==== MATERIALS TECHNOLOGY ==== ======== PUBLICATIONS ========

71 Chalk Hill, Watford WD19 4DA, UK. Tel: +44 1923 237910 Fax: +44 1923 211510 Internet: www.mat-tech.co.uk

A new in-depth Market Report on the Refractories Industry….

EUROPEAN AND INTERNATIONAL REFRACTORIES INDUSTRY:
A MARKET / TECHNOLOGY REPORT

By John Briggs

ISBN 1 871677 57 2 (Published November 2007)

The report provides information on:

- Production, consumption, imports and exports of monolithic refractories by major country
- Production, consumption, imports and exports of refractory bricks and shapes by major country
- Growth prospects for refractories by type, material and geographical area
- Production, consumption, imports and exports of refractory raw materials (magnesite, alumina, andalusite, bauxite, silicon carbide, graphite, zirconia, dolomite, chamotte, etc.)
- Review of major end-user markets, including iron & steel production, cement, glass, ceramics, foundries, non-ferrous metals, incinerators, power production; their relative importance in different countries
- Data on trends in the specific consumption of refractories per tonne of steel by process in integrated plants and in electric-arc plants
- Data on trends in the specific consumption of refractories in the cement, non-ferrous metals and glass industries
- Refractory fibre and kiln furniture markets by product, country and supplier
- Survey of refractories in Europe by major country, covering production, trade and consumption
- Review of technological developments and their impact on the demand for refractories
- Review of China and India's role in the contemporary and future markets for refractories
- Profiles of major multinational and European-based refractories and raw materials producers: their size, market share and product range
- Over 500 A4 pages and over 400 tables

AVAILABLE NOW – The "European and International Refractories Industry: A Market / Technology Report" is a newly-published in-depth study of the current position and future prospects for the refractories industry, providing comprehensive data on production, consumption, imports/exports, growth rates, etc. for both Europe and the main geographic areas outside Europe: USA, China, India, Japan, Brazil, etc. Information concerning the activities of key multinational and European-based refractories companies is also provided. In addition, the raw materials supply sector and the impact that developments in refractory materials are having on the market are analysed in detail, as are the end-user industries that consume refractories.

Over 500 pages long, this fifth edition of the report updates and extends the information presented in the fourth edition (published in 2004).

Total consumption of refractories within the European Union (defined in the report as the 25 EU countries as of 2006) was about 4 million tonnes in 2006, with a corresponding value of around €2.6 billion. Of this total, just over 1.6 million tonnes (40%) was monolithic or unshaped refractories and slightly less than 2.4 million tonnes (60%) was refractory bricks and shapes. Germany was the largest consumer in the region, with about 19% of the total, followed by Italy and Spain with 14% and 13% respectively, the UK and France with 8%, Poland with 7%, Austria with 5%, and the rest of the EU25 with approximately 26%. Spain's share in terms of both production and consumption has grown strongly in recent years, reflecting developments in the user industries in the region.

Between 2007-2010, the market for refractory products in the European Union will grow at approximately 2% a year by value, reaching about €2.8 billion by the end of the period. There will be strong growth in Eastern Europe, particularly in those countries that are new members of the EU. Overall growth in the markets for refractory products in terms of volume will be in the order of 2.2% a year for the EU generally, to reach 4.36 million tonnes by 2010. Growth in non-EU countries within Eastern Europe, including Russia, will be even higher than that of Eastern Europe countries within the EU, at around 4% a year, reaching over 2.5 million tonnes by 2010.

Total production of refractories in the EU25 countries increased by an annual average of about 0.8% a year by weight between 2002 and 2006. The region now produces 5.3 million tonnes of refractory products, valued at approximately €3.4 billion; this is 1.3 million tonnes more than it actually consumes, and therefore the EU is a net exporter. By comparison, the production of refractories in the USA was approximately 2.2 million tonnes in 2006, valued at $1.87 billion (€1.46 billion); in Japan, production was 1.1 million tonnes.

Iron and steel production is responsible for about 55% of the total demand for refractories: therefore, the profitability of the refractories industry as a whole is strongly influenced by steel production levels and steel plant investments. Overall growth in steel production in Europe (EU) for the period 2007-2010 is expected to average 2.5% a year, with high growth in 2007 and less towards the end of this period. East European steel production will continue to show healthy growth of over 4% a year in this period:

Europe is self-sufficient in only a few refractory raw materials, so there is a substantial requirement for imports of key materials. China has been a major supplier of many relatively inexpensive refractory raw materials. However, increasing demand from China's own end-user industries has restricted exports of several important refractory raw materials. This situation has led to shortages in some cases and consequent price increases. Increasing oil prices have also negatively impacted prices for raw materials.

