




SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005

Volume I: North America (Completed)
Volume II: Western Europe (Completed)
Volume III: Asia-Pacific (Business Analysis completed)

MINESET PARTNERS LLC

179-9 Route 46 West, PMB 100
Rockaway, NJ 07866
Phone: (973) 366-5151
Fax: (973) 366-0066



MineSet Partners and Kline & Company are pleased to present a new extensive series of market analyses and manufacturing cost analyses on the worldwide market for specialty silicas.

Separate volumes will be organized regionally for:

- North America
- Western Europe
- Asia-Pacific, including China

Each volume will consist of a **Regional Business Report** and a **Manufacturing Cost Analysis**. These reports will be delivered separately, according to the schedule set forth in this brochure.

Each volume will cover four primary specialty silicas:

- Precipitated silicas and silicates
- Silica gel
- Fumed silica
- Colloidal silica

In addition, following the publication of each regional volume, a yearly **Global Advisory Report** will be issued to summarize specialty silica market and supply conditions globally.

TABLE OF CONTENTS

Regional Business Report

I. INTRODUCTION

II. REGIONAL BUSINESS ANALYSIS

For each regional business analysis, the following will be provided:

A. Product analysis

1. Precipitated silicas and silicates
2. Silica gel
3. Fumed silica
4. Colloidal silica

For each product, the regional demand analysis will provide detailed information on:

- a. Key applications
- b. Key grades or products
- c. Competitive materials
- d. Pricing
- e. Regional demand by application and end-use market
- f. Key customers

- g. Major suppliers
- h. Market trends and outlook
- i. Five-year demand forecast by application and end use

analysis of dynamic sectors such as specialty papers, passenger tire treads, neutraceuticals, and chromatography

B. Market analysis

For each end-use market, the regional business analysis will provide detailed information on:

1. Major specialty silica markets by region
2. Specialty silica performance requirements
3. Current consumption of silicas by product and application
4. Technology and market trends
5. Five-year forecast demand by product and application

Included are new sections on high-growth end uses such as electronics and an expanded

III. REGIONAL SUPPLIER PROFILES

The top 15 to 20 specialty silica producers identified in each region are profiled in detail in each Regional Business Report, including information on:

- A. Facility locations and capabilities
- B. Technology employed
- C. Product mix
- D. Raw material sourcing
- E. SWOT analysis
- F. Apparent market position by end use
- G. Competitive advantages and disadvantages
- H. Future plans

Manufacturing Cost Analysis

An accompanying regional manufacturing cost and technology assessment will be provided for each of the specialty silica products covered. In addition, a supplemental cost analysis for key raw materials such as sodium silicate and TCS/STC will be provided in the new series of reports.

A. Product brief

B. Technology history and development

C. Technology assessment

D. Regional supply structure

E. Representative producer analysis

1. Definition of representative specialty silica plant
2. Process overview
3. Capital investment requirements

F. Production economics for representative specialty silica plant

1. Raw material cost
2. Production cost analysis
3. Economies of scale

G. Sensitivities to raw material cost, capacity utilizations, pricing

H. Detailed cost analysis of representative plant, including an assessment of representative raw material production costs

I. Producer cost curve analysis

1. Extrapolation of representative cost analysis to other production facilities in the region and an assessment of the cost position of each operation

Global Advisory Reports (for full subscribers only)

A. Global demand summary by region and market segment

B. Global supply summary

1. Investment activity
2. Global production capacity update and two-year outlook

C. Merger, investment, divestiture and joint venture activity

D. Global five-year operating rate analysis

E. New product developments

F. New market and technology developments

BACKGROUND

The global specialty silicas business, including precipitated silica and silicate, silica gel, colloidal silica, and fumed silica, generates revenues of close to \$3.0 billion a year. Global demand for these materials is still growing at an annual rate of about 4%, fueled by a projected annual growth of over 5.5% in the Asia-Pacific region, and nearly 8% per year in China alone.

