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U.S. Cement Industry: Plant Information Summary

December 31, 2022



U.S. Portland Cement Industry:

Plant Information Summary

December 31, 2022



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U.S. Executive Summary

The U.S. cement
facilities) operatin

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sh grinding

The 2022 plant s
clinker producing
However, the ave
2019 report. This
cement manufact

he number of
decade ago.
s greater than the
g domestic

Major changes w

U.S. cement man

As of December

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, 2022. Plant modernization and expansion plans reflect only publically announced plans through December 2023. Types of cement produced and fuels used pertain to production during the entire year. Plants producing exclusively or near exclusively Blended Type IL cement may have reported blended cement characteristics instead of ASTM C150 cement characteristics under Table 16.

TABLE 1
U.S. HISTORICAL DATA SUMAMRY
(Tonnage reported in Metric Tons)

	1974	1990	1991	1992	1993	1994	1995	1996	1997	1998
--	------	------	------	------	------	------	------	------	------	------

Daily Clinker Capacity (Tons)

Annual Clinker Capacity (000

Total
 Gray
 White

Wet
 Dry

Finish Grinding Capacity (000

Total
 Gray
 White
 Grinding Only

Number of Kilns

Total
 Wet
 Dry

Average Capacity Per Kiln

(000 Tons)

Average Kiln Startup/Modern

Number of Kilns
 Kiln Capacity

Primary Kiln Fuel (Inc. gray & w

% 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 to
 *Plant Information Summary went to

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TABLE 2

CAPACITY EXPANSIONS

(Clinker; 000 Metric Tons)

SUMMARY OF KILN ADDITIONS

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

2022

2023

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TABLE 3

U.S. INDUSTRY UPDATE

2020

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TABLE 4

U.S. RETIRED CEMENT FACILITIES
(000 Metric Tons)

Company

City

State

Grinding

Clinker

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CAPACITY Total Rep

Active Clinker Capac

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>	<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:			
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:			
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>WET</u>	<u>DRY</u>	<u>TOTAL</u>
BASED ON NUMBER OF KILNS			

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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>
<hr/> PRIMARY FUEL <hr/>			
Coal			
Natural Gas			
Coal, Natural Gas			
Coke			
Coal, Coke			
Alternative Fuel			
Coal, Natural Gas, Coke			
Natural Gas, Coke			
Coal, Oil, Coke			
Oil, Coke			
Oil			
Natural Gas, Coke, AF			
Coal, AF			
Coke, AF			
Total:			

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<hr/> SECONDARY FUEL <hr/>			
Alternative Fuel			
Coal			
Natural Gas			
Natural Gas, AF			
Coal, AF			
Oil			
Coke, AF			
Natural Gas, Coke, AF			
Coke			
Coal, Oil, AF			
Coal, Natural Gas, AF			
Oil, AF			
Oil, Natural Gas, Coke, AF			
Totals:			

AF=Alternative Fuel

TABLE 8

PLANTS UTILIZING ALTERNATIVE FUELS

As a Primary Fuel:

As a Secondary Fuel:

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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>
-------------	-------------------------------	-----------------------------	---------------------

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TABLE 10

UNITED STATES CEMENT COMPANY GRINDING CAPACITIES

(Includes Gray and White Plants)

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

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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>
-------------	-------------------------------	-----------------------------	--------------

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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>
-------------	---	-----------------------------	--------------

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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>
-------------	-------------------------------	-----------------------------	------------------------

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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>
-------------	---	-----------------------------	------------------------

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Table 15

U.S. Cement Company Capacity

and

Ownership

Company/
Owner

Number of
Plants

Annual
Grinding
Capacity
(000 Tons)

Annual
Clinker
Capacity
(000 Tons)

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Table 16

U.S. Cement Plant Detail

Primary

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

Alternative A - Oil B - Solvents C - Tire Derived D - Waste Derived

Fuel Codes: E - Hazardous F - Renewable G - Other Solid H - 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

Mill Data - Number of Mills:

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

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Types of Cement Produced:

Predominant Cement Produced:

Characteristics of Most	% Clinker	% Gypsum	% Limestone
Common ASTM C150 Cement:	% Inorganic Processing Addition		% Other

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 - Waste Derived
E - Hazardous F - Renewable G - Other Solid H - 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					
Plant Location	No. Kilns	Finish Grinding Capacity (000 Tons)	Year	Fuel	AF	Process	Clinker Capacity	
							(Tons/Day)	(000 Tons/Year)

ALABAMA

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State Totals: = = = =

ARIZONA

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

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

PENNSYLVANIA

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GRAND TOTAL USA:

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WHITE CEM
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U.S. HYDRAULIC CEMENT

Portland Cement Types

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SAMPLE g

Blend

Blend

Blend

Blend

Hydra

Hydra

Hydra

Hydra

Hydra

Hydra

Color

Expan

Grouti

Oil We

ells

Mason

Morta

Plasti

est)

White

* Optio

-

High S

U.S. Cement Plant Directory

Company Plant Contact	Address Phone Number	City	State	Zip Code
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United States Portland Cement Plant Locations

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