

UNITED STATES CLINKER CAPACITIES BY STATE

(Includes Gray and White Plants)

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>State</u>
-------------	-------------------------------	-----------------------------	--------------

Total:

=====

THERE ARE NO CLINKER PRODUCING PLANTS IN THE FOLLOWING STATES

TABLE 12

UNITED STATES GRINDING CAPACITIES BY STATE

(Includes Gray, White and Grinding Plants)

<u>Rank</u>	<u>Finish Grinding (000 Tons)</u>	<u>Percent Industry</u>	<u>State</u>
-------------	-------------------------------------------	-----------------------------	--------------

Total:

=====

THERE ARE NO CEMENT PRODUCING PLANTS IN THE FOLLOWING STATES

TABLE 13

UNITED STATES GRAY CEMENT PLANT CLINKER CAPACITIES

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	-------------------------------	-----------------------------	------------------------

TABLE 13

UNITED STATES GRAY CEMENT PLANT CLINKER CAPACITIES

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	-------------------------------	-----------------------------	------------------------

TABLE 13

UNITED STATES GRAY CEMENT PLANT CLINKER CAPACITIES

<u>Rank</u>	<u>Clinker (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	-------------------------------	-----------------------------	------------------------

Total:

=====

TABLE 14
UNITED STATES GRAY CEMENT PLANT GRINDING CAPACITIES

<u>Rank</u>	<u>Finish Grinding (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	---------------------------------------	-----------------------------	------------------------

TABLE 14
UNITED STATES GRAY CEMENT PLANT GRINDING CAPACITIES

<u>Rank</u>	<u>Finish Grinding (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	---------------------------------------	-----------------------------	------------------------

TABLE 14
UNITED STATES GRAY CEMENT PLANT GRINDING CAPACITIES

<u>Rank</u>	<u>Finish Grinding (000 Tons)</u>	<u>Percent Industry</u>	<u>Name - Location</u>
-------------	---------------------------------------	-----------------------------	------------------------

Total:

Table 15

U.S. Cement Company Capacity

and

Ownership

Company/ Owner	Number of Plants	Annual Grinding Capacity (000 Tons)	Annual Clinker Capacity (000 Tons)
Alamo Cement Company Presa S.P.A. Cementeria de Robilante (Italy)			
Argos USA Cementos Argos S.A. (Columbia)			
American Cement Company (USA)			
Armstrong Cement & Sup. Corp. (USA)			
Ash Grove Cement Company (USA)			
Buzzi Unicem, Inc. Buzzi Unicem USA Inc. (Italy)			
CalPortland Taiheiyo Cement Corp. (Japan)			
Capitol Aggregates, Ltd. H. B. Zachry Company (USA)			
CEMEX Cemex S.A. de C.V. (Mexico)			
Continental Cement Co., Inc. (USA)			
Drake Cement Cementos Lima (Peru)			
Eagle Materials (USA)			
Essroc Cement Corp. Italcementi (Italy)			
GCC of America, Inc. Grupo Cementos de Chihuahua (Mexico)			
Giant Cement Holding, Inc. Cementos Portland Valderrivas, S.A. (Spain)			
Holcim (US) Inc. Holderbank Financiere Glaris Ltd. (Switzerland)			
Lafarge North America Inc. Lafarge Coppee (France)			
Lehigh Cement Company Heidelberg Cement (Germany)			
Lehigh Northeast Cement Company Heidelberg Cement (Germany)			

Company/ Owner	Number of Plants	Annual Grinding Capacity (000 Tons)	Annual Clinker Capacity (000 Tons)
Lehigh Northwest Cement Company Heidelberg Cement (Germany)			
Lehigh Southwest Cement Company Heidelberg Cement (Germany)			
Martin Marietta Materials, Inc. (USA)			
Mitsubishi Cement Corporation Mitsubishi Corp. (Japan)			
Monarch Cement Company (USA)			
National Cement Co. of Alabama Societe des Ciments Vicat (France)			
National Cement Co. of California Societe des Ciments Vicat (France)			
Phoenix Cement Company Salt River Materials Group (USA)			
St. Marys Cement, Inc. (U.S.)/VCNA Votorantim (Brazil)			
Suwannee American Cement Votorantim/Anderson			
Texas-Lehigh Cement Company Centex (USA)/Heidelberger Zement A.G. (Germany)			
Titan America LLC Tarmac PLC (United Kingdom)			

Table 16

U.S. Cement Plant Detail

Primary

Fuel Codes: C - Coal O - Oil G - Gas K - Coke A - Alternative

Alternative

Fuel Codes: A - Oil B - Solvents C - Tire Derived
D - Other Solid E - Other

Secondary fuel codes are shown in parenthesis () following the primary fuel code(s).
Alternative fuel codes are shown in brackets [] below the fuel code(s).