Despite the robust growth projections in China, other established regions have seen a slight deceleration in growth over the past five years, as a result of a slowing global economy and the mature nature of many of the larger end-use markets for specialty silicas. For the most part, however, the development of several niche end-use markets for specialty silicas in the electronics, rubber, and other industries has helped to sustain overall growth levels above regional GDP rates.

In order to sustain the growth and profitability of their specialty silica business units, some producers of these materials have broadened their product offerings through acquisitions and new product development efforts. W.R. Grace is a good example of this trend, having recently expanded into complimentary specialty silica businesses such as colloidal silicas and precipitated silicas following recent acquisitions in the United States and Western Europe. Others have looked to specialize more, while at the same time consolidating less cost-efficient parts of their silicas businesses.

The opportunities for specialization are many. They can be seen in the development of new technologies, such as lapping slurries for chemical-mechanical planarization, to new markets, such as inkjet papers and security documents. Producers may opt to specialize in one or more end-use sectors, as J.M. Huber does with its precipitated silicas in the food and healthcare market.

Others choose to focus on a particular type of specialty silica technology, as does Eka Chemicals (colloidal silica) and Wacker (fumed silica).

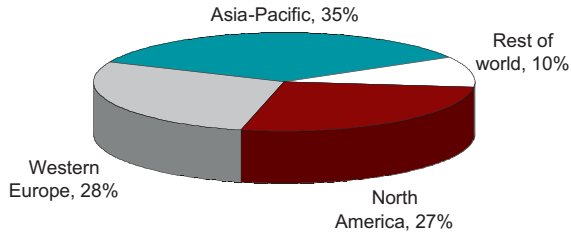
Meanwhile, the business continues to expand globally. For over 20 years, major players in the specialty silicas business have been extending their reach, building plants in Asia and Latin America. A major motivation for this activity has been to serve end-use markets that have migrated to these regions in pursuit of lower manufacturing costs. The footwear industry is a good example of this migration. When it moved to the Asia-Pacific region, so did a significant share of the demand for precipitated silica, which is the favored reinforcement in footwear. As shown in Figure 1, the Asia-Pacific region is now the leading region for specialty silica consumption, with demand exceeding USD 1.0 billion in 2004.

The margins in specialty silicas, however, are under pressure in all products and in most markets. Buyers have substantial leverage in most markets, and rivalry among existing competitors is high across all products. An over-expansion of capacity in the last ten years, in anticipation of higher-than-realized demand levels, created additional pressures on margins in the specialty silicas business.

As a result, it is increasingly important for producers to understand their competitive cost position and to be able to benchmark their operations against other plants in the industry. The supplemental Manufacturing Cost Analysis provided in this series of reports is designed to help participants in this business understand the manufacturing capabilities of a representative supplier in each region by comparing variable, fixed, and depreciation costs, as shown in Figure 2. Each Manufacturing Cost Analysis will also include an industry cost curve, which shows the relative cost position of each producer, as depicted in Figure 3.

Figure 1

REGIONAL MARKET SHARES FOR SPECIALTY SILICAS



Now more than ever, the construction of a plant requires not only a detailed assessment of the long-term market opportunities for specialty silica products, but also a complete assessment of the competitive position of each producer and a thorough understanding of the manufacturing costs in each developing region. This series of reports aims to provide the basis for making such judgments.

REPORT CONTENTS

The markets for specialty silicas will be thoroughly analyzed in terms of demand, pricing, supplier share, and growth outlook by product type (for each of the four major silica types) and by end use. This new series will provide a fresh update to our previously published global studies of these markets and will break new ground with the following new features:

- Sharper focus on high-growth specialty uses, such as microelectronics, specialty papers, and "green" tires
- In the Manufacturing Cost Analysis section, an analysis of the cost of key raw materials such as sodium silicate and TCS/STC
- An industry cost curve based on manufacturing cost estimates of each operation for each of the specialty silica products by region
- Extensive database compilation of the findings, which will provide considerable latitude for "what-if" interpretations of market growth assumptions
- Projected demand to 2007, 2008, and 2009 for specialty silicas by type and application

Included with the subscription for this series is one day of consultation with members of the project team for each volume of the report. This gives subscribers a chance to probe specific findings more deeply and to review nonconfidential customer call reports compiled during the course of our research each year.

