CLICK TO VIEW

Refractories

US Industry Study with Forecasts for **2019 & 2024**

Study #3295 | June 2015 | $5300 | 238 pages

The Freedonia Group
767 Beta Drive
Cleveland, OH • 44143-2326 • USA
Toll Free US Tel: 800.927.5900 or
+1 440.684.9600
Fax: +1 440.646.0484
Email: info@freedoniagroup.com

www.freedoniagroup.com

Refractories

US Industry Study with Forecasts for *2019 & 2024*

Freedonia®

Table of Contents

Refractories

US Industry Study with Forecasts for ***2019 & 2024***

List of Tables/Charts

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

FORMS

MATERIALS

MARKETS

INDUSTRY STRUCTURE

Refractories

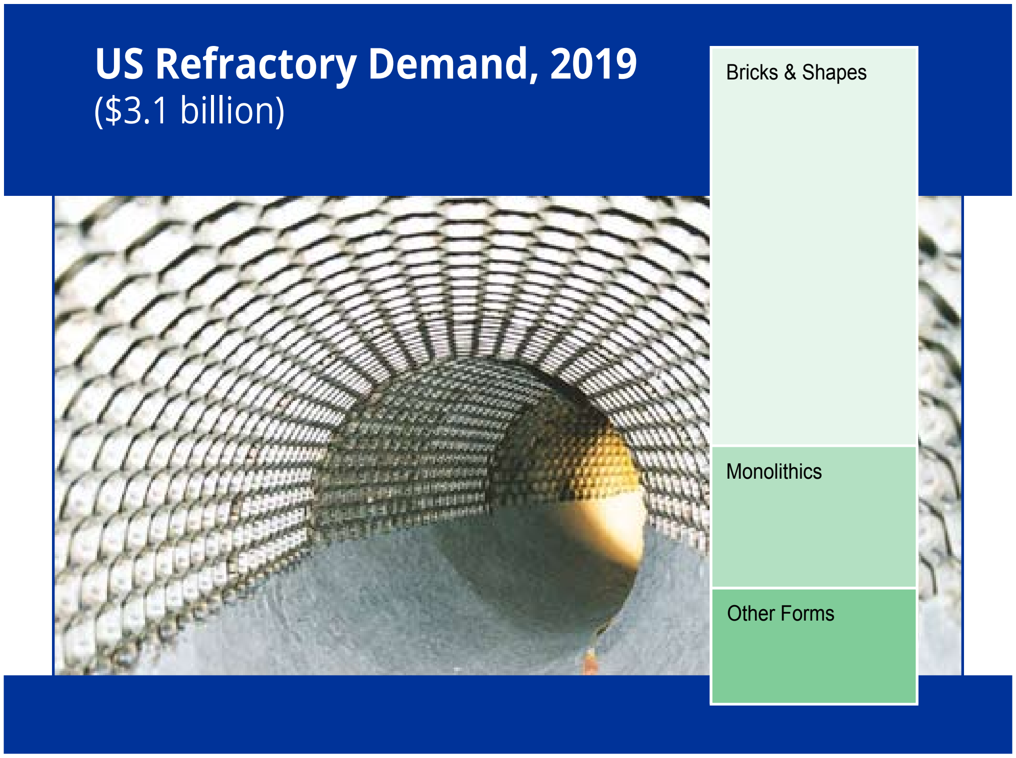
US Industry Study with Forecasts for ***2019 & 2024***

Decelerating demand will result from slowing US iron and steel production and durable goods manufacturing, and from a shift toward better performing refractories that lengthen replacement cycles.

US demand to rise 3.3% annually through 2019

Demand for refractories in the US is forecast to increase 3.3 percent per year through 2019 to $3.1 billion. This will represent a deceleration from robust 2009-2014 gains, as iron and steel production in the US slows. Sales will also be limited by moderating output in a number of other durable goods manufacturing industries, many of which utilize refractories to at least some extent. Furthermore, a shift in demand toward better performing refractories, while providing an initial boost to sales due to their premium prices, will cause market growth to slow in the long run as replacement cycles are lengthened. On the positive side, rising raw refractory material prices will support value gains. Additionally, the nonmetallic minerals industry segment, which is expected to record the fastest market advances, utilizes some of the highest cost refractories, boosting overall dollar growth.