Process Codes: X - Preheater C - Precaliner

Name of CEMENT COMPANY

Address

Gray Cement

Kiln Data - Number of Kilns:

Year Began or Modernized	Operated in 2013	Fuels	Process	Clinker Capacity	
				Tons/Day	Tons/Yr (000)

Mill Data - Number of Mills: 2

Year Began	Mill Grinding Capacity		Roller Press Used
	Tons/Hour	Tons/Yr (000)	

Types of Cement Produced:

TYPE I

TYPE II

Predominant Cement Produced: TYPE X

Characteristics of Most

Common ASTM C150 Cement:

Primary Source of Raw Materials:

Table 17

U.S. Cement Plant Detail

by State

Primary

Fuel Codes: C - Coal O - Oil G - Gas K - Coke A - Alternate

Alternate fuel codes are shown in parenthesis () following the primary fuel code(s).

Alternative Fuel Codes (AF): A - Oil B - Solvents C - Tire Derived
D - Other Solid E - Other

Process Codes: X - Preheater C - Precalciner

Inactive kilns are identified by [I] following the kiln year.

There are no cement-producing plants in the following states:

U.S. CEMENT PLANT INFORMATION SUMMARY BY STATE
(Gray Cement)

PLANT DATA			KILN DATA					
<u>Plant Location</u>	<u>No. Kilns</u>	<u>Finish Grinding Capacity</u> <i>(000 Tons)</i>	<u>Year</u>	<u>Fuel</u>	<u>AF</u>	<u>Process</u>	<u>Clinker Capacity</u>	
							<i>(Tons/Day)</i>	<i>(000 Tons/Year)</i>

ALABAMA

State Totals: == == == ==

ARIZONA

State Totals: == == == ==

U.S. CEMENT PLANT INFORMATION SUMMARY BY STATE
(White Cement)

PLANT DATA			KILN DATA					Clinker Capacity	
<u>Plant Location</u>	<u>No. Kilns</u>	<u>Finish Grinding Capacity (000 Tons)</u>	<u>Year</u>	<u>Fuel</u>	<u>AF</u>	<u>Process</u>	<u>(Tons/Day)</u>	<u>(000 Tons/Year)</u>	

GRAND TOTAL USA:

CEMENT PLANT GLOSSARY

ALTERNATIVE FUEL: An industrial byproduct or waste material that contains sufficient energy to either supplement or partially replace the materials normally used to fuel kiln and calciner combustion.

ANDHYDRITE: Anhydrous calcium sulfate; gypsum from which the water of crystallization has been removed, usually by heating to about 325 degrees F. Depending upon the degree of heating, soluble or insoluble anhydrite can be produced.

BAUXITE: A reddish rock composed primarily of hydrous aluminum oxides together with silica and ferric oxide. It is a raw material for the manufacture of calcium aluminate cement, and can be used as an alumina source for portland cement clinker.

BLAST FURNACE SLAG: The nonmetallic product consisting essentially of silicates and aluminosilicates of calcium and magnesium that is developed in a molten condition simultaneously with iron in a blast furnace.

BOTTOM ASH: Residue mainly from the coal burning process that falls to the bottom of the boiler for removal and disposal.

CEMENT: Any chemical binder, such as glue, paste, etc., used to permanently join unique and separate materials into a uniform and monolithic matrix.

CKD: Cement kiln dust. Particulates of the raw materials, partially processed feed, and components of the final product entrained in the combustion gases that flow countercurrent to the feed and that are collected in the particulate matter control device. CKD may be returned as a component of raw feed in cement manufacturing if it is low in alkalis or it may be used in beneficial applications including as an agricultural amendment.

