

# Packaging Industry Unwrapped

## Caps and Closures ... Metal, the Other Material

Despite loss of overall market share to plastic, metal caps and closures will continue to hold an important place in the market for niche applications where performance and appearance are important. According to Frost and Sullivan, the U.S. market for caps and closures was approximately \$6.7 billion in 2006. This figure includes a variety of metal, plastic, cork and rubber products including threaded and unthreaded, dispensing, child resistant, screw and lug caps and closures. Frost forecasted the overall market to grow modestly to over \$7.0 billion by 2011 (1% CAGR). Although plastic remains the most widely used material, accounting for \$3.6 billion, or 54%, of the total market, metal follows at a close second with \$2.7 billion, or 40% of the market. In recent years, plastic's share of the overall market has increased due to its cost and weight advantages in many common applications. While plastic is expected to continue to gain share of the overall market, metal will remain the preferred material for important applications where plastic cannot meet select performance and appearance characteristics.

The metal continuous thread ("CT") and lug segment of the metal caps and closures market is estimated by Freedonia to be approximately \$500 million in size. Other segments include crowns and aluminum roll-on pilfer proof ("ROPP") closures (both used primarily for beverages).

The metal CT and lug segment of the industry is highly concentrated with a limited number of participants. The primary producers include Silgan Closures, Crown Cork & Seal and Penn-Wheeling Closure, who together account for over 90% of the overall market in volume. While there has been a migration towards plastic, metal remains the material of choice for a variety of high growth niche markets and applications including specialty foods, cosmetics, nutraceuticals and aromatherapy, among others. Many companies in these markets continue to prefer metal closures due to a number of advantages that metal continues to have over plastic in many specialty applications. These advantages include the following:

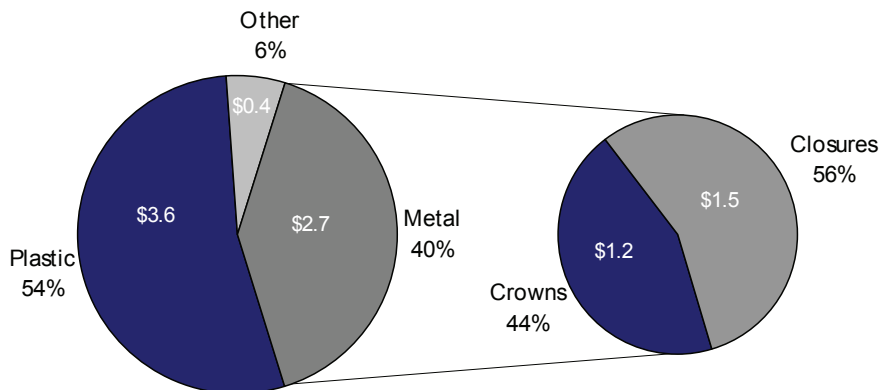
- Conveyance of a premium look and feel

- Increased aesthetic appeal associated with lithographic printing
- Ability to provide a hermetic seal
- Longer shelf life due to impermeability to oxygen and moisture
- Ability to handle the high temperature and pressure associated with hot-fill processes
- Image of a traditional, home-style product when used with a glass jar

introductions. Much of the growth in specialty sauces has been driven by demand for ethnic products such as "Mexican" sauces (taco sauce, salsa and picante sauce) and "Oriental" sauces (soy and teriyaki sauces). In fact, the ethnic product segment is expanding rapidly as newer regional specialties are introduced (e.g. Cantonese, Burmese, etc.). The specialty sauce market will continue to drive demand for custom-designed metal closures, due to desire for differentiation.

*Organic Foods* – The organic foods market was over \$35 billion in 2006, as estimated

U.S. Caps and Closures (dollars in billions)



Source: Frost and Sullivan

The following section details the importance of metal closures in certain key segments and applications.

### Specialty Foods

Specialty foods, which includes sauces, dressings, condiments and organic foods, among other products, continues to be a growth market for metal caps and closures. The specialty foods industry is fast growing and relies heavily on the metal closure/glass jar combination because of the home-style look, increased shelf life and hot-fill advantages that the combination provides.

Growth in the specialty foods market has been focused on two segments in particular:

*Table Sauces* – According to Mintel International Group ("MIG"), the overall table sauce market has been relatively flat since 1999. However, specialty sauces continue to dominate new product

by JustFoods.com, and is expected to continue to grow at double digit revenue rates through the end of the decade. The introduction of formal national standards in October 2002 provided manufacturers with a significant marketing tool and increased consumer awareness. As a result, sales growth of organic foods and beverages through mass market channels outpaced growth in natural food stores from 2001 to 2004 (88% versus 71%). As additional organic food makers enter the market, the need for differentiation increases, driving additional demand for unique metal closures.

