Cement in China

Industry Study with Forecasts for 2012 & 2017

Study #2430 | January 2009 | $5100 | 203 pages
### Table of Contents

#### EXECUTIVE SUMMARY

#### MARKET ENVIRONMENT
- General ........................................ 4
- Economic Overview ........................... 4
- Recent Economic Performance ............ 5
- Economic Outlook ............................ 7
- Demographic Overview ....................... 8
- Population ..................................... 9
- Households .................................... 11

#### Industrialization & Manufacturing Trends
- Construction Outlook ....................... 15
- Residential Building ......................... 17
- New Housing .................................. 20
- Improvements & Repairs ..................... 21
- Nonresidential Building ...................... 22
- New Construction ............................. 24
- Improvements & Repairs ..................... 25
- Nonbuilding Construction ................... 26
- Roads & Other Transportation .......... 27

#### Regional Demand
- Overview .................................... 30
- Central-North ................................. 31
- Overview .................................... 32
- Central-East .................................. 33
- Overview .................................... 34
- Central-South ................................ 35
- Overview .................................... 36
- South West ................................... 37
- Overview .................................... 38
- Northeast ..................................... 39
- Overview .................................... 40
- World Outlook ................................ 41
- Foreign Trade ................................ 42

#### PRODUCTS
- General ....................................... 43
- Blended Cement .............................. 46
- Types ......................................... 47
- Strength Grades ............................... 49
- Portland Cement ............................. 51
- Specialty & Other Cements ............... 53
- Specialty ...................................... 54
- Other ......................................... 55

#### END USES
- General ....................................... 60
- Residential Building Construction .... 61

#### MARKETS
- General ....................................... 65
- Single Family ................................. 66
- Multiple Family .............................. 67
- By Application ............................... 68
- Nonresidential Building Construction .... 69
- By Structure ................................ 70
- By Application ............................... 71
- Nonbuilding Construction ................ 72
- By Structure ................................ 73
- By Application ............................... 74

#### REGIONAL TRENDS
- General ....................................... 80
- Regional Demographic & Economic Trends 91
- Population Patterns .......................... 94
- Economic Outlook ........................... 95
- Regional Construction Expenditures ..... 96
- Regional Cement Demand .................. 97
- Central-North ................................ 98
- Overview .................................... 99
- Central-East .................................. 100
- Overview .................................... 101
- Central-South ................................ 102
- Overview .................................... 103
- South West ................................... 104
- Overview .................................... 105
- Northeast ..................................... 106
- Overview .................................... 107
- Cement Demand ............................. 108

#### INDUSTRY STRUCTURE
- General ....................................... 125
- Industry Composition ....................... 126
- Market Share ................................ 127
- Foreign Participation in the ............... 128
- Chinese Market ............................... 129
- Legal & Regulatory Issues .................. 130
- Joint Ventures ................................ 131
- Wholly Owned Foreign Enterprises ..... 132
- Representative Offices ..................... 133
- Technological Issues ......................... 134
- Role of Government ......................... 135
- Marketing & Distribution ................. 136
- Cooperative Agreements .................... 137
- Acquisitions & Divestitures ................ 138
- Financial Issues & Requirements ........ 139

#### COMPANY PROFILES
- Anhui Conch Cement ....................... 149
- Asia Cement ................................. 152
- BBMG Group ................................. 154
- Binani Industries ............................. 155
- China National Building Material ..... 156
- China National Materials ................. 160
- China Resources ............................. 161
- China Shanshui Cement .................... 165
- Fujian Cement ................................. 166
- Gansu Qilianshan Cement .................. 167
- HeidelbergCement AG ....................... 169
- Henan Anyang Hubo Cement .......... 170
- Holcim Limited ............................... 172
- Hongshi Holding .............................. 173
- Jiangxi Lanfeng Cement .................... 175
- Jiangxi Wannianqing Cement .......... 176
- Jilin Yatai ..................................... 178
- Lafarge SA ..................................... 180
- Mitsubishi Materials ......................... 182
- Shaanxi Qinling Cement .................... 184
- Shandong Yizhou Cement .................. 185
- Shui On Construction and Materials ..... 186
- Taiheiyo Cement ............................. 189
- Taiwan Cement .............................. 190
- Taiyuan Lionhead Cement ............... 191
- Tangshan Jidong Cement .................. 192
- Tianrui Group Cement ....................... 193
- Xinjiang Tianshan Cement ............... 194
- Zhejiang Hushan ............................. 195
- Zhejiang Jianfeng ............................ 196
- Zhejiang Jinyuan Cement ............... 197
- Zhejiang Leomax ............................. 198
List of Tables

