

IN PROGRESS

GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003

A global series of regional market analyses

- Volume I: North America
- Volume II: Asia-Pacific
- Volume III: Europe



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The market for metalworking fluids has rapidly become a global business. Globalization is fueling unprecedented change in demand in the three major market regions: North America (NAFTA), the Asia-Pacific region, and Europe. Economic and political forces are reshaping the dynamics of supply and demand throughout the world.

In addition to globalization, the metalworking fluids business is also being reshaped by health and environmental issues, end users relocating their metalworking production capacity, technological factors, consolidation of the supplier and consumer bases, and other factors. As a result of these ever-changing market forces, the metalworking fluids business is more complex and dynamic than ever before. Opportunities to grow the business continue to develop. Conversely, the evolving market forces also present significant threats to those who are unaware of the challenges and changes ahead or those who are unable or unwilling to adapt to them.

GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003 is Kline's newest offering combining individual regional market analyses into a comprehensive, three-year service to provide metalworking fluid formulators, additive suppliers, and end users with the latest information on products, services, applications, and trends in the three leading consuming regions of the world.

The three-volume report will provide subscribers with several key value-added benefits, including:

- Objective information on the size and segmentation of the global metalworking fluids industry
- Timely insights into market trends and business developments
- Valuable competitive intelligence
- A high-value analysis of business opportunities in North America, the Asia-Pacific region, and Europe
- A detailed understanding of current and future industry regulations and the impact on your business
- An examination of formulation technology changes, options, and opportunities
- A perspective of the industry from your customers' vantage point

GENERAL OUTLINE OF VOLUMES I, II, AND III

1. EXECUTIVE SUMMARY

This section will include a concise, executive-style overview of key regional report findings and market developments.

2. INTRODUCTION

Background information on the scope, methodology, and terminology used in the report will be presented.

3. END-USE INDUSTRIES*

- Fabricated metal products
- Machinery
- Metal cans
- Primary aluminum products
- Primary ferrous products
- Transportation equipment
- Other end use industries

For each of the leading end-use industries consuming metalworking fluids, the following detail will be provided on a regional and country level:

- Introduction
- Structure of the industry
- Applications of metalworking fluids
- Specifications and prices
- Consumption
 - Products
 - End-use markets

- By package type
- By country
- Historical perspective
- Major customers and comments
- Purchasing practices
- Major suppliers
- Channels of distribution
- Market developments
- Outlook
- Appraisal and opportunities

** Not included in Volume II.*

4. PRODUCTS

- Removal fluid
- Forming fluid
- Protecting fluid
- Treating fluid

Each of the four fluid categories will be discussed, including such issues as applications, specifications and prices, demand, suppliers, channels of distribution, additives, forecast demand, trends, and opportunities.

5. SUPPLY STRUCTURE

Understanding the supply structure of the metalworking fluids business is key to success in this competitive market. This section will look at the supply structure from three levels: specialty chemical companies, integrated oil companies, and distributors.

In addition, it will provide insights and information on recent acquisitions in the global regions in this series, as well as an outlook of how the supply structure is expected to evolve over the next five years.

The outlook is particularly important for those looking to understand the continuing role of chemical management, e-commerce, and integrated supply.

6. SUPPLIER PROFILES

This section will provide company profiles for suppliers of metalworking fluids according to their global region of focus. Profiles will include such detail as locations, ownership, financials, organizational structure, and Kline & Company's assessment of the supplier's business.

- Major suppliers (top ten metalworking fluid suppliers)
- Minor suppliers (other metalworking fluid suppliers)

APPENDIX: List of Companies Interviewed

GLOBAL BUSINESS
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OBJECTIVE

The objective of **GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003** is to provide subscribers with an authoritative, objective, and commercially relevant analysis of the metalworking fluids markets in North America, the Asia-Pacific region, and Europe.

This series is intended to serve as a cost-effective extension of subscribers' own intelligence development capabilities and will provide a solid foundation of knowledge as well as assistance in business planning and development activities.

SCOPE

Volume I: North America focuses on the metalworking fluid business in the United States, Canada, and Mexico. Metalworking fluid demand for these three countries in 2001 is the foundation of the report.

This volume is complete and available for purchase.

Volume II: Asia-Pacific focuses on China, South Korea, India, Taiwan, Thailand, Indonesia, Malaysia, Australia, Japan, and other countries in the Asia-Pacific region. The

base year for this report is 2002.

This volume is complete and available for purchase.