### Cosmetics

According to Freedonia, within the cosmetics industry, demand for caps and closures is expected to grow approximately 6.0% per annum to over \$1.0 billion in 2008. This trend will be driven by the overall growth in the cosmetics industry and an

(Continued on page 2)

(Continued from page 1)

increased focus on product image. Growth in the U.S. cosmetics industry will be propelled by anti-aging products, including hair dyes and lotions, as the U.S. population continues to age. As new cosmetics products are introduced, unique packaging continues to be emphasized. According to Beiersdorf AG, a Hamburg, Germany-based maker of skin and beauty care products, "Packaging is the most important instrument of brand management. An attractive packaging design puts a product on stage."<sup>1</sup> Thus, while some manufacturers migrate towards plastics to lower costs, numerous others are trending towards metal to reap the benefits of an upscale image and the differentiating look and feel that metal closures provide.

### Nutraceuticals

Freedonia estimates the global nutraceuticals market to be \$11.7 billion. Within this market, which includes dietary supplements, nutritional beverages and herbal products, packaging is a key differentiator between products. According to Freedonia, the global nutraceuticals market is expected to grow at a rate of 5.8% through 2010. Nutraceuticals remains a highly competitive market, with new entrants seeking to displace incumbents. Packaging has become a primary means of product differentiation, driving demand for quality caps and closures. Specifically, metal caps and closures provide the premium quality look that many nutraceutical manufacturers are seeking.

The fast-paced U.S. lifestyle continues to drive industry growth as consumers seek convenient ways to maintain healthy diets. Further, the growing expenses associated with health care are forcing more Americans to seek nutraceutical products

for both prevention and treatment of health issues. In order to sustain long-term growth in this sector, manufacturers are targeting the growing youth segment of the population.

### Candles/Aromatherapy

The U.S. market for home fragrance products, including potpourri and candles, offers a dynamic growth opportunity for metal caps and closures. As demand for candles and home fragrance products grows, so does the need for containers and lids. Typically, metal and glass containers and caps are best suited for candle and aromatherapy applications as consumers seek containers and closures that have strong aesthetic appeal. Metal closures with perforations and/or unique embossing provide candle manufacturers with a cost-effective method of creating a premium image.

### Wine

Overall demand for caps and closures in the wine and spirits market is expected to grow in line with increased growth in the alcoholic beverage market. According to VineExpo, wine and spirits production volume will increase from 2005 to 2009 at a 6.3% CAGR and 5.1% CAGR, respectively. Demand for metal caps and closures is expected to decrease moderately in the spirits segment as some distillers shift to plastic closures.

However, new demand is expected from wineries that have traditionally been limited to cork closures. The move away from cork has been inspired by studies indicating that aluminum screw caps offer better quality control. In fact, wine producers believe that as much as 7% to 10% of their production is being ruined by cork taint or leakage.

In response, a number of wineries, including many of the most prominent

vineyards in Australia and New Zealand (e.g., Cyprus Winery, Plumpjack Winery, etc.), have adopted screw-cap closures. In 2001, the New Zealand Wine Seal Initiative ([www.screwcap.co.nz](http://www.screwcap.co.nz)) was formed to advance the use of metal ROPPs in place of traditional corks.

Since then, almost 50 independent wineries have joined the initiative and are increasingly using metal caps. Approximately 75% of all Australian and New Zealand wineries have adopted screw cap closures for all or a portion of their production.

The global wine industry, which according to VineExpo is over \$100 billion, could offer significant growth opportunities above and beyond the international market for metal cap and closure manufacturers if this trend continues.

### Hotel Amenities

Hotel amenities are products, including shampoo, lotions and soap, that hotels provide to their guests for use during their stay. Within this market, the use of aluminum caps and closures and premium quality packaging products is becoming more widespread. Luxury hotels, which seek to differentiate themselves from other lodging establishments, are providing upscale amenities in fashionable packaging to reinforce their first class image.

### Conclusion

Due to the demanding performance and appearance specifications by certain manufacturers and for specific niche applications, metal caps and closures will continue to have an important place in the market. As such, we believe that there will continue to be increasingly attractive opportunities in the industry for investment, acquisition and consolidation.

---

## Lincoln International Opens Office in Los Angeles

In September 2006, we announced the opening of our Los Angeles office. Since our founding in 1996, Lincoln International has been dedicated to consistent growth. With a global investment banking staff of more than 100 professionals, Lincoln International has established a strong presence domestically and abroad with offices in Chicago, Frankfurt, New York and Paris.

Southern California represents one of the nation's most diverse and robust economies and is home to an abundance of mid-market businesses, Fortune 500 companies and a fast-growing private equity community. Lincoln International's local presence will help to expand and strengthen the firm's relationships with current and pro-

spective clients in California and throughout the western United States.