EXECUTIVE SUMMARY
1 Summary Table ................................... 3

MARKET ENVIRONMENT
1 Macroeconomic Indicators .................... 8
2 Gross Domestic Product of China .......... 8
3 Population of China ......................... 10
4 Households in China by Region ............ 12
5 Manufacturing Value Added in China .... 15
6 Construction Expenditures in China .... 16
7 Residential Building Construction
   Expenditures in China .................. 20
8 Nonresidential Building Construction
   Expenditures in China ............. 24
9 Paved Roads in China by Region ......... 30
10 Cement Pricing Patterns in China ...... 38
11 World Cement Demand by Region ...... 41
12 Chinese Foreign Trade in Cement .... 42

MARKETS
1 Cement Demand in China by Market ..... 80
2 Construction Contractor Market
   for Cement in China by Region ...... 82
3 Concrete Product Market for Cement
   in China by Region .................. 84
4 Ready-Mix Market for Cement
   in China by Region .................. 87
5 Consumer Market for Cement
   in China by Region .................. 89
6 Other Markets for Cement
   in China by Region .................. 90

REGIONAL TRENDS
1 Population of China by Region .......... 96
2 Gross Domestic Product
   of China by Region .................. 97
3 Construction Expenditures
   in China by Region .................. 99
4 Cement Demand in China by Region .... 100
5 Central-North Region of China:
   Cement Demand ...................... 105
6 Northeast Region of China:
   Cement Demand ...................... 109
7 Central-East Region of China:
   Cement Demand ...................... 113
8 Central-South Region of China:
   Cement Demand ...................... 116
9 Southwest Region of China:
   Cement Demand ...................... 120
10 Northwest Region of China:
   Cement Demand ...................... 124

END USES
1 Cement Demand in China by End Use .... 62
2 Residential Building Cement
   Demand in China ..................... 65
3 Nonresidential Building Cement
   Demand in China ..................... 70
4 Nonbuilding Construction Cement
   Demand in China ..................... 75

PRODUCTS
1 Cement Demand in China
   by Product, 2007 .................... 45

REGIONAL TRENDS
1 Cement Demand in China
   by Region, 2007 ..................... 101
2 Central-North Region of China ....... 103
3 Northeast Region of China ........... 107
4 Central-East Region of China ........ 111
5 Central-South Region of China ...... 115
6 Southwest Region of China .......... 118
7 Northwest Region of China .......... 122

INDUSTRY STRUCTURE
1 Cement Market Share in China
   by Company, 2007 .................... 128

List of Charts

MARKET ENVIRONMENT
1 Population of China by Age ............. 11
2 Construction Expenditures in China
   by End Use, 2007 .................... 17

PRODUCTS
1 Cement Demand in China
   by Product, 2007 .................... 45

END USES
1 Cement Demand in China
   by End Use, 2007 .................... 62

MARKETS
1 Cement Demand in China
   by Market, 2007 .................... 80

REGIONAL TRENDS
1 Cement Demand in China
   by Region, 2007 ..................... 101
2 Central-North Region of China ....... 103
3 Northeast Region of China ........... 107
4 Central-East Region of China ........ 111
5 Central-South Region of China ...... 115
6 Southwest Region of China .......... 118
7 Northwest Region of China .......... 122

INDUSTRY STRUCTURE
1 Cement Market Share in China
   by Company, 2007 .................... 128

Click here to purchase online

Order now, click here!
Demand in China to grow 6% yearly through 2012

Demand for cement in China is forecast to rise 6.0 percent annually through 2012 to 1.8 billion metric tons. Growth will be driven by rising, but decelerating, construction expenditures in China. Further advances in cement manufacturing technology will also help stimulate sales by improving the quality of the product. Blended cements will account for about 90 percent of total sales in 2012, reflecting the versatility of these types across a range of construction applications, as well as their performance and/or price benefits over competitive cements.