CLAY: An important raw material for cement manufacture that contains alkalis and aluminum silicates and their conversion products, feldspar and mica. Includes the kaolin and montmorillonite mineral groups.

CLINKER: The fused product of a kiln which is ground to make cement. (see portland Cement)

CLINKER CAPACITY: Daily capacity is the normal clinker capacity output a kiln can produce per day given a realistic work pattern. Annual capacity is daily capacity multiplied by 365 less normal downtime days. Normal downtime days are the number of days of downtime required for maintenance, repair or clean-up. Clinker capacity is reported in tons of clinker, not tons of cement.

COAL: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

COKE: In the case of petroleum coke, a residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. In the case of coke derived from coal, a solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke from coal is grey, hard, and porous.

DRY PROCESS: Process for cement manufacture in which the raw materials are ground, conveyed, blended and stored in a dry form.

FINISH GRINDING: The grinding of clinker into finished cement usually with the addition of 3 to 6 percent gypsum.

FINISH GRINDING CAPACITY: The normal cement output a finish mill can grind per year given a realistic work pattern.

FINISH MILL

- (1) Usually a tube or ball mill in which the final stages of clinker grinding are accomplished.
- (2) The entire finish grinding department.

FLY ASH: Residue of fused spherically shaped particles from burning of powdered coal. May be used (1) as an argillaceous-siliceous component of cement raw mix; and (2) as an addition to concrete depending upon carbon content and uniformity.

GRINDING MILLS: [Same definition as Finish Mill but add %Vertical Roller Mills+immediately prior to %Ball Mills+]

GYPSUM: Hydrated calcium sulfate added to portland cement clinker and interground in the range of about 3 to 6 percent to control the setting time of the cement paste.

HYDRAULIC CEMENT: Cement capable of setting and hardening under water.

INORGANIC PROCESSING ADDITIONS: A material that, when added during cement manufacturing process, facilitates the production process either by enhancing grindability, improving flow characteristics, reducing the tendency towards agglomeration, or otherwise improving a products characteristics. These materials are typically employed in the finish milling system as the final product is ground and stored.

KILN: Equipment in which a raw mix is dried, calcined, and burned into clinker at a temperature of about 1450 degrees C.

LIMESTONE: Calcium carbonate; a primary raw material of portland cement clinker manufacturing. Also used as an ingredient in portland cement and blended hydraulic cement.

MAGNETITE: Magnetic oxide of iron. An ore of iron and source of iron in cement raw mix.

MARL: A loose or soft calcareous raw material containing clay, sand, and sometimes broken marine shells.

MILL SCALE: High iron waste material obtained from rolling mills in steel plants and often used as a component of the raw mix when a Type II or Type V cement is manufactured.

NATURAL GAS: A combustible gas issuing from the earth's crust through natural openings or bored wells. Consists essentially of methane with small amounts of ethane, propane, butane, hydrogen, oxide of carbon, nitrogen, helium, hydrogen sulfide, etc.

OIL: A mixture of hydrocarbons usually existing in the liquid state in natural underground pools or reservoirs, broadly defined as a class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include non hydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

PORTLAND CEMENT: A hydraulic cement produced by pulverizing clinker consisting of hydraulic silicates, usually containing one or more of the forms of calcium sulfate as an interground addition. Gray in color unless special raw materials are used. (see White Cement)

PRECALCINER: Utilizes preheated combustion air from the clinker cooler and/or kiln exit gases with separate burners to effect up to 95% calcination of the raw material. Also known as flash furnace, calciner, calcining furnace.

PRECALCINER KILN SYSTEM: A rotary kiln system which includes an external furnace in which cement raw meal is heated to calcination temperature. The system generally includes a multi-stage cyclonic preheater.

PREHEATER: Installation for heating raw meal or slurry ahead of their entry into rotary kiln proper to improve over-all fuel economy. Preheaters for raw meal can be of the following types: (1) Suspension Parallel Flow Cyclonic, (2) Suspension Counter Flow, (3) Fixed Bed, (4) Traveling Bed or Grate, (5) Fluidized Bed, and (6) Sprouted Bed. Slurry preheaters can be: (1) Heated Tumbling Beds, (2) Chains, or (3) Crosses.