Over recent years there has been considerable consolidation within the refractories industry. The two largest refractories groups, RHI (10% share of the worldwide market) and Vesuvius (8% share) have both made several notable acquisitions. Further mergers are expected in the near future. In addition, private equity investment in the sector is increasing in significance.

TABLE OF CONTENTS

NOTE: Due to space limitations in this leaflet, this table of contents has been truncated. For the complete table of contents and the full list of the companies profiled in the report, please see the pagesplaced after the end of this leaflet

ORDER FORM

EUROPEAN AND INTERNATIONAL REFRACTORIES INDUSTRY
(fifth edition, published November 2007)

(Payment in full must be received before publications are sent. Please tick or cross appropriate boxes)

☐ Please send me the **EUROPEAN AND INTERNATIONAL REFRACTORIES INDUSTRY: A MARKET / TECHNOLOGY REPORT** at ☐ Euro €1900 or ☐ £1300 or ☐ (U.S.)$2700

☐ Please send me …… extra copies of the **EUROPEAN AND INTERNATIONAL REFRACTORIES INDUSTRY: A MARKET / TECHNOLOGY REPORT** at the reduced price of ☐ Euro €380 or ☐ £260 or ☐ (U.S.)$540
(NOTE: One copy of the report must be purchased at the full price)

☐ Please send the report as: ☐ Electronic version (pdf file on a CD) ☐ Printed paper version
(NOTE: If you select both versions, one will be charged at full price and the other at the extra copy rate)

☐ A cheque is enclosed (payable to "Materials Technology Publications")

☐ Please send me a pro-forma invoice (NOTE: This includes details of how to pay by bank transfer)

☐ Please debit my credit card: ☐ Visa ☐ MasterCard ☐ American Express

Card Number……………………………………………………………………………Expiry Date…………………………………

Cardholder………………………………………………………………………….Signature……………………………………………

(Please note that credit card orders are processed at the Pounds Sterling rate)

SIGNATURE ______________________ NAME ______________________ DATE __________

COMPANY NAME____

ADDRESS____

____

______________________ POST CODE ____________ COUNTRY ______________

TELEPHONE______________FAX________________ E-MAIL__________________

VAT (also known as TVA / IVA / Ust) NUMBER (EU COUNTRIES ONLY) ______________________
(Our VAT Number GB 490 2566 39)

Please return this form by fax or post to:

MATERIALS TECHNOLOGY PUBLICATIONS
71 CHALK HILL
WATFORD WD19 4DA
ENGLAND, UK

FAX: +44 1923 211510

(Tel: +44 1923 237910; E-mail: info@mat-tech.co.uk; Internet: www.mat-tech.co.uk)

SOME OF THE 400+ TABLES FEATURED IN THE REPORT:

- Europe (EU25): consumption of continuous casting refractories, 2006
- Europe (EU25): production, imports, exports and apparent consumption of unshaped refractory materials in major countries, 2006
- Europe (EU25): evolution of production of shaped and unshaped refractories by major country, 1995-2006
- Europe (EU25): refractories production, domestic markets imports and exports, 2006
- Europe (EU25): consumption of monolithic refractories by application, 2006
- Europe (EU25): major producers of unshaped refractories, 2006
- Europe (EU25): production, trade and consumption of bricks and shapes by country, 2006
- Europe (EU25): consumption of magnesia-based bricks and shapes by application sector, 2006
- Europe (EU25): consumption of dolomite bricks by application sector, 2006
- Europe (EU25): refractory ceramic fibres market, 2006
- Europe (EU25): markets for refractory ceramic fibres by supplier, 2006
- Europe (EU25): demand for refractory materials by industry sector, 2006
- Europe (EU25): demand for refractory materials by type, 2006
- Europe (EU25): refractory bricks and shapes, production by type and country, domestic markets, imports & exports, 2006
- Europe (EU25): reported range of refractory consumption in iron and steel production by process unit, 2006
- Europe (EU25): proportion of refractories by process in a typical integrated steel plant
- Germany: production of refractories by year and class of material, 1996-2006
- Germany: imports & exports of refractory shapes and monolithics, 2006
- France: production of refractories by year and class of material, 1999-2005
- France: imports & exports of refractory shapes and monolithics, 2006
- UK: production of refractories by year and class of material, 1999-2005
- UK: imports & exports of refractory shapes and monolithics, 2006
- Italy: production of refractories, 1999, 2002, 2005 and 2006
- Italy: market for refractory materials by user industry, 2006
- Italy: imports & exports of refractory shapes and monolithics, 2006
- Spain: raw materials consumed in the refractories industry
- Spain: production of refractories by material, 1999-2006
- Spain: imports & exports of refractory shapes and monolithics, 2006
- Austria: production of refractories by type, 2002 and 2006
- Austria: imports & exports of refractory shapes and monolithics, 2006
- Netherlands: imports & exports of refractory shapes and monolithics, 2006
- Poland: production and export of refractories by type, 2001-2006
- Poland: refractories sales by user industry, 2006
- Poland: market and trade in refractories, 2002-2006
- Poland: imports & exports of refractory shapes and monolithics, 2006
- Russia: imports & exports of refractory shapes and monolithics, 2006
- USA: refractory production by category, 2002-2006
- USA: imports & exports of refractory shapes and monolithics, 2006
- Japan: refractory output, 1996-2005
- Japan: consumption of major refractory raw materials, 1999-2005
- Japan: imports & exports of refractory shapes and monolithics, 2006
- China: imports & exports of refractory shapes and monolithics, 2006
- India: production of refractories by type, 2001-2006
- India: consumption of refractories by industry sector, 2006
- India: major refractories manufacturers, 2006
- India: imports & exports of refractory shapes and monolithics, 2006
- Brazil: production of refractories by type, 2005-2006
- Brazil: imports & exports of refractory shapes and monolithics, 2006
- World: imports and exports of artificial corundum, 2006
- World: production of bauxite by country, 1998-2006
- World: refractory-grade bauxite production/exports, 1995-2007
- World: production capacity of fused alumina by country, 1998-2006
- World: tabular alumina production capacity, 2006
- World: silicon carbide production capacity by country, 1998-2006
- Europe: producers of fused alumina, 2006
- Europe: silicon carbide capacity by producer, 2006
- Europe: price trends for refractory-grade silicon carbide
- North America and Middle East: silicon carbide capacity by producer, 2006
- Europe: major producers of refractory clays
- Europe (EU25): Major producers of calcium aluminate cement, capacity 2006
- Major steel producers worldwide, 2006
- Europe (EU25): steel production, 1995-2006
- Central and Eastern Europe and the CIS: steel production,1995-2006
- Asia and the Middle East: steel production, 1995-2006
- Americas: steel production, 1995-2006
- Steel production totals by European region, 1996-2006
- World: trends in consumption of finished steel, 2001-2006
- Europe (EU25): stainless steel production, number of AOD vessels, by country, 2005-2006
- World: blast furnaces incorporating ceramic cup design, 1997-2007
- Europe: major blast furnace installations by company and capacity, 2006
- EU and Eastern Europe: production of liquid steel in electric arc furnaces, 1999-2006
- Europe: coke production by country, 2000-2005
- Europe: trends in primary iron production by country, 1995-2006
- World: primary aluminium production by country, 1998-2006
- World: forecasts of metal casting shipments by type and country, 2003-2008
- Europe: sales in the ceramics industry by sector, 2001-2005
- Italy and Spain: production of ceramic tiles, 1999-2005
- Europe: cement production by country, 2002-2005
- Cement production in other major countries, 1999-2006
- The world's largest cement producers by capacity, 2006
- Refractory brick usage and lifetimes in modern cement kilns
- Lime production by major country, 2003-2006
- Europe (EU25): manufacture of glass products by type, 2000-2005
- Europe (EU25): float glass production units by country and group, 2006
- Eastern and Central Europe: float glass production units by country and group, 2006
- Europe: the incineration of municipal waste by country
- Recent acquisitions of refractory raw materials groups by private equity groups
- World: oil refinery capacity by major country, 1998-2005
- Europe: Coal-fired electricity generating capacity by country, 1999-2020
- Europe: production of sanitaryware by country, 2006

Please note: In order to accommodate more titles on this page, some of the table titles have been amalgamated (in the report, there are actually six tables per country for imports & exports) or been shortened (e.g. values such as euros and units such as tonnes are missing). Moreover, this is only a brief selection of the 400+ tables in the report: other trade tables include those for Belgium, Czech Republic, Denmark, Finland, Hungary, Greece, Ireland, Norway, Portugal, Romania, Slovakia, Slovenia, Sweden, Switzerland and Turkey. For a comprehensive list, please see pages below

COMPLETE TABLE OF CONTENTS

PAGE

TABLES