The Central-East is expected to remain the largest cement market in China through 2012, fueled by increases in regional construction expenditures. However, the cement markets in the Northwest and Southwest will grow at the fastest pace, benefiting from the government’s Great Western Development strategy, which aims to promote investment in these areas. Consumption of cement in the Central-North is also forecast to perform above the national average, supported by high levels of transportation infrastructure construction and booming urban markets in Beijing and Tianjin.

Nonresidential building to remain largest end use

Nonresidential building construction will continue to represent the largest end use for cement, benefiting from ongoing industrialization in China. Nonresidential building cement consumption will also be boosted by the construction of new production facilities as the Chinese industrial sector focuses on more value added goods. However, demand for cement in nonbuilding construction will outpace other construction categories. In the short term, demand for cement used in infrastructure applications will benefit from government spending packages designed to offset the effects of the global economic downturn. In the longer term, a number of large infrastructure projects and other government initiatives to address imbalances in development between urban and rural areas will boost nonbuilding cement consumption.

Ready-mix concrete to be fastest growing market

Construction contractors will continue to represent the largest market for cement, accounting for nearly one-third of total demand in 2012. However, the ready-mix concrete market will exhibit the strongest growth, posting near double-digit gains through 2012. Gains will benefit from government regulations banning on-site concrete and mortar mixing. Demand for cement used in concrete products will be driven by the increasing popularity of precast concrete with many construction contractors. In addition, the phase-out of clay bricks will heighten demand for concrete blocks.

Copyright 2009 The Freedonia Group, Inc.
MARKETS

Construction Contractors

Cement consumption by construction contractors is projected to rise 4.6 percent per year through 2012 to 569 million metric tons, slower than the forecast pace for the cement market as a whole. Demand will be driven by strong construction expenditures in China. However, government bans on concrete and mortar mixing on job sites will constrain cement sales to construction contractors going forward. The Central-East will remain the largest regional market for cement in this category, accounting for almost two-fifths of total construction contractor cement use in 2012. Construction contractor cement demand in the Northwest and Southwest will grow at annual rates of 6.1 percent and 5.5 percent respectively through 2012. Regional gains will benefit from the government's Great Western Development strategy, which aims to promote economic growth in the relatively underdeveloped western areas of China, as well as from reconstruction efforts following a large earthquake in Sichuan province in May 2008.

Construction contractors that have their own ready-mix or concrete product manufacturing operations account for much of the cement sold in this market category, although historically it was a prevalent practice for builders in China to mix batches of concrete and mortar on an as-need basis on construction sites. However, in October 2003 the central government issued Decree [2003] 341, which banned concrete mixing operations on job sites in 124 cities across the country from the beginning of 2004, and in all urban areas from the beginning of 2006. Construction contractors that do not have their own off-site concrete production operations must purchase ready-mix concrete, eliminating the need to purchase cement directly. As a result, cement sales to these construction contractors will shift to ready-mix concrete producers or concrete product manufacturers.

TABLE IV-3
NONRESIDENTIAL BUILDING CEMENT DEMAND IN CHINA (million metric tons)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonres Bldg Constr Expend (bil 2006 ¥)</td>
<td>368</td>
<td>744</td>
<td>1711</td>
<td>2620</td>
<td>3650</td>
</tr>
<tr>
<td>kg cement/000¥ construction</td>
<td>522</td>
<td>368</td>
<td>294</td>
<td>254</td>
<td>229</td>
</tr>
<tr>
<td>Nonresidential Building Cement Demand</td>
<td>192</td>
<td>274</td>
<td>503</td>
<td>666</td>
<td>835</td>
</tr>
<tr>
<td>By Structure:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>89</td>
<td>123</td>
<td>215</td>
<td>272</td>
<td>324</td>
</tr>
<tr>
<td>Institutional</td>
<td>43</td>
<td>69</td>
<td>143</td>
<td>210</td>
<td>293</td>
</tr>
<tr>
<td>Office &amp; Commercial</td>
<td>37</td>
<td>53</td>
<td>95</td>
<td>124</td>
<td>149</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>29</td>
<td>50</td>
<td>60</td>
<td>69</td>
</tr>
<tr>
<td>By Type:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Construction</td>
<td>147</td>
<td>207</td>
<td>376</td>
<td>487</td>
<td>592</td>
</tr>
<tr>
<td>Improvements &amp; Repairs</td>
<td>45</td>
<td>67</td>
<td>127</td>
<td>179</td>
<td>243</td>
</tr>
<tr>
<td>% nonresidential building</td>
<td>38.2</td>
<td>38.0</td>
<td>37.7</td>
<td>37.2</td>
<td>36.6</td>
</tr>
<tr>
<td>Total Cement Demand</td>
<td>503</td>
<td>721</td>
<td>1335</td>
<td>1790</td>
<td>2280</td>
</tr>
</tbody>
</table>