Volume III: Europe will focus on Germany, France, the United Kingdom, Italy, and Spain. Information will also be provided for Benelux and Scandinavian countries, in addition to select Eastern European countries. The base year for this report volume will be 2003.

Subscriptions for this volume are now being accepted, and the report will be published in the third quarter of 2004.

The scope of metalworking fluid products covered in this report encompasses the following:

- Removal fluid (coolants/cutting oil/grinding fluid)
- Forming fluid (rolling oils, drawing and stamping compounds, and hydroforming fluids)
- Treating fluid (quenching fluids)
- Protecting fluid (temporary rust preventatives)

The base years for supply and demand data in each report volume are shown below, along with a five-year forecast:

<u>Supply/demand data</u>		
<u>Volume</u>	<u>Base year</u>	<u>Forecast</u>
I	2001	2006
II	2002	2007
III	2003	2008

SOURCES AND METHODOLOGY

Kline & Company's approach to providing high-quality market information on the global metalworking fluids business is based on primary research.

Industry experts within Kline's Petroleum and Energy Practice conducted telephone and in-person field interviews with metalworking fluid manufacturers and marketers, additive and basestock manufacturers, blenders, trade associations, and other industry experts on the supply side.

Demand-side primary research focused on interviews with equipment operators on the shop floor, operations and plant managers, purchasing

managers, and others who have a direct influence on what brand and supplier gets the business and why they keep it or lose it.

Secondary research focused on such sources as the Internet, industry trade publications, product literature and other sources of published industry data.

DELIVERY SCHEDULE

Volume I was published in March 2003. Volume II was published in November 2003. Volume III will be delivered in the third quarter of 2004.

SUBSCRIPTION TERMS AND PRIVILEGES

GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003 is available only by subscription. In order to maximize the value and usefulness of this report to each charter subscriber, the following privileges and services will be made available:

- **One day of consultation** with members of the team at the Kline Group's offices in Little Falls, NJ, to be used at the client's discretion within six months of receipt of the report. This meeting can be used as a company-specific work session to help each subscriber obtain maximum value from both the program and Kline's industry expertise.

- **The option of hard copy or online versions** of the reports. Subscribers can elect to receive three hard copies of each volume of the report or, alternatively, the online version. The online version includes unlimited online access to the contents of each volume for members of the subscribing company, plus one hard copy of each volume. Additional hard copies will be made available for a nominal fee.

Details regarding subscription options and rates are described in the attached subscription agreement. To subscribe now, please complete the subscription agreement and forward it to any of our offices.

To obtain further information about the study, or to arrange a meeting, please contact us at any of our locations listed on the back cover.

KLINE GROUP CREDENTIALS

The Kline Group is a leading business consulting firm serving information needs of the petroleum, energy, and related chemical-based industries, with principal offices in the United States, Belgium, Japan, China, Singapore, and Brazil. Since 1959, the firm has assisted clients in finding practical solutions to complex business problems.

Kline's Petroleum & Energy Practice leverages more than 70 years of combined experience in the petroleum, lubricant, and chemical industries to assist clients in a wide range of proprietary assignments, including:

- Business appraisals
- Competitive intelligence
- Customer satisfaction
- Manufacturing economics
- Market analysis
- Mergers and acquisitions
- Strategy development
- Technology assessment

GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003 combines the individual report volumes for North America, Asia-Pacific, and Europe into one focused continuing annual series.

Included in this effort will be an expansion of our longstanding **METALWORKING FLUIDS USA** series to include the other NAFTA countries (Canada and Mexico) as well.

Other metalworking fluids studies by Kline & Company include:

- PROFILES OF METALWORKING FLUID SUPPLIERS USA 1999
- METALWORKING FLUIDS USA 1998
- METALWORKING FLUIDS ASIA-PACIFIC 1997
- METALWORKING FLUIDS JAPAN 1997
- THE EMERGENCE OF CHEMICAL MANAGEMENT IN METALWORKING INDUSTRIES USA 1996
- METALWORKING FLUIDS EUROPE 1995
- METALWORKING FLUIDS USA 1994

GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003

Please enter our subscription to your comprehensive study **GLOBAL BUSINESS OPPORTUNITIES IN METALWORKING FLUIDS, 2001-2003**. The standard subscription includes three copies of the finished report and one day of consultation time within the scope of the study. A subscription to the online version of the study includes unlimited online access to the report contents and one day of consultation time, plus one hard copy of the report. Additional copies of the report will be available for a nominal fee.

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Study options	Standard price (U.S. funds)	Check here to indicate subscription preference
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VOLUME II: ASIA-PACIFIC		
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