In addition, following the publication of each Regional Business Report, a Global Advisory Report will be issued to summarize specialty silica supply and market conditions globally. This supplemental report will enable individual subscribers to keep abreast of changing market dynamics in all major regions and to bridge the gap between the individual regional volumes in this three-year service.

A Table of Contents is presented in this prospectus for the Regional Business Reports, Manufacturing Cost Analyses, and Global Advisory Reports.

SCOPE

Each volume of **SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005** will cover four primary specialty silicas:

- Precipitated silicas and silicates
- Silica gel
- Fumed silica
- Colloidal silica

The study is tentatively scheduled to include specialty silica market data from the countries listed in Table 1.

TIMING

The projected timetable for delivery of **SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005** is shown in Table 2.

The cornerstone of this service will be separate Regional Business Reports. The Manufacturing Cost Analyses will be published separately. Each of these reports can be tailored to suit a subscriber's preferences by silica type and region.

SUBSCRIBER BENEFITS

This service is designed to assist specialty silica producers, as well as suppliers of basic raw materials such as sodium silicate and TCS/STC. The business intelligence contained in this report series is of value to manufacturers of specialty silicas, their raw material suppliers, and their customers. In other words, it will be beneficial to any company involved in the specialty silica value chain, including end users with large or captive silica requirements.

This service can assist your company in identifying the following:

- **For specialty silica manufacturers**
 - Opportunities to develop new products for emerging markets
 - Shifts in product mix (types and grades)
 - Global positioning
 - Acquisitions, mergers, and joint ventures
 - Opportunities to increase market share through strategic alliances
 - Short-term supply/demand balance and its affects on pricing
- **For raw material producers**
 - Opportunities to increase market share through strategic alliances
 - Shifts in global supply

