



Freedonia Focus Reports
Global Collection

Global Refractories

March 2020



CLICK TO ORDER
FULL REPORT
BROCHURE
CLICK TO ORDER
FULL REPORT

www.freedoniafocusreports.com

Table of Contents

1. Highlights	3
2. Global Overview & Forecasts	5
Materials	5
Markets	8
Iron & Steel	9
Nonmetallic Minerals	9
Nonferrous Metals	10
Other Markets	11
3. Regional Segmentation & Forecasts	13
Regional Shipments Overview	13
Regional Demand Overview	15
North America	17
Western Europe	19
Asia/Pacific	21
Other Regions	23
Central & South America	24
Eastern Europe	24
Africa/Mideast	24
4. Industry Structure	26
Key Findings & Industry Composition	26
Market Leaders	27
RHI Magnesita	28
Vesuvius	29
Krosaki Harima	29
5. About This Report	30
Scope	30
Sources	30
Industry Codes	31
Freedonia Methodology	31
Resources	33

List of Tables & Figures

Figure 1 Global Refractory Market Outlook, 2018 – 2023	4
Figure 2 Global Refractory Demand by Material, 2008 – 2023 (mil m tons)	5
Table 1 Global Refractory Demand by Material, 2008 – 2023 (000 m tons)	5
Figure 3 Global Refractory Demand by Material, 2008 – 2023 (%)	6
Figure 4 Global Refractory Demand by Market, 2008 – 2023 (mil m tons)	8
Table 2 Global Refractory Demand by Market, 2008 – 2023 (000 m tons)	8
Figure 5 Global Refractory Demand by Market, 2008 – 2023 (%)	12
Figure 6 Global Refractory Shipments by Region, 2008 – 2023 (US\$ bil)	13
Table 3 Global Refractory Shipments by Region, 2008 – 2023 (US\$ mil)	13
Figure 7 Global Refractory Shipments by Region, 2008 – 2023 (%)	14
Figure 8 Global Refractory Demand by Region, 2008 – 2023 (mil m tons)	15
Table 4 Global Refractory Demand by Region, 2008 – 2023 (000 m tons)	15
Figure 9 Global Refractory Demand by Region, 2008 – 2023 (%)	16
Figure 10 North America: Refractory Demand by Material, 2008 – 2023 (mil m tons)	17
Figure 11 North America: Refractory Demand by Market, 2008 – 2023 (mil m tons)	17
Table 5 North America: Refractory Demand by Material & Market, 2008 – 2023 (000 m tons)	18
Figure 12 Western Europe: Refractory Demand by Material, 2008 – 2023 (mil m tons)	19
Figure 13 Western Europe: Refractory Demand by Market, 2008 – 2023 (mil m tons)	19
Table 6 Western Europe: Refractory Demand by Material & Market, 2008 – 2023 (000 m tons)	20
Figure 14 Asia/Pacific: Refractory Demand by Material, 2008 – 2023 (mil m tons)	21
Figure 15 Asia/Pacific: Refractory Demand by Market, 2008 – 2023 (mil m tons)	21
Table 7 Asia/Pacific: Refractory Demand by Material & Market, 2008 – 2023 (000 m tons)	22
Figure 16 Other Regions: Refractory Demand by Region, 2008 – 2023 (mil m tons)	23
Figure 17 Other Regions: Refractory Demand by Market, 2008 – 2023 (mil m tons)	23
Table 8 Other Regions: Refractory Demand by Region & Market, 2008 – 2023 (000 m tons)	25
Figure 18 Global Refractory Market Share by Company, 2018 (%)	27
Table 9 Leading Suppliers to the Global Refractory Market	28
Table 10 NAICS & SIC Codes Related to Refractories	31
Table 11 HS Codes Related to Refractories	31

About This Report

Scope

This report forecasts to 2023 global demand for refractories by material, market, and major world region in metric tons. Material segments include:

- clay
- nonclay

Reported markets encompass:

- iron and steel
- nonmetallic minerals
- nonferrous metals
- other markets such as chemical manufacturing, petroleum refining, and waste incinerators

Major world regions include North America, Western Europe, Asia/Pacific, and all other regions.