Copyright 2009 The Freedonia Group, Inc.
### COMPANY PROFILES

**China Shanshui Cement Group Limited**

Suite 901 B Kinwick Centre
32 Hollywood Road Central
Hong Kong
86-571-8599-9833
http://www.shanshuigroup.com

Employment:  12,780 (June 2008)
Key Products: ordinary silicate cement, slag cement and clinker

**International Contact:** Mr. Caikui Zhang, Chairman


The Company’s main products are ordinary silicate cement, slag cement and clinker. Cements made by China Shanshui Cement include low- and high-grade types, all of which are sold under the SHANSHUI DONGYUE tradename. In 2007, China Shanshui Cement produced 17.3 million metric tons of cement and 13.9 million metric tons of clinker. According to the Company, China Shanshui Cement is the leading cement manufacturer in both Shandong and Liaoning provinces. The Company has the annual capacity to produce 50 million metric tons of cement.

As of June 2008, the Company operated 14 clinker production lines and 53 cement grinding lines in Shandong. The Company’s

### TABLE V-1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Expenditures (bil 2006 ¥)</td>
<td>1027</td>
<td>2062</td>
<td>4814</td>
<td>7460</td>
<td>10600</td>
</tr>
<tr>
<td>Cement Demand (kg cement/000¥ construction)</td>
<td>150</td>
<td>130</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Construction Contractors</td>
<td>203</td>
<td>270</td>
<td>454</td>
<td>569</td>
<td>679</td>
</tr>
<tr>
<td>Concrete Products</td>
<td>168</td>
<td>226</td>
<td>395</td>
<td>513</td>
<td>621</td>
</tr>
<tr>
<td>Ready-Mix Concrete</td>
<td>25</td>
<td>79</td>
<td>240</td>
<td>383</td>
<td>563</td>
</tr>
<tr>
<td>Consumers</td>
<td>44</td>
<td>64</td>
<td>123</td>
<td>167</td>
<td>232</td>
</tr>
<tr>
<td>Other</td>
<td>63</td>
<td>82</td>
<td>123</td>
<td>158</td>
<td>185</td>
</tr>
<tr>
<td>¥/metric ton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement Demand (bil ¥)</td>
<td>93</td>
<td>144</td>
<td>317</td>
<td>465</td>
<td>650</td>
</tr>
</tbody>
</table>

### CHART VI-1

CEMENT DEMAND IN CHINA BY REGION, 2007
(1.3 billion metric tons)
## Order Information

**Five Convenient Ways to Order**

**ONLINE:** [www.freedoniagroup.com](http://www.freedoniagroup.com)

**MAIL:** Print out and complete the order form and send to The Freedonia Group (see address at the bottom of this form)

**PHONE:** Call toll free, 800.927.5900 (US) or +1 440.684.9600

**FAX:** +1 440.646.0484 (US)

**EMAIL:** info@freedoniagroup.com

---

### Cement in China

<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Use License (add to study price) *</td>
<td>+$2300</td>
</tr>
<tr>
<td>Additional Print Copies @ $500 each *</td>
<td></td>
</tr>
<tr>
<td><strong>Total (including selected option)</strong></td>
<td>$5100</td>
</tr>
</tbody>
</table>

**Free Handling & Shipping**

There is NO charge for handling or UPS shipping in the US. Expect delivery in 3 to 5 business days. Outside the US, Freedonia provides free airmail service. Express delivery is available at cost.

**Orders Outside of the US**

Checks must be made payable in US funds, drawn against a US bank and mailed directly to The Freedonia Group. For wire transfers please contact our customer service department at info@freedoniagroup.com. Credit cards accepted.

**Save 15%**

If you order three (3) different titles at the same time, you can receive a 15% discount. If your order is accompanied by a check or wire transfer, you may take a 5% cash discount (discounts do not apply to Corporate Use Licenses).

---

### Corporate Use License

Now every decision maker in your organization can act on the key intelligence found in all Freedonia studies. For an additional $2300, companies receive unlimited use of an electronic version (PDF) of the study. Place it on your intranet, e-mail it to coworkers around the world, or print it as many times as you like.