When measured in volume terms, demand increases will be much more sluggish, averaging under one percent per year through 2019, when sales will total 2.3 million tons. Improvements in refractory designs have enabled end users to utilize less material per ton of output. Among specific markets, nonmetallic minerals will record the fastest demand gains, supported by an acceleration in output of cement and mineral products. Overall refractory market advances will be limited by only modest increases in iron and steel production in the US. The health of the iron and steel industry, which accounts for the largest share of refractory demand by volume, has a major impact on the total market.



Nonclay refractories to outpace clay types

Demand for nonclay refractories will increase at a faster rate than clay refractories through 2019, a reversal from the 2009-2014 period. Nonclay refractories typically offer a number of performance advantages that boost their use in more demanding applications, and nonclay refractory prices will rise faster than those for clay products, boosting value gains. However, the lower cost of clay refractories ensures that their continued use, especially where the performance advantages of nonclay refractories are not required.

Technological advantage of US producers to remain

As is the case with demand, refractory production increases will be limited by the modest gains anticipated for iron and steel production in the US. Domestic manufacturers of refractories will also continue to face competition from low cost foreign suppliers. Despite this, the technological advantage that US refractory producers have will continue to offer opportunities for growth, based on the global trend toward use of better performing refractories.

Refractories

US Industry Study with Forecasts for ***2019 & 2024***

Freedonia®

Sample Text, Table & Chart

MARKETS

Ceramics -- Sales of refractories used in the manufact
ce percent per year thr
to n from the rebound
th creases in ceramics
w ory demand. Howe
ti ess refractory weig
o cing gains will con
st or refractories used
p nt per year through
$2

SAMPLE TEXT

Among the products included in this market segment ar
plumbing fixtures, ceramic brick and clay tile, ceramic cookw
tableware, ceramic sewer pipe and fittings, other architectura
products, porcelain and steatite electrical products, pottery pr
refractories (excepting dead-burned magnesia).

Switching from low cost refractories to more expensive, but higher performing, refractories is a growing trend in the ceramics industry, with kiln furniture being a prime example. The use of lightweight products, including silicon carbide, ceramic fibers, and lightweight aggregate blended with standard products, has aided in reducing the mass of kiln furniture, while new processing techniques make kiln furniture thinner. Low weight, low volume furniture reduces heat up and cool down times, saving energy and significantly reducing costs for ceramics producers.

Ceramics producers use refractories as heat resistant materials in
kilns and during the production of brick, tile, sewage/drainag
tion pipe, dinnerware, sanitary or whiteware (such as toilets
advanced ceramics, electric insulators, ceramic electronic co
(e.g., capacitors, semiconductors, and ferrite cores), abrasive
refractories. Resistance to high temperatures, slag attack fro

142 Copyright 2015

TABLE IV-3

NONCLAY REFRACTORY SUPPLY & DEMAND
(million dollars)

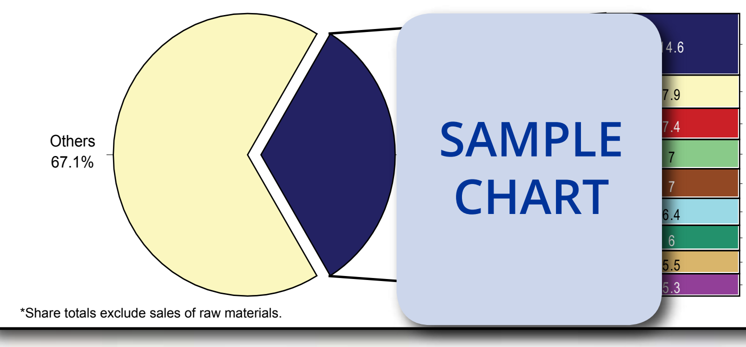
Item	2004	2009	2014	2019	2024
Refractory Demand					
% nonclay					
Nonclay Refractory Demand					
net exports					
Nonclay Refractory Shipments					
Magnesite & Chrome					
Zircon & Zirconia					
Extra-High Alumina					
Ceramic Fibers					
Silicon Carbide					
Graphite & Carbon					
Mullite					
Silica					
Dolomite & Other					
$/ton					
Nonclay Refractory Shipments (000 tons)					

SAMPLE TABLE

Source: The Freedonia Group, Inc.