To illustrate historical trends, world, material, market, and regional demand (including material and market segments) are provided for 2008, 2013, and 2018. Finally, global shipments in US dollars are segmented by major world region and provided for 2008, 2013, 2018, and 2023.

For this report, refractories are defined according to the ASTM International definition: “nonmetallic minerals having those chemical and physical properties that make them applicable for structures, or as components of systems, that are exposed to environments above 538 degrees Celsius (1,000 degrees Fahrenheit)”. Materials that are resistant to lower temperatures are excluded.

Other various topics, including profiles of pertinent leading companies, are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Global Refractories (FW60037) is based on a [comprehensive industry study](#) published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources, such as:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- intergovernmental and non-governmental organizations

About This Report

- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 10 | NAICS & SIC Codes Related to Refractories

NAICS/SCIAN 2017		SIC	
North American Industry Classification System		Standard Industrial Classification	
327120	Clay building material and refractories manufacturing	3255	Clay Refractories
		3297	Nonclay Refractories

Source: US Census Bureau

Table 11 | HS Codes Related to Refractories

HS Code	Definition
3816	Refractory cements, mortars, concretes, and similar compositions
6902	Refractory bricks, blocks, tiles, and similar refractory ceramic goods
6903	Other refractory ceramic goods, such as retorts, crucibles, muffles, nozzles, plugs, etc.

Source: United Nations Statistics Division

Freedonia Methodology

The Freedonia Group, a subsidiary of MarketResearch.com, has been in business for more than 30 years and in that time has developed a comprehensive approach to data analysis that takes into account the variety of industries covered and the evolving needs of our customers.

Every industry presents different challenges in market sizing and forecasting, and this requires flexibility in methodology and approach. Freedonia methodology integrates a variety of quantitative and qualitative techniques to present the best overall picture of a market's current position as well as its future outlook: When published data are available, we make sure they are correct and representative of reality. We understand that published data often have flaws either in scope or quality, and adjustments are made accordingly. Where no data are available, we use various methodologies to develop market sizing (both top-down and bottom-up) and then triangulate those results to come up with the most

About This Report

accurate data series possible. Regardless of approach, we also talk to industry participants to verify both historical perspective and future growth opportunities.

Methods used in the preparation of Freedonia market research include, but are not limited to, the following activities: comprehensive data mining and evaluation, primary research, consensus forecasting and analysis, ratio analysis using key indicators, regression analysis, end use growth indices and intensity factors, purchase power parity adjustments for global data, consumer and end user surveys, market share and corporate sales analysis, product lifespan analysis, product or market life cycle analysis, graphical data modeling, long-term historical trend analysis, bottom-up and top-down demand modeling, and comparative market size ranking.

Freedonia quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

Copyright & Licensing

The full report is protected by copyright laws of the United States of America and international treaties. The entire contents of the publication are copyrighted by The Freedonia Group.

Resources

The Freedonia Group

Global Refractories

Freedonia Industry Studies

Global Abrasives

Global Fiber Cement

Global Flat Glass Market

Global Foamed Plastic Insulation

Global Industrial Silica Sand

Insulation

Freedonia Focus Reports

Aluminum: United States

Global Cement

Industrial Clays: United States

Lime: United States

Sheet Metal: United States

Steel Mill Products: United States

Freedonia Custom Research

Trade Publications

Ceramic & Glass Manufacturing

Fastmarkets IM

Refractories Window

refractories WORLDFORUM

Agencies & Associations

ASTM International

The Association of China Refractories Industry

Brazilian Institute of Geography and Statistics

Confindustria Ceramica

Eurostat

India's Ministry of Statistics & Programme Implementation

Latin American Association of Refractory Manufacturers

Mexico's National Institute of Statistics and Geography

State Statistics Service of Ukraine

Statistics Bureau of Japan

Statistics Canada

Statistics Korea

About This Report

Taiwan's Bureau of Foreign Trade
Taiwan's National Development Council
Turkish Statistical Institute
United Nations Comtrade
United States Census Bureau
United States Geological Survey
United States International Trade Commission
World Refractories Association
World Steel Association