ROTARY KILN: Cylindrical rotating kiln, inclined approximately 1/2 in. per foot toward its discharge end, for burning cement raw meal into clinker. Lined with refractory bricks and often equipped with internal heat exchangers. The kiln is divided into the following process zones: Drying Zone (for Wet Process), Preheating Zone, Calcining Zone, Burning Zone, and Cooling Zone. When the rotary kiln is used in conjunction with a preheater, and/or precalciner, the first three kiln zones are virtually eliminated.

SHALE: Rock formed by consolidation of clay, mud, or silt, high in alumina, silica, and iron oxide, but low in lime. Used as argillaceous raw material in portland cement clinker manufacturing.

SOLVENTS: Materials characterized by their ability to solubilize or mobilize other constituents. Example applications include degreasing, cleaning, fabric scouring, use as diluents, and use as an extractant.

SYNTHETIC GYPSUM: Calcium sulfate or calcium sulfite produced from the reaction of lime or limestone with gaseous sulfur in a flue gas desulfurization system designed to remove or reduce sulfur dioxide emissions at some coal-fired power plants. When properly processed, the calcium sulfate can be used at portland cement plants to replace the natural gypsum that must be added to the final product to control the setting of concrete.

WET PROCESS: The cement manufacturing method whereby grinding, blending, mixing and pumping cement raw materials is done with water. Wet process is chosen where raw materials are extremely wet and sticky, which would make drying before crushing and grinding difficult and costly.

WHITE CEMENT: Cement, conforming to portland cement specifications, made from low-iron raw materials (such as kaolin) and burned with special methods to reduce coloring effects of trace elements.

U.S. HYDRAULIC CEMENT

Portland Cement Types

I	Normal
IA	Normal, Air-Entraining
II	Moderate Sulfate Resistance
IIA	Moderate Sulfate Resistance, Air-Entraining
II(MH)	Moderate Heat of Hydration and Moderate Sulfate Resistance
II(MH)A	Moderate Heat of Hydration and Moderate Sulfate Resistance, Air Entraining
III	High Early Strength
IIIA	High Early Strength, Air-Entraining
IV	Low Heat of Hydration
V	High Sulfate Resistance

Blended - Type IP	Portland-pozzolan cement (up to 40% pozzolan (P))
Blended - Type IS	Portland blast-furnace slag cement (<70% or >70% slag (S))
Blended - Type IT	Ternary blended cement (P>S or <P<S<70%)
Hydraulic – Type GU	General Use
Hydraulic – Type HE	High Early Strength
Hydraulic – Type MS	Moderate Sulfate Resistance
Hydraulic – Type HS	High Sulfate Resistance
Hydraulic – Type MH	Moderate Heat of Hydration
Hydraulic – Type LH	Low Heat of Hydration
Colored Cement	Portland cement (usually white) with pigment
Expansive Cement	Hydraulic cement that expands slightly during the early hardening period after setting
Grouting Cement	Hydraulic cement used in grouts which is capable of being pumped
Oil Well Cement	Slow-setting, high temperature, high pressure resistant cement for sealing oil wells
Masonry Cement	Hydraulic cement designed for use in mortar for masonry construction
Mortar Cement	Hydraulic cement designed for use in mortar for masonry construction
Plastic Cement	Hydraulic cement used in plaster or stucco (used primarily in the West/Southwest)
White Cement	Hydraulic cement that is white, primarily used for architectural/decorative concrete

*Optional special properties may be specified for blended cements: MS . Moderate Sulfate Resistance, HS . High Sulfate Resistance, MH . Moderate Heat of Hydration, LH . Low Heat of Hydration

