

BDA

Final
Prospectus

Assessment of the North American Graphic Corrugated Market

Business Development Advisory — “Finding Growth in Mature Markets”

Why Buy This Study?

This in-depth study provides an invaluable information source and tool to help you more effectively compete in the Graphic Corrugated board segment. Specifically, the informa-

1. Identify the best growth opportunities
2. Provide information to support investment decisions
3. Provide direction for product development initiatives
4. Identify and evaluate key market segments and shares
5. Assess the impact of future technology / process developments
6. Identify major threats and opportunities
7. Evaluate category supply and value chains
8. Forecast changes in end user preferences and potential need gaps
9. Forecast demand, supply, and price changes
10. Provide an independent, expert source of information and analyses

Who Should Purchase?

- General Managers
- Marketing / Sales Executives

Study Background

This “first ever” multi-client study of the graphic corrugated market examines in detail this industry segment and identifies the best future growth opportunities and likely developments. This growing market is expected to undergo significant changes over the next five to ten years which will have major implications to all suppliers and market participants.

We estimate that this high value, high growth niche segment accounted for nearly \$11 billion in North American corrugated board sales in 2004. This represented 23% of total corrugated volume but over 28% of sales revenue. For linerboard producers, this amounted to approximately 2.6 million tons of demand or about



11% of total linerboard consumption in North America.

This market is characterized by relatively high margins, above average growth rates, and a broad range of demanding customer requirements. These dynamics make it critical for suppliers to fully understand the market and the future developments, risks, and opportunities that lie ahead.

The study is must-have information for linerboard producers, corrugators, folding carton converters, coating and ink suppliers, and press / corrugating equipment manufacturers. The market is examined from the standpoint of consumer demographics, product and end use requirements, primary and secondary packaging applications, board manufacturing, package converting and printing, print tech-





BDA Qualifications / Expertise

BDA's principal, **Frank Perkowski**, has over 25 years of experience within the paper and packaging industry in senior marketing positions. This includes direct experience in graphic paperboard markets and over eight years as an industry-focused management consultant. As a consultant, Frank has worked on over 100 consulting assignments helping industry clients solve a wide range of business and market-related problems. BDA's focus on identifying growth opportunities provides an added dimension to the study that gives it more value.

Chuck Klass, principal of Klass Associates, is a key resource for this project. Chuck has over 40 years of industry experience and is recognized as an expert in all board manufacturing processes including those relating to fiber, papermaking, coating, converting, and printing. His extensive work in this segment provides important insights and factual information that is based on his real world experience.

Market / Product Definition

For the purpose of this study, graphic corrugated board is defined as any corrugated substrate with a coated or uncoated white-top that provides an improved printing surface suitable for high quality printing. The product is typically characterized by a special "white top" linerboard (uncoated bleached, coated unbleached, coated bleached board, or paper laminated) that is combined with an unbleached or bleached corrugated medium and inside liner to form a corrugated substrate. This "sandwich" substrate is then printed with multiple colors at high resolution and converted into corrugated shipping containers, display units, folding cartons, or other specialty containers.

Study Content

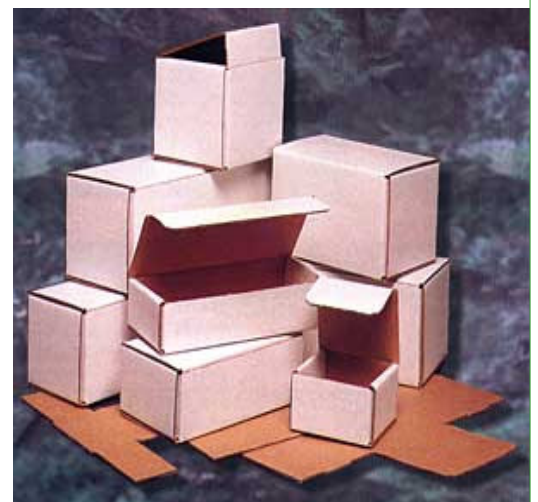
This data rich study integrates information from different sources to develop a broad perspective of the market and identify the key business drivers. Historical and 2004 estimated data are combined with five year forecasts to provide an overall view of where the market has been and how it is expected to develop in the future.

The study provides a broad but thorough review of the overall graphic corrugated market and industry segment. Specifically, it will provide an assessment of the industry / market structure, an identi-

detailed review of the entire supply chain including strategic reviews of key suppliers, an identification of major growth opportunities and threats, and a detailed forecast and industry outlook.

While the study is primarily focused on market-related developments, it will also focus on existing technologies and identify future technology and process changes that will impact the market and suppliers. Future developments are analyzed in the areas of paperboard production (fiber, chemicals, process), coatings, corrugating (including flute developments), folding carton converting, printing, distribution, and product applications.