The Los Angeles effort will be led by Steve Wiesner, who recently joined the firm as a Senior Vice President. He is a seasoned investment banking professional with strong ties to the Los Angeles financial community. He previously worked for Zuma Capital Partners and Credit Suisse First Boston in Los Angeles and in the Mergers & Acquisitions Group at Donaldson, Lufkin & Jenrette in San Francisco and New York. Wiesner will work closely with Rob Barr, Managing Director and President - North America, to staff the office and deepen client relationships throughout the region.

"As we continue to expand, Southern California offers a multitude of opportunities for us in a wide range of industries," said Barr. "Our Los Angeles office provides us with a dedicated local presence in a rapidly growing market, and will allow us to deepen our ties with California-based companies and private equity firms who are seeking quality deal execution."

"Our presence in Los Angeles will allow us to tap into the local market of highly talented investment bankers and selectively add people that fit into our culture and deepen and/or broaden our industry expertise," said Wiesner.

1. Butschli, Jim. "Packaging takes the stage for Beiersdorf." 2 Oct. 2006 <<http://www.packworld.com/view-22078>>.

## Select Packaging M&A Transactions, Q4 2006

Date Closed	Target Company	Target Location	Acquiring Company	Acquirer Location	Classification	Transaction Value (dollars in millions)
Pending	SCA Packaging North America	United States	Metalmark Capital LLC	United States	Rigid	\$400
Dec-06	Autobar Packaging Group	France	SunEuropean Partners LLP	United Kingdom	Rigid, Flexible	N/A
Dec-06	Norampac, Inc.	Canada	Cascades, Inc.	Canada	Paper	474
Dec-06	Clear Pack Company	United States	Sonoco Products Co.	United States	Rigid	N/A
Dec-06	Cousins-Currie Limited	Canada	Silgan Holdings	United States	Rigid	49
Dec-06	SCA Packaging Asia	China	SCA AB	Sweden	Rigid	6
Dec-06	Biosphere Industries	United States	Sealed Air	United States	Rigid	N/A
Dec-06	Promens hf	Iceland	Polimoon ASA	Norway	Rigid	388
Dec-06	Europackaging Group	United Kingdom	MidOcean Partners	United Kingdom	Rigid, Specialty	N/A
Dec-06	Demoli Industria Cartaria S.p.A.	Italy	Sonoco-Alcore S.a.r.l.	Belgium	Rigid	N/A
Dec-06	Alexander Box Company	United Kingdom	Rosewood Packaging	United Kingdom	Paper	N/A
Dec-06	Caraustar Industries, Inc., Select Specialty Packaging Locations	United States	Private	N/A	Specialty	6
Dec-06	Kobbeltvedt Emballasje AS	Norway	Kunst Trykk Edgar Hartvedt AS	Norway	Paper	N/A
Dec-06	S. Walter Packaging Corp.	United States	Brynwood Partners	United States	Paper	N/A
Dec-06	Keenpac Limited	United Kingdom	Bunzl plc	United Kingdom	Specialty	N/A
Nov-06	Nicholl Food Packaging Bag Business	United Kingdom	Audax Group	United States	Flexible	N/A
Nov-06	Kingfoil Containers Pty Ltd.	Australia	Confoil Pty Ltd.	Australia	Flexible	N/A
Nov-06	The MAB Group LLC	United States	Consolidated Container Co. LLC	United States	Rigid	N/A
Nov-06	Saverglass	France	Natexis Industrie	France	Glass	N/A
Nov-06	Rexam Thin Wall Plastic Containers	Sweden	Polimoon ASA	Norway	Rigid	N/A
Oct-06	Cin-Made Packaging Group, Inc.	United States	Sonoco Products Co.	United States	Rigid	N/A
Oct-06	Whitworths Food Group	United Kingdom	European Capital Financial Services	United Kingdom	Specialty	164
Oct-06	Sonoco-Alcore S.a.r.l.	Belgium	Sonoco Products Co.	United States	Rigid	N/A
Oct-06	Grenville Printing Ltd.	Canada	Grafikom L.P.	Canada	Label	N/A
Oct-06	GRAFCO PET Packaging Technolo-	United States	Captive Plastics, Inc.	United States	Rigid	N/A
Oct-06	Cool Logistics Ltd.	United Kingdom	Svenska Cellulosa Aktiebolaget, SCA	Sweden	Specialty	15