**Click here to learn more about the Corporate Use License**

---

### Order Form

**Name**

**Title**

**Company**

**Division**

**Street**

(No P.O. Box please)

**City/State/Zip**

**Country**

**Phone**

**Fax**

**Email**

---

**Bill my company**

**American Express**

**MasterCard**

**Visa**

---

**Signature**

---

* Please check appropriate option and sign below to order an electronic version of the study.

---

**Individual Use License Agreement**

The undersigned hereby represents that the above captioned study will be used by only __ individual(s) who are employees of the company and that the study will not be loaded on a network for multiple users. In the event that usage of the study changes, the Company will promptly notify Freedonia of such change and will pay to Freedonia the appropriate fee based on Freedonia’s standard fee schedule then in effect. Note: Entire company corporate use license, add $2300; one additional user, add $500; two additional users, add $1000; three additional users, add $1500.

**Corporate Use License Agreement**

The above captioned study may be stored on the company’s intranet or shared directory, available to company employees. Copies of the study may be made, but the undersigned represents that distribution of the study will be limited to employees of the company.

**Signature**

---

The Freedonia Group, Inc. 767 Beta Drive • Cleveland, OH • 44143-2326 • USA • Web site: [www.freedoniagroup.com](http://www.freedoniagroup.com)

Tel US: 800.927.5900 or +1 440.684.9600 • Fax: +1 440.646.0484 • e-mail: info@freedoniagroup.com

Page 7
Other Studies

World Cement & Concrete Additives
Global demand for cement and concrete additives will rise 6% yearly through 2012. Gains will be driven by more penetration of chemical and fiber additives in concrete construction, in both emerging markets in Asia and Eastern Europe as well as the more mature cement industry in North America. This study analyzes the $12.1 billion world cement and concrete additive industry, with forecasts for 2012 and 2017 by type, market, world region and for 46 countries. It also evaluates market share and profiles industry players.
#2425 ...................... 12/2008 .................. $5700

Cement & Concrete Additives
US cement and concrete additive demand will grow 6.4% annually through 2012, as construction activity rebounds from a low 2007 base. Chemical additives will stay the top segment, led by water reducers such as superplasticizers. Mineral additives will grow faster, paced by waste materials such as fly ash and blast furnace slag. This study analyzes the $2.3 billion US cement and concrete additive industry, with forecasts for 2012 and 2017 by product and market. It also evaluates market share and profiles industry competitors.
#2382 ...................... 08/2008 .................. $4600

Construction Outlook in China
Construction expenditures in China will grow 9.2% annually through 2012, as nonresidential building construction will be the fastest growing sector based on the expansion and upgrading of the country’s physical infrastructure, and on utilities construction. Nonresidential building will remain the largest market. This study analyzes the $4.8 trillion construction sector in China, with forecasts for 2012 and 2017 by type, market and geographic region. It also evaluates company market share and profiles industry participants.
#2356 ...................... 07/2008 .................. $5100

Brick & Block
US demand for brick and block will reach $7.9 billion in 2012. Growth will be greatest in concrete products, reflecting stronger growth in key nonresidential building markets. Demand for clay brick will benefit from a recovery in residential building activity, especially in new single-family housing. This study analyzes the $14.2 billion unit US brick and block industry, with forecasts for 2012 and 2017 by product, market, application and US geographic region. It also evaluates company market share and profiles major players.
#2331 ...................... 05/2008 .................. $4500

World Cement
Global demand for cement will grow 5.3% annually through 2012, driven by strong increases in construction activity in developing countries. The rate of growth in China, the largest market, will moderate considerably but remain above the world average. The second largest market, India, will grow the fastest. This study analyzes the 2.8 billion metric ton world cement industry, with forecasts for 2012 and 2017 by type, market, world region and for 46 countries. It also evaluates company market share and profiles 44 major players.
#2325 ...................... 04/2008 .................. $5800

About The Freedonia Group

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

- Chemicals
- Plastics
- Life Sciences
- Packaging
- Building Materials
- Security
- & Electronics
- Industrial Components & Equipment
- Automotive & Transportation Equipment
- Household Goods
- Energy/Power Equipment

Freedonia Custom Research

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company’s specific needs, companies harness Freedonia’s research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia’s team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.