In addition, while the study is primarily focused on the graphic corrugated segment, it will evaluate this segment in the context of the overall corrugated board and paperboard markets. Quantitative data is provided to support subjective assessments in the areas



Study Methodology

BDA is highly experienced in market research techniques and market analytical methods. We use a combination of information sources to analyze markets and develop credible forecasts.

Since limited data exists on this market segment, BDA triangulates and reconciles conflicting information to de-

Key Information Sources

1. Internal databases including historical and current market data, macro data, professional experience, and industry library
2. Personal interviews and discussions with industry participants, end users, suppliers, knowledgeable consultants, and other information providers
3. Public information sources including company publications and releases, association data, industry reports and presentations, trade literature, government data, market surveys and special reports
4. Strategic / statistical analyses using internally developed market models, projections, segmentation matrixes, and other quantitative methods
5. Market forecasts and sup-

Additional Insights

In addition to providing important market information and an in-depth market analysis, the study discusses how suppliers can best take advantage of opportunities within this market and most effectively position their companies in light of future developments. The major growth opportunities are evaluated along with an assessment of the major risks and requirements for success.

In addition to identifying market segments, processes, and products that show the most promise, the study identifies the market / business strategies that are likely to be the most effective in light of emerging customer and end user needs. These opportunities encompass not only those that relate to

1. New service opportunities
2. Integrated customer solutions
3. Strategic alliances and acquisitions that could add the most value
4. Adjacent market expansions
5. Potential technological breakthroughs or process improvements
6. Intangible asset development

Given the importance of changing technologies in this market, alternative processes and technologies are evaluated in the context of changing customer requirements.

Graphic Corrugated Study Table of Contents

Executive Summary

Study Approach

Industry / Market Structure

Market Definition
Market Size / Overview
Quality Segments / Specifications
Graphic Liner Descriptions
Supply Base
Graphic Corrugated Applications
End Use Markets
Distribution Channels
Market Demand
Price Dynamics
Technologies and Processes
Market Trends and Developments

Industry Threats

Products
Outsourced Manufacturing
Environmental

Industry Opportunities

Exports
Traditional Growth Opportunities
Non Traditional Growth Opportunities
Mergers / Acquisitions / Alliances
Supply Chain Efficiency
Positioning

Industry Outlook

Major Dynamics Affecting Demand
Industry / Market Drivers
Consumption / Demand
Supply Chain
Pricing
Product / Market Shifts
End User / Channel Requirements

Appendix

12 Detailed Exhibits

The report contains 65 Tables, and Charts. Plus 12 pages of detailed appendix exhibits.

134 pages of information!

About BDA

BDA is a specialized management consulting firm focused on helping companies in mature industry segments identify and develop effective growth strategies. Founded in 2002 by Frank Perkowski, the company's services fall into three main areas

- 1. Strategic Industry / Market Studies.** These studies involve analyses related to industry markets and business strategy. Examples include market assessments, opportunity screenings, new business feasibility studies, market research, and capability assessments. Most of these studies are for individual clients but multi-client studies are conducted where a broader interest exists.
- 2. Supply Chain Optimization Services.** These projects leverage our understanding of packaging markets, supply / value chains, and industry cost structures to help companies throughout the supply chain maximize value. For suppliers, this includes studies that help to better understand customer needs, competitive positioning, and market growth opportunities. For buyers, this typically involves evaluating supply alternatives and identifying the most efficient / lowest cost supply options.
- 3. Growth Strategy Development.** Our primary focus is helping companies in low growth / mature industry segments transition their business to take advantage of new growth opportunities. Services include opportunity identification and

Order Information

The base price for one hard copy of this study is **\$4,500**. A special 15% "pre-publication" discount is available on all advance orders received prior to January 30, 2005. This results in a savings of \$675 and a final cost of **\$3,825**. This "order" is non binding but does indicate your intent to purchase the study upon receipt of the final study prospectus and invoice. We expect the study to be completed by March 30, 2005.

Additional hard copies of the report and an electronic PDF version are also available at a cost of \$500 each. The PDF version requires the submission of a signed company licensing / distribution agreement.

Payment in the form of a check or wire transfer is due prior to report delivery and upon receipt of a BDA invoice. This signed order form can be faxed to BDA at 770-650-8145 or sent via email to BDA at frank@bd-advisory.com. Please indicate your purchase selection below along with identification information and your signature and forward to Frank Perkowski.

Base Study Price for 1 Hard Copy incl. S&H.....	\$4,500
Less "Pre-Publication" Discount of \$590.....	\$3,825
Add () Extra Hard Copies @ \$500 each.....	_____
Add cost of PDF version @\$500.....	_____
Final Study Cost including S&H.....	_____
Buyer Signature.....	_____
Buyer Name	_____



1307 Hatton Walk
Marietta, GA 30068
Phone: 770-643-9081
Fax: 770-650-8145
www.bd-advisory.com