Figure 2

ILLUSTRATIVE SPECIALTY SILICA MANUFACTURING COST ANALYSIS FOR REPRESENTATIVE PLANT

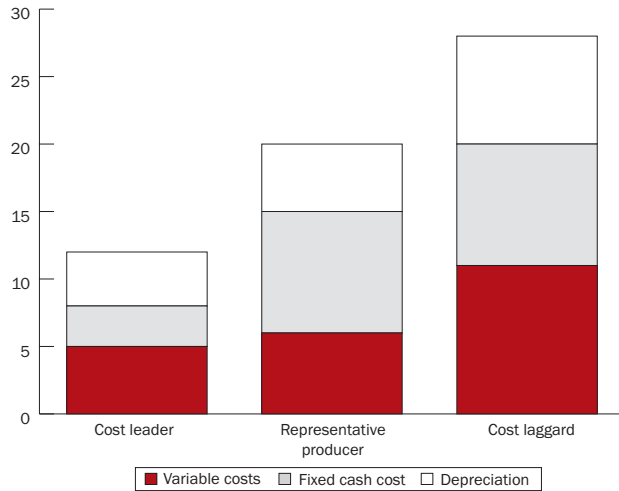


Figure 3

SAMPLE INDUSTRY COST CURVE, CAPACITY VERSUS PRODUCTION COST

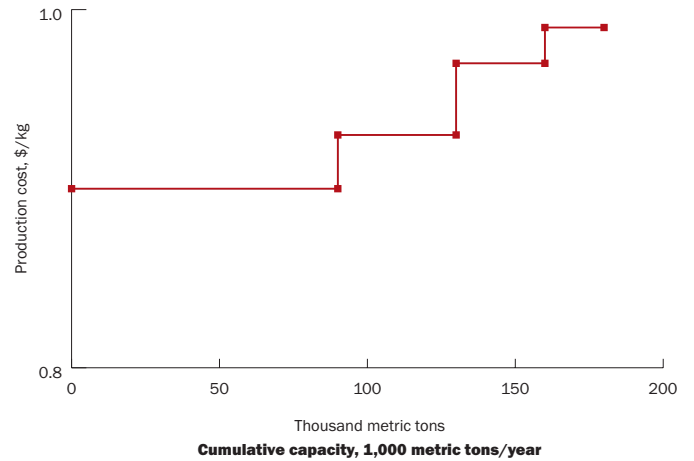


Table 1

COUNTRIES TO BE INCLUDED IN THE STUDY

- North America
 - Canada
 - Mexico
 - United States
- Western Europe
 - Austria
 - Belgium
 - Denmark
 - Finland
 - France
 - Germany
 - Italy
 - The Netherlands
 - Norway
 - Portugal
 - Spain
 - Sweden
 - Switzerland
 - United Kingdom
- Asia-Pacific
 - Focus countries
 - China
 - Japan
 - South Korea
 - Taiwan
 - Other countries
 - Indonesia
 - Malaysia
 - Thailand

Table 2

PROJECTED TIMETABLE FOR REGIONAL REPORT DELIVERY

Regional Report	Regional business reports	Manufacturing cost analyses	Global advisory reports
Volume I: North America	2Q 2003	1Q 2004	2Q 2003
Volume II: Western Europe	1Q 2004	1Q 2005	2Q 2004
Volume III: Asia-Pacific	4Q 2005	2Q 2006	1Q 2006

- **For specialty silica consumers**
 - Cost competitiveness of different specialty silica producers
 - Sourcing options and price negotiations
 - Cost/benefits of various specialty silica materials
 - Short-term supply/demand balance and its affects on pricing
 - Short- and long-term trends in the rubber, plastics, paper, coatings, and other markets for all four specialty silicas

METHODOLOGY

The overall survey and analysis will be completed by a team of experienced professionals from the MineSet Partners staff, along with associates retained for this project. While members of the team will draw heavily on their backgrounds and prior experience in the specialty silicas business, major emphasis will be placed on primary data gathered through personal interviews.

Interviews will be completed each year to assess current market conditions and competitive supply positions. These interviews will be primarily conducted with global and regional producers of specialty silica materials, large baseload customers in each region, and other pertinent organizations as necessary.

PROJECT TEAM EXPERIENCE AND CAPABILITIES

SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005

represents the first volume in a new three-part series of reports analyzing the commercial and economic issues that drive the specialty silicas business on a global basis. This also marks the third update of Kline & Company's global analysis of the specialty silicas business going back to 1990, the most recent editions of which were completed between 1997 and 1999.

These studies are now being administered by MineSet Partners, LLC under the direction of Todd Harris, a former director in Kline's Minerals and Chemicals Practice, as part of an agreement that was reached between Kline and MineSet Partners early in 2003. MineSet Partners, LLC, a New Jersey-based consultancy specializing in the minerals and inorganic chemicals industries, was formed in 2002 by Mr. Harris.

MineSet Partners is committed to building on Kline's reputation for producing and delivering accurate and reliable technical industry publications. In addition, we will work with members of the Kline Group staff around the world, as well as our own network of international associates, to provide regional expertise and language capabilities where necessary.

The project team for this series of reports will utilize a systematic approach to gathering and analyzing information, based on detailed primary research, which guarantees high-confidence results. Our proven approach and global capabilities will enable us to put on-the-ground analysts in each of the regions that will be assessed through the course of this new service.

• **Our Team Approach**

- MineSet Partners, and Kline's resources include experts in all areas of the mineral, chemical, and manufacturing economic fields. This diversity allows us to tailor a special project team for each volume that provides the right blend of expertise in the fields of marketing, technology, manufacturing economics, competitive intelligence, and strategic planning.
- Our project teams are experienced at researching and analyzing information available from a variety of industry sources. These teams are further supported by the MineSet Partners and Kline organizations, providing a wealth of experience and knowledge within our respective firms.

This high level of technical support and expertise allows us to maintain a high standard of execution and consistently deliver quality studies and assessments.

• **Our Existing Global Database**

- The key project team members have been involved with numerous consulting assignments in the specialty silicas industry, including three comprehensive multiclient analyses of the markets for specialty silicas dating back to 1987.
- These projects have enabled MineSet Partners to develop a substantial database that contains detailed information on silica suppliers, products, customers, trends, and production technologies. In addition, this database has been augmented with an equal amount of information from numerous proprietary consulting assignments in the specialty silicas industry. As a result, our staff maintains an up-to-date and in-depth knowledge store of industry trends, product developments, and supply shifts around the world.