U.S. Cement Plant Directory

Company Plant Contact	Address Phone Number	City	State	Zip Code
Alamo Cement Company John Henderson	6055 W. Green Mountain Rd. (210) 208-1880	San Antonio	TX	78265-4807
American Cement Company William Wall	4750 EC 470 (352) 569-5393	Sumterville	FL	33585
Argos USA Anthony Perry	8039 Highway 25 (205) 668-6103	Calera	AL	35040
Argos USA	463 Judge St. (843) 462-7651	Harleyville	SC	29448
Argos USA	304 National Street (941) 722-3480	Palmetto	FL	34221
Argos USA	2001 Maritime Blvd. (813) 247-4831	Tampa	FL	33605
Argos USA	4000 N.W. CR235 (352) 472-4722	Newberry	FL	32669
Lafarge North America Inc. Kyle Harrison	2520 Paul Avenue, N.W. (404) 792-6110	Atlanta	GA	30318
Armstrong Cement & Sup. Corp. Rick Smith	100 Clearfield Road (724) 352-4471	Cabot	PA	16023-9521
Ash Grove Cement Company David Dorris	4343 Highway 108 West (870) 542-3010	Foreman	AR	71836
Ash Grove Cement Company Randy Pryor	1801 N. Santa Fe Street (620) 433-3500	Chanute	KS	66720
Ash Grove Cement Company Richard Johnson	100 MT Hwy 518 (406) 442-8855	Clancy	MT	59634
Ash Grove Cement Company John Dale	16215 Hwy 50 (402) 234-4814	Louisville	NE	68037-2881
Ash Grove Cement Company Terry Kerby	33600 Shirttail Creek Road (541) 877-2411	Durkee	OR	97095
Ash Grove Cement Company Ron Smith	Highway 132 (435) 857-1212	Nephi	UT	84648
Ash Grove Cement Company Carey Austell	3801 E. Marginal Way S. (206) 623-5596	Seattle	WA	98134
Ash Grove Cement Company Kevin Blankenship	900 Gifco Road (972) 723-2301	Midlothian	TX	76065

Company Plant Contact	Address Phone Number	City	State	Zip Code
Buzzi Unicem, Inc. John Kass	3301 S. County Road 150W (765) 653-9766	Greencastle	IN	46135
Buzzi Unicem, Inc. Brad Williams	1000 River Cement Road (636) 937-7601	Festus	MO	63028-0903
Buzzi Unicem, Inc. W. Steven Leus	2425 South Sprigg Street (573) 335-5591	Cape Girardeau	MO	63703
Buzzi Unicem, Inc. Terry Byrne	2430 South 437 CR (918) 825-1937	Pryor	OK	74361
Buzzi Unicem, Inc. Ken Smith	501 Hercules Drive (610) 759-6300	Stockertown	PA	18083
Buzzi Unicem, Inc. Dave Puzan	1201 Suck Creek Road (423) 866-0800	Chattanooga	TN	37406
Buzzi Unicem, Inc. Richard Zimmer	202 County Road 306 (325) 288-4221	Maryneal	TX	79536
CalPortland David N. Bittel	11115 N. Casa Grande Hwy (520) 682-2221	Rillito	AZ	85654
CalPortland Ron Dumond	9350 Oak Creek Road (661) 824-2401	Mojave	CA	93501
CalPortland D. M. Robertson	695 South Rancho Ave (909) 825-4260	Colton	CA	92324-0947
Capitol Aggregates, Ltd. Gerry McKervey	11551 Nacogdoches Road (210) 871-7000	San Antonio	TX	78217
CEMEX Gary W. Pinault	1617 Arcola Road (334) 289-4400	Demopolis	AL	36732
CEMEX Cesar A. Millan	16888 North "E" Street (760) 381-7600	Victorville	CA	92394
CEMEX Bradley S. Wilson	5134 UTE Highway (303) 823-2100	Lyons	CO	80540
CEMEX James S. Daniel	10311 Cement Plant Rd. (352) 799-7881	Brooksville	FL	34601
CEMEX Luis G. Lopez	1200 NW 137 Ave. (305) 221-7645	Miami	FL	33182
CEMEX Robert A. Stamback	2720 Highway 341 South (478) 988-2306	Clinchfield	GA	31013
CEMEX Ricardo M. Quiroga	15301 Dixie Highway (502) 935-7331	Louisville	KY	40272
CEMEX Alberto I. Calleros	3250 Linebaugh Road (937) 878-8651	Xenia	OH	45385