CHART VI-1

US REFRACTORY MARKET SHARE*, 2014
($2.6 billion)



*Share totals exclude sales of raw materials.

Click here to purchase online

Order now, click here!

Refractories

US Industry Study with Forecasts for ***2019 & 2024***

Freedonia®

Sample Profile & Table, & Study Coverage

TABLE III-11

OTHER REFRACTORY FORM SUPPLY & DEMAND
(million dollars)

Item	2004	2009	2014	2019	2024
Refractory Demand					
% other forms					
Other Refractory Form Demand					
net exports					
Other Refractory Form Shipments					
Nonclay					
Clay					
$/ton					
Other Refractory Form Shipments (000 tons)					

Source: The Freedonia Group, Inc.

SAMPLE TABLE

COMPANY PROFILES

BNZ Materials Incorporated
6901 South Pierce Street, Suite 260
Littleton, CO 80128
303-978-1199
http://w

Annual S
Employ

Key Pro ... n, insulating fire-
bricks, c

SAMPLE PROFILE

BNZ ... industrial insulation and refractories for the furnace, petrochemical, aluminum, electrical, glass, steel, and other industries. The Company is privately held.

The Company is involved in the US refractory industry through the manufacture of calcium silicate ($CaSiO_3$) structural insulation, insulating firebricks, castables, mortars, and cements. BNZ Materials' $CaSiO_3$ structural insulation includes MARINITE, CS85, TRANSITE, and ZELIEBLOK products. The MARINITE structural insulation line includes MARINITE A and MARINITE C boards, which are heat treated and designed for use in the conveying, containing, and forming of molten aluminum and other nonferrous metals; and MARINITE P, MARINITE I, and MARINITE M oven-dried boards that can be utilized in heat insulating processes, fire protection applications, and machined parts.

CS85 structural insulation board is engineered to provide the Company's highest strength and electrical resistance properties in applications with temperatures of 1,800 degrees Fahrenheit and higher. Among other applications, CS85 boards are suitable for platen press

186

STUDY COVERAGE

Refractories is a Freedonia study that presents historical demand data (2004, 2009 and 2014) plus forecasts (2019, 2024) by form, material and market. In addition, the study considers key market environment factors, assesses the industry structure, evaluates company market share and profiles 25 US industry competitors.

Order Information

Five Convenient Ways to Order

INDUSTRY MARKET RESEARCH FOR BUSINESS LEADERS, STRATEGISTS, DECISION MAKERS

Freedonia®

ONLINE: 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

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.

Credit Card Orders

For convenience, Freedonia accepts American Express, MasterCard or Visa. Credit card purchases must include account number, expiration date and authorized signature.

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 $2600, companies receive unlimited use of an electronic version (PDF) of the study. Place it on your intranet, email 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

F-WEB.3295

Refractories $5300

☐ Corporate Use License (add to study price) * +$2600

___ Additional Print Copies @ $600 each *

Total (including selected option) $________

☐ Enclosed is my check (5% discount) drawn on a US bank and payable to The Freedonia Group, Inc., in US funds (Ohio residents add 8% sales tax)

☐ Bill my company ☐ American Express ☐ MasterCard ☐ Visa

Credit Card # Expires mm/yy Security Code

Signature ________

Name ________

Title ________

Company ________

Division ________

Street ________
(No PO Box please)

City/State/Zip ________

Country ________

Phone ________ Fax ________

Email ________

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

☐ 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 ________

☐ 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 $2600; one additional user, add $600; two additional users, add $1200; three additional users, add $1800.