• **Our Manufacturing Economics Practice Team**

- With the guidance of Kline's Manufacturing Economics Practice, the project team has been involved with numerous technology assessments for companies in the mineral, chemical, and petroleum refinery industries. These individuals are adept at helping companies to:
 - Assess their manufacturing cost position against specific competitor operations, develop industry cost curves, and conduct value chain analyses
 - Benchmark their technology against competing technologies
 - Re-engineer and improve their manufacturing cost position
 - Evaluate the impact that expansion or consolidation of manufacturing capacity will have on their overall manufacturing cost
 - Evaluate the cost structure of new technologies prior to implementation

Our manufacturing cost assessments are complete and comprehensive. They include details of the manufacturing plant configuration, process technology, plant performance, and the organization. Our clients value the level of detail, the accuracy, and the reliability of the representative cost assessments we develop in these syndicated services. The success of their business depends on the critical strategic decisions they make based on the data that we provide.

RELEVANT ASSESSMENTS AND STUDIES

MineSet Partners and Kline & Company have completed a number of relevant assignments in the specialty silicas area, including our highly regarded previous editions of **GLOBAL OPPORTUNITIES IN SPECIALTY SILICAS**.

Individual team members also bring complementary skills from consulting programs such as business strategies, acquisition analyses, manufacturing economics, competitive assessments, market size and segmentation, image analysis, and other proprietary assignments in the specialty silicas business.

The team's experience has also been pivotal in the ongoing success of our two other continuing service programs, **THE OUTLOOK FOR COATING AND FILLER PIGMENTS IN PAPER** and **THE OUTLOOK FOR PERFORMANCE MINERALS IN INDUSTRIAL AND CONSUMER MARKETS, NORTH AMERICA AND WESTERN EUROPE**, as well as other syndicated titles that are now being administered by MineSet Partners:

- The Outlook For Coating And Filler Pigments In Paper, 2005-2008

- The Outlook for Industrial and Consumer Markets for Performance Minerals, North America and Western Europe, 2001-2002
- The Global Outlook for Extender and Filler Minerals in Paper, 2000-2002
- Specialty Silicas -- Global Competitive Analysis: Asia-Pacific, North America, Western Europe, 1997-1999
- Extender and Filler Minerals Western Europe, 1996
- Inorganic, Specialty, and Natural Thickeners USA, 1996
- Coagulants and Flocculants North America, 1996
- Industrial Markets for Ground Limestone North America, 1995
- Specialty Markets for Magnesium Compounds, 1994
- Minerals and Specialty Chemicals in Printing and Writing Papers, 1992-2002
- Analysis of the U.S. Markets for Specialty Clays, 1989
- Strategic Developments in North American Talc, 1988
- Specialty Silicas, 1987

SUBSCRIPTION TERMS AND OPTIONS

For many companies, budgeting for outside consulting services is becoming increasingly difficult, due to the unusually fast pace of change in many end-use industries. As a result, we have developed various subscription option plans that are intended to enable companies of all sizes to take advantage of this valuable service.

- Full subscription and benefits -

As a subscriber to the entire three-volume series of the Regional Business Reports and Manufacturing Cost Analysis, your company will also receive the Global Advisory Report, which will provide you with updated global market information, a discussion of the past year's industry trends, and an analysis of structural changes that have occurred in the industry over the past year.

This stand-alone report will be provided each year following the regional business reports.

By purchasing the complete set, subscribers will receive a significant discount from the combined price of all three reports.

- Partial subscription -

As a partial subscriber, your company can also elect to receive one or more of the Regional Business Reports or the Manufacturing Cost Analyses, which will provide you with all of the insights and information outlined in the Table of Contents.

We can also tailor a subscription package to one or more of the product chapters from each of the regional editions of this study. Please call us for more information and pricing terms on this option.