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CEMEX Bruce A. Dallimore	2001 Portland Park (724) 535-4311	Wampum	PA	16117
CEMEX Antonio De Luca	6212 Cement Plant Road (865) 541-5500	Knoxville	TN	37924
CEMEX Jimmy L. Rabon	2580 Wald Road (210) 250-4100	New Braunfels	TX	78132
CEMEX Bruce A. Dallimore	16501 West Murphy (432) 385-2800	Odessa	TX	79766
Continental Cement Co., Inc. Terry Bennett	10107 Hwy 79 (573) 221-1740	Hannibal	MO	63401
Drake Cement Lawrence "Tony" Turner	5001 E. Drake Rd. (928) 636-6004	Paulden	AZ	86334
Eagle Materials Robert B. Kidnew	1601 Rockwell Road (815) 224-2112	La Salle	IL	61301-0442
Eagle Materials Joseph P. Sells	Interstate 80 At Exit 46 (775) 575-2281	Fernley	NV	89408
Eagle Materials Norm Gilbertson	#5 Sand Creek Road (307) 745-4879	Laramie	WY	82070
Eagle Materials	2200 Courtney Road (816) 257-3600	Sugar Creek	MO	64050
Eagle Materials	2609 N. 145th East Avenue (918) 388-1462	Tulsa	OK	74116
Essroc Cement Corp. Bruno Gellagamba	3084 West C.R. 225 South (574) 753-5121	Logansport	IN	46947
Essroc Cement Corp. Mike McHugh	301, East Highway 31 (812) 246-7800	Speed	IN	47172
Essroc Cement Corp. Paul Stewart	Rt 248 & Easton Road (610) 746-3200	Nazareth	PA	18064
Essroc Cement Corp. Munzer Ghosh	1826 S. Queen Street (304) 260-1800	Martinsburg	WV	25401
GCC of America, Inc. Gina Nance	3372 Lime Road (719) 647-6800	Pueblo	CO	81004
GCC of America, Inc. Saul Alvidrez	11783 Hwy 337 (505) 281-3311	Tijeras	NM	87059
GCC of America, Inc. Stephen J. Post	501 N. Saint Onge Street (605) 721-7100	Rapid City	SD	57709

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Giant Cement Holding Ray DeGrass	U.S. Route 1 (207) 593-0110	Thomaston	ME	04861
Giant Cement Holding Jose de la Vega	Route 329 (610) 837-1881	Bath	PA	18014-0058
Giant Cement Holding Edmo Gutierrez	654 Judge Street (803) 496-5033	Harleyville	SC	29448
Holcim (US) Inc. Quentin Mccahey	3051 Hamilton Blvd. (251) 443-6200	Theodore	AL	36582
Holcim (US) Inc. Ricardo Vilchis	3500 State Highway 120 (719) 784-6325	Florence	CO	81226
Holcim (US) Inc. John Flores	1840 N Federal Avenue (641) 421-3308	Mason City	IA	50401
Holcim (US) Inc. Denzil Cotera	1260 Security Road (301) 739-1150	Hagerstown	MD	21742
Holcim (US) Inc. John Todd	2942 US Hwy 61 (636) 524-8000	Bloomsdale	MO	63627
Holcim (US) Inc. Eric Ervin	4070 Trident Road (406) 285-3241	Three Forks	MT	59752
Holcim (US) Inc. Neil Hodgson	120 Alpha Road Route 9W (518) 943-4040	Catskill	NY	12414
Holcim (US) Inc. Ajay Kumar	14500 CR 1550 (580) 421-8900	Ada	OK	74820
Holcim (US) Inc. Joe McFalls	200 Safety Street/Hwy 453 (803) 496-5027	Holly Hill	SC	29059
Holcim (US) Inc. Michel Moser	1800 Dove Lane (972) 923-5800	Midlothian	TX	76065
Holcim (US) Inc. Keith Krugh	6055 E. Croydon Road (801) 829-6821	Devil's Slide	UT	84050
Lafarge North America Inc. Joseph H. Pennings	301 East Front Street (563) 323-2751	Buffalo	IA	52728
Lafarge North America Inc. Michael Klenk	2500 Portland Road (618) 543-7541	Grand Chain	IL	62941
Lafarge North America Inc. Paul Rogers	1435 Ford Ave. (989) 354-4171	Alpena	MI	49707
Lafarge North America Inc. Mike Kralik	1916 Route 9W (518) 756-5000	Ravena	NY	12143
Lafarge North America Inc. Andrew Whitt	11435 County Road 176 (419) 399-4861	Paulding	OH	45879-0160

