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# World Cement & Concrete Additives

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Industry Study with Forecasts for **2015 & 2020**

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Study #2841 | January 2012 | \$5900 | 383 pages

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*Gains will be bolstered by recovery in the US construction market, as well as by the consumption of much higher volumes of additives per ton of cement in Western Europe and Japan.*

## World demand to rise 8.3% annually through 2015

World demand for cement and concrete additives is projected to increase 8.3 percent annually to \$15.8 billion in 2015, a significant improvement over the performance of the 2005-2010 period. Gains will be bolstered by recovery in the US construction market, which will boost demand for both cement and related additives. Advances in Western Europe and Japan, while below the global average, will be significant in boosting overall demand, as they consume much higher volumes of additives per ton of cement than many of the largest cement markets in the world, such as China, India, Brazil, Vietnam and Egypt.

In developing markets, growth will be boosted by sustained levels of construction activity, increased cement consumption and the growing use of additives to shorten construction times, save on labor costs and draw concrete construction practices closer into line with the standards in more developed markets. In India, demand will be boosted by greater use of cement in large infrastructure projects, incentives to utilize industrial waste products as mineral additives and efforts to improve the performance characteristics of concrete products. In China, already the world's largest market for additives, increasing demand for higher-grade water reducers (superplasticizers) and other specialty products will bolster overall value gains.

## World Cement & Concrete Additive Demand, 2015 (\$15.8 billion)

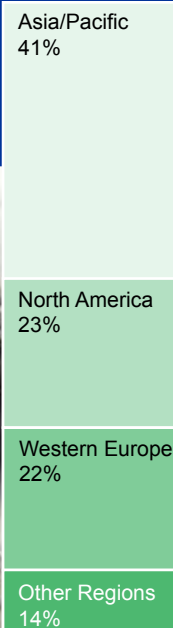


photo: China National Building Materials International Corp.

## Fiber additives to lead gains from small base

The use of mineral additives in concrete formulations is expanding due to efforts to reduce overall cement consumption and to take advantage of performance attributes offered by industrial waste products such as fly ash (which can increase chemical resistance and final strength) and blast furnace slag (which can improve durability). Although much of this use will be in the form of supplementary cementitious materials (SCMs) in cement production (which is not included in the scope of this study), greater use of these same mineral additives in concrete formulations is also anticipated.

Chemical additive demand growth will be led by water reducers, particularly high-value superplasticizers used in self-consolidating concrete (SCC) and other high-performance applications. Air entrainers and other smaller chemical products will also benefit from increased use in SCC, which is finding greater use in high-rise buildings, dams and other structures with particularly rigorous performance criteria. The small fiber segment is expected to register the fastest growth through the forecast period, due to rebounding demand in several key markets and increasing use of fiber additives in markets in which their use has been less common, including Western Europe and other relatively mature additive markets.

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Sample Text,  
 Table & Chart

ASIA/PACIFIC

South Korea: Cement & Concrete Additive Demand

Demand for cement and concrete additives in South Korea was \$300 million in 2010, the third largest national market in the region behind China and Japan. The extent of additive usage in South Korea has traditionally been low relative to its level of economic development, but is several times the regional average. Mineral additives account for a significant share of demand, with blast furnace slag the primary mineral product due to South Korea's sizable iron and steel industry and aggressive utilization targets set by the government. The use of slag as a cement substitute in South Korea has gained momentum only in the last decade or so. However, mineral additive usage in concrete is fairly widespread, as blended cement accounts for a much smaller share of cement consumption in South Korea than in the region overall. The market for chemical additives in concrete is more mature in South Korea than in most countries in the Asia/Pacific region in terms of usage per metric ton of cement.

Demand for cement and concrete additives in South Korea is projected to increase to \$500 million in 2015. An acceleration in construction activity during a recent period of economic sluggishness will boost demand, particularly in building construction applications. The market will benefit from an increase in cement consumption and from strong advances after a decade or so of essentially flat demand. Mineral and fiber additives will benefit from increased use in residential and commercial construction, particularly high-rise buildings and infrastructure projects which require high-strength concrete. In terms of markets, demand growth in the nonbuilding sector will accelerate notably from 2010 pace, although the building sector will post faster gains. Major producers of cement and concrete additives in South Korea include BASF, DENKA, EnGro, Lafarge, POSCO (formerly Pohang Steel) and Sika.

SAMPLE  
 TEXT

TABLE VI-12

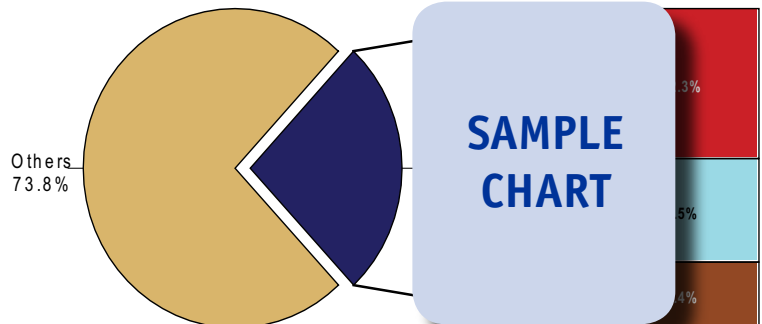
SOUTH KOREA: CEMENT & CONCRETE ADDITIVE DEMAND BY TYPE & MARKET (million dollars)