Signature ________

Related Studies

World Magnets

This study analyzes the world magnet industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by product (e.g., neodymium, samarium cobalt, ferrite, alnico) and market (e.g., automotive, industrial, electronics) for six world regions and 23 major countries. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#3328..............October 2015.................$6300

Abrasives

Demand for abrasives in the US is forecast to rise 3.8 percent annually through 2019 to $7.0 billion. Durable goods will remain the dominant market as well as one of the fastest growing. Market share gains for superabrasives will benefit the bonded, coated, and loose abrasives segments. Growth in metallic abrasives will lag the industry average. This study analyzes the $5.8 billion US abrasives industry, with forecasts for 2019 and 2024 by raw material, product and market. The study also evaluates company market share and profiles industry players.

#3248............. February 2015................$5300

Precast Concrete Products

US demand for precast concrete products is forecast to rise 6.4 percent per year to $12.2 billion in 2018. The dominant structural and architectural building component segments will grow the fastest, as they rebound from previous steep declines. The residential market will see above average gains in precast concrete roofing tiles, siding and fencing. This study analyzes the $8.9 billion US precast concrete products industry, with forecasts for 2018 and 2023 by product, market and US region. The study also evaluates company market share and profiles industry competitors.

#3244..............January 2015.................$5200

Bricks, Blocks & Pavers

Demand for bricks, blocks and pavers in the US is forecast to rise 8.8 percent per annum from a low 2013 base to $8.9 billion in 2018. Bricks, typically made of clay, will see the most rapid growth of any product, driven by a rebound in new housing construction. Pavers will be the second fastest growing type, driven in part by interest in “green” building materials such as permeable pavers. This study analyzes the $5.8 billion US brick, block and paver industry, with forecasts for 2018 and 2023 by product, material, market, application and US region. The study also evaluates company market share and profiles industry players.

#3236.............November 2014................$5200

World Material Handling Products

Global material handling product demand will rise 5.0 percent annually through 2018 to $142 billion. India and China will grow the fastest as material handling products supply growing manufacturing and distribution activity. Automated storage and retrieval systems and automated guided vehicles will grow the fastest. This study analyzes the $111 billion world material handling product industry, with forecasts for 2018 and 2023 by product, market, world region, and for 29 countries. This study also evaluates company market share and profiles industry participants.

#3196........... September 2014..............$6400

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 and other world markets. Industries analyzed by Freedonia include:

Automotive & Transport • Chemicals • Construction & Building Products • Consumer Goods • Energy & Petroleum • Industrial Components • Healthcare & Life Sciences • Machinery & Equipment • Metals, Minerals & Glass • Packaging • Plastics & Other Polymers • Security • Services • Textiles & Nonwovens • Water Treatment

Click here to learn more about Freedonia

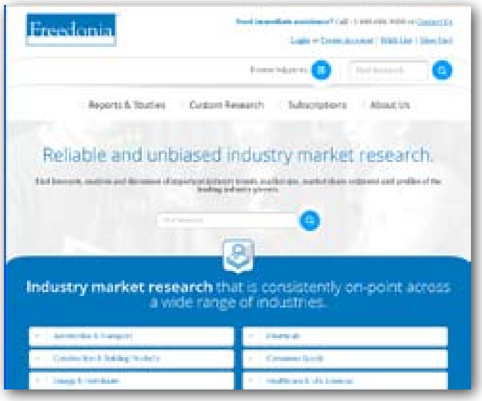
Freedonia Custom Research

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.

Click here to learn more about Custom Research

Click here for complete title list



Click here to visit freedoniagroup.com

The Freedonia Group, Inc. • 767 Beta Drive • Cleveland, OH • 44143-2326 • USA • Website: www.freedoniagroup.com
Tel US: 800.927.5900 or +1 440.684.9600 • Fax: +1 440.646.0484 • Email: info@freedoniagroup.com