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Lafarge North America Inc. Lorraine Faccenda	5160 Main Street (610) 262-7831	Whitehall	PA	18052
Lafarge North America Inc. Jonathan Hall	5400 W Marginal Way SW (206) 937-8025	Seattle	WA	98106-1517
Lehigh Cement Company Rick Parker	8401 Second Ave. (205) 262-4148	Leeds	AL	35094
Lehigh Cement Company Thomas A. O'Neill	700 25th St., NW (641) 421-3400	Mason City	IA	50401
Lehigh Cement Company Bert Massengale	180 N Meridian Road (812) 849-2191	Mitchell	IN	47446
Lehigh Cement Company Kent Martin	675 Quaker Hill Road (410) 386-1210	Union Bridge	MD	21791
Lehigh Northeast Cement Company Neil Hodgson	313 Warren Street (518) 792-1137	Glens Falls	NY	12801
Lehigh Northeast Cement Company Cheryl McElroy	120 Alpha Blvd. (518) 943-5300	Catskill	NY	12414
Lehigh Cement Company Michael Gonzales	537 Evansville Road (610) 926-1024	Fleetwood	PA	19522
Lehigh Cement Company Curvin Hersh, Sr.	200 Hokes Mill Rd. (717) 843-0811	York	PA	17404
Lehigh Cement Company Thomas Del Vecchio	100 South Wickson Road (254) 776-7162	Waco	TX	76712
Lehigh Northwest Cement Compan Wayne Bratz	741 Marine Drive (360) 733-6720	Bellingham	WA	98225
Lehigh Southwest Cement Compa Alan Sabawi	24001 Stevens Creek Blvd. (408) 996-4000	Cupertino	CA	94015-5660
Lehigh Southwest Cement Compa James E. Ellison	15390 Wonderland Blvd. (530) 275-1581	Redding	CA	96003
Lehigh Southwest Cement Compa Alan Rowley	13573 Tehachapi Blvd. (661) 822-4445	Tehachapi	CA	93561
Martin Marietta Materials, Inc. Dave Salzborn	19409 National Trails Hwy (760) 245-5321	Oro Grande	CA	92368
Martin Marietta Materials, Inc. Gordon Johnson	1500 Rubidoux Blvd (909) 683-3660	Riverside	CA	92509
Martin Marietta Materias, Inc. Clifton Stapleton	7781 FM 1102 (512) 396-4244	New Braunfels	TX	78132
Martin Marietta Materials, Inc. Randy Walser	245 Ward Road (972) 647-4985	Midlothian	TX	76065

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Mitsubishi Cement Corporation Jim Russell	5808 State Hwy 18 (760) 248-7373	Lucerne Valley	CA	92356
Monarch Cement Company Kenny Miller	449 1200th Street (620) 473-2222	Humboldt	KS	66748
National Cement Co. Of Alabama Pascal Lamontagne	80 National Cement Drive (205) 472-2191	Ragland	AL	35131
National Cement Co. Of California Laurent Meurette	15821 Ventura Blvd, Suite 475 (661) 248-6733	Encino	CA	91436-4778
Phoenix Cement Company Gregg St. Clair	601 N. Cement Plant Road (928) 634-2261	Clarkdale	AZ	86324
St. Marys Cement, Inc. (U.S.)/VCN Dirk Cox	16000 Bells Bay Road (231) 547-9971	Charlevoix	MI	49720
St. Marys Cement, Inc. (U.S.)/VCN Marivaldo Filho	9333 Dearborn Street (313) 842-4600	Detroit	MI	48209
Suwannee American Cement Tom Messer	5117 US Hwy 27 (386) 935-5000	Branford	FL	32008
Texas-Lehigh Cement Company Jason L. Gilbert	701 Cement Plant Road (512) 295-6111	Buda	TX	78610
Titan America LLC Marco Burgoa	11000 NW 121st Way (305) 364-2200	Medley	FL	33178
Titan America LLC Tassiadamix Konstantinos	6071 Catawba Road (540) 992-1505	Troutville	VA	24090