Item	2000	2005	2010	2015	2020
Cement Demand (million metric tons)					
\$ additives/metric ton cement					
Cement & Concrete Additive Demand					
By Type:					
Chemicals					
Minerals					
Fibers					
By Market:					
Buildings					
Highways & Streets					
Other					
% South Korea					
Asia/Pacific Cement/Concrete Additive	2135	2727	4385	6445	8730

SAMPLE  
 TABLE

CHART VIII-1

WORLD CEMENT & CONCRETE ADDITIVE MARKET SHARE (\$10.6 billion, 2010)



SAMPLE  
 CHART

## Sample Profile, Table & Forecast

### COMPANY PROFILES

#### AfriSam South Africa Pty Limited

Constantia Park  
 Holcim Building  
 Cnr 14th Avenue  
 Roodepoort 1  
 South Africa  
 27-11-670-550  
 http://www.af

Annual Sales:  
 Employment:

Key Products:

**SAMPLE  
PROFILE**

AfriSam South Africa is one of the leading producers of cement, aggregates, ready-mix concrete and other construction materials in South Africa. The privately held company is a wholly owned subsidiary of AfriSam Consortium Pty Limited (South Africa), a holding company. Among AfriSam Consortium's main shareholders is Holcim Limited (Switzerland), which owns a 15-percent stake in the company.

The Company is involved in the cement and concrete additives market mainly through the manufacture of SLAGMENT ground granulated blast furnace slag (GGBFS). SLAGMENT GGBFS, a latent hydraulic binder, is used primarily as a partial cement replacement material in the production of concrete and certain other construction applications. SLAGMENT GGBFS modified concrete is specified for use in the construction of buildings, dams, bridges, roads and water-retaining structures, among other applications. AfriSam South Africa manufactures SLAGMENT GGBFS at facilities in Gauteng, South Africa. The Company has the capacity to produce over 800,000 metric tons of SLAGMENT GGBFS per year.

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TABLE VI-11

### SOUTH KOREA: KEY INDICATORS FOR CEMENT & CONCRETE ADDITIVE DEMAND

Item	2000	2005	2010	2015	2020
Population (million persons)					7
\$ GDP/capita					0
Gross Domestic Product (bil 2009\$)					0
% construction					8
Construction Expenditures (bil 2009\$)					0
Building:					4
Residential					4
Nonresidential					0
Nonbuilding					6
kg cement/capita					8
kg cement/000\$ GDP					2
kg cement/000\$ construction					2
Cement Demand (million metric tons)	4.7	10.0	15.5	22.0	38.0

**SAMPLE  
TABLE**

"Cement demand in South Korea is forecast to rise a healthy 5.4 percent per year through 2015 to 59 million metric tons, exhibiting renewed strength after a period of weakness. Consumption will be driven by a notable rebound in residential building expenditures combined with an acceleration in growth in non-building and nonresidential spending. To provide one example, in March 2011 the Center for New American Security announced that construction at ..."  
 --Section VIII, pg. 187

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**OTHER STUDIES**

**Green Building Materials**

US green building materials demand is forecast to increase 11 percent annually to \$86.6 billion in 2017. Permeable pavement and structural products (e.g., recycled concrete, FSC-certified lumber) will grow the fastest. Exterior products such as energy-efficient windows and green roofing will remain the largest segment. This study analyzes the \$51.8 billion US green building material industry, with forecasts for 2017 and 2022 by product, market and US region. The study also considers market environment factors and profiles industry participants.

#2995 ..... February 2013 ..... \$5100

**Construction Outlook in China**

Construction expenditures in China will increase 8.8 percent per annum in real terms to 16.4 trillion yuan in 2016. Nonbuilding construction will be the fastest growing segment, benefiting from transportation infrastructure expansion and upgrades, and from the construction of utilities. Growth in residential and nonresidential building construction will also be strong. This study analyzes the 10.8 trillion yuan construction industry in China, with forecasts for 2016 and 2021 by type, market and region. The study also evaluates company market share and profiles industry participants.

#2898 ..... June 2012 ..... \$5500

**World Asphalt**

Global consumption of asphalt is forecast to advance 4.1 percent annually from a very weak base to 119.5 million metric tons in 2015. Gains will be most rapid in North America. Massive infrastructure projects in China and India will continue to drive strong growth in the Asia/Pacific region. This study analyzes the 98 million metric ton world asphalt industry, with forecasts for 2015 and 2020 for primary asphalt, asphalt products, world region and for 24 major countries. The study also evaluates company market share and profiles industry participants.

#2847 ..... February 2012 ..... \$6100

**World Construction Aggregates**

World demand for sand, crushed stone, gravel and other construction aggregates will rise 5.2 percent annually through 2015 to 48.3 billion metric tons. The Asia/Pacific market will grow the fastest, followed by Eastern Europe and the Africa/Mideast region. Recycled and secondary types will grow the fastest. This study analyzes the 37.4 billion metric ton world construction aggregates industry, with forecasts for 2015 and 2020 by product, market, application, world region and for 19 countries. The study also evaluates company market share and profiles industry players.

#2838 ..... January 2012 ..... \$5900

**World Cement**

Global demand for hydraulic cement will rise 5.3 percent annually through 2015. Growth in the dominant Chinese market will slow while the US posts the strongest gains of any major market. Blended cement will remain the dominant product type, while ready-mix concrete will be the fastest-growing outlet and largest market. This study analyzes the 3.3 billion metric ton world cement industry, with forecasts for 2015 and 2020 by product, market, world region and for 46 major countries. The study also evaluates company market share and profiles industry participants.

#2805 ..... November 2011 ..... \$6300

**About The Freedonia Group**

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