- Delivery format options -

Subscribers can elect to receive three hard copies of each report ordered, or, alternatively, the online version, which provides unlimited access to the report contents for members of the subscribing company on a worldwide basis, plus one hard copy. A charge of \$1,500 will be applied to each volume ordered in online format. Online delivery will continue to be provided via klineonline.com, under the agreement between MineSet Partners and Kline & Company.

Additional hard copies will also be made available for a nominal fee.

SUBSCRIPTION AGREEMENT

Please fax signed agreement to +1-973-366-0066

SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005

Please enter our subscription to your comprehensive study **SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005**. The standard subscription includes one hard copy of the report, online access to the report contents via KlineOnline.com, one CD-ROM containing pdf files of the report sections, and one day of consultation time to be used within six months of publication of the report. Additional hard copies or CD-ROMs are available for a nominal fee.

To protect our investment in this report and that of other subscribers, we agree that, for a period of three years after its date of issue, we will: (1) refrain from reproducing or copying this report in whole or in part by any means; (2) restrict its circulation to our own employees; and (3) use all reasonable precautions to prevent the disclosure of its contents to any other persons or organizations. We may, however, make this report available to any subsidiary company in which we hold more than half interest or to any parent company that holds more than a half interest in our firm. We may also use or disclose any information in this report that is public knowledge, that was already in our possession before receipt of the report, or that comes to us from third parties independently of this report.

MineSet Partners similarly agrees that it will use all reasonable precautions to prevent the disclosure of the contents of this report to any persons or organizations other than subscribers for three years after its date of issue.

We understand that **SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005** is available only by subscription. Subscription prices do not include sales tax. (NJ add 6% sales tax.) Subscription payments will be invoiced upon delivery of the published version of each report. We will pay these invoices within 15 days of receipt. We further acknowledge that this agreement is fully binding on the corporation and non-cancelable. Standard shipping within the U.S. via UPS Ground is included. Overnight and international shipping fees are optional and will be added to the total amount.

Please circle your subscription preference on the following page for each volume and add these amounts for each row in the column marked "Subtotal."

We have completed and signed this subscription agreement. Please indicate your acceptance of this subscription by countersigning and returning one copy for our files.

COMPANY _____	
SIGNATURE _____	DATE _____
NAME _____	
TITLE _____	
E-MAIL _____	
PHONE _____	

Shipping address (if different than billing address):

NAME _____
TITLE _____
ADDRESS _____

E-MAIL _____

Send invoices to:

NAME _____
TITLE _____
ADDRESS _____

E-MAIL _____
PURCHASE ORDER # _____

MineSet Partners use only:

ACCEPTED _____
SIGNATURE _____
NAME _____
TITLE _____
DATE _____

METHOD OF PAYMENT:

Send invoice



Card #: _____ Exp. Date: _____

Name (as it appears on credit card): _____

Signature (for credit card authorization): _____

MINESET PARTNERS LLC
www.minesetpartners.com

179-9 Route 46 West, PMB 100 Rockaway, NJ 07866 Phone: (973) 366-5151 Fax: (973) 366-0066

Y105g

SUBSCRIPTION OPTIONS AND RATES

SPECIALTY SILICAS: GLOBAL STRATEGIC ANALYSIS, 2002-2005

Subscription options	Regional Business Reports	Extra copies	Manufacturing Cost Analyses	Extra copies	Online access-a	Subtotal (please fill in row totals)
FULL SUBSCRIPTION	\$70,400	___ @ \$500 ea.	\$40,750	___ @ \$500 ea.	\$1,500	
SINGLE-VOLUME SUBSCRIPTION						
Volume I: North America	22,200-b	___ @ 500 ea.	12,900-b	___ @ 500 ea.	1,500	
Volume II: Western Europe	24,700	___ @ 500 ea.	14,300	___ @ 500 ea.	1,500	
Volume III: Asia-Pacific	27,200	___ @ 500 ea.	15,700	___ @ 500 ea.	1,500	
					Subtotal	
					NJ only: 6% sales tax	
					TOTAL	

a- One charge applies to both reports in each volume.

b- Price reflects a recent reduction

NOTE: All prices in U.S. funds.