Source: Public Filings, Capital IQ, Mergerstat

## Select Recent Caps and Closures Transactions

Date Closed	Target Company	Acquiring Company	Target Description
Jan-07	Ancor's Asian White Cap Closures	Silgan Holdings, Inc.	Manufactures metal, plastic and composite vacuum closures for bottles, cans and jugs
Jul-06	Ancor's European White Cap Closures	Silgan Holdings, Inc	Manufactures metal, plastic and composite vacuum closures for bottles, cans and jugs
Jul-06	Calmar Inc.	MeadWestvaco	Manufactures sprayers and dispensers for the personal care industries
Jun-06	Airspray NV	Rexam plc	Manufactures dispensers for consumer products
May-06	VR Plastics	Robinson plc	Manufactures injection molded packaging systems and custom closures
Apr-06	Boxmore Plastics Ltd.	Management buyout	Manufactures PET plastic bottles, preforms and HDPE closures to the carbonated drinks and water markets
Mar-06	Penn-Wheeling Closure Inc.	Tecnocap SpA	Manufactures metal caps and closures
Mar-06	Ten Cate Plasticum	NPM Capital	Manufactures aerosol and dispensing, closure and container, and injection molded plastic packaging products
Mar-06	Superfos Pharma	Gerresheimer Group	Manufactures pharmaceutical plastic containers and closure systems
Feb-06	Dispensing Closure Business of CCL Industries	AptarGroup Inc.	Manufactures dispensing closures for the personal care, fragrance/cosmetic, pharmaceutical, household and food/beverage markets

Source: Public Filings, Capital IQ, Mergerstat

## Public Company Comparables (dollars in millions)

Company	Stock Price	52 Week High	52 Week Low	LTM Revenues	Market Cap.	Net Debt	P/E	EV/ EBITDA	EV/ EBIT
<b>Rigid Packaging Companies</b>									
Ball Corp. (NYSE:BLL)	\$46.25	\$47.55	\$34.16	\$6,622	\$4,851	\$2,300	14.8x	8.8x	12.9x
Constar International Inc. (NasdaqNM:CNST)*	\$8.94	\$7.70	\$2.09	\$984	\$96	\$376	NM	7.1x	15.4x
Crown Holdings Inc. (NYSE:CCK)	\$22.54	\$22.73	\$14.71	\$6,982	\$3,574	\$3,134	11.3x	8.3x	11.6x
Rexam plc (LSE:REX)	\$10.61	\$11.97	\$8.98	\$6,505	\$5,924	\$2,707	11.2x	6.8x	9.1x
Silgan Holdings Inc. (NasdaqNM:SLGN)	\$51.26	\$51.93	\$33.84	\$2,668	\$1,901	\$939	18.8x	8.0x	12.3x
<b>Specialty Packaging Companies</b>									
AptarGroup Inc. (NYSE:ATR)	\$60.84	\$62.29	\$46.86	\$1,518	\$2,119	\$138	22.1x	8.0x	13.0x
Bemis Co. Inc. (NYSE:BMS)	\$33.93	\$36.53	\$28.54	\$3,639	\$3,593	\$688	20.7x	8.8x	12.8x
Pactiv Corp. (NYSE:PTV)	\$32.46	\$36.91	\$21.54	\$2,917	\$4,365	\$688	16.4x	8.8x	11.9x
Sealed Air Corp. (NYSE:SEE)	\$64.87	\$66.49	\$45.62	\$4,328	\$5,277	\$1,445	22.1x	9.5x	12.4x
Sonoco Products Co. (NYSE:SON)	\$38.11	\$38.90	\$29.45	\$3,622	\$3,864	\$613	20.1x	8.7x	12.7x
<b>Paper Packaging Companies</b>									
Caraustar Industries Inc. (NasdaqNM:CSAR)*	\$7.91	\$11.33	\$6.63	\$912	\$231	\$262	5.8x	9.7x	18.4x
Chesapeake Corp. (NYSE:CSK)	\$18.02	\$17.84	\$12.94	\$1,020	\$345	\$459	NM	9.2x	28.3x
Graphic Packaging Corp. (NYSE:GPK)*	\$5.01	\$5.12	\$1.94	\$2,396	\$1,001	\$1,972	NM	10.1x	30.4x
Greif Inc. (NYSE:GEF)	\$116.50	\$122.77	\$56.75	\$2,628	\$2,716	\$367	24.5x	10.0x	14.1x
International Paper Co. (NYSE:IP)	\$36.02	\$37.98	\$30.69	\$21,995	\$15,560	\$5,599	13.5x	7.8x	14.6x
MeadWestvaco Corp. (NYSE:MWV)	\$30.51	\$30.85	\$24.76	\$6,530	\$5,437	\$2,427	59.5x	10.8x	34.8x
Packaging Corp. of America (NYSE:PKG)	\$23.31	\$24.23	\$20.19	\$2,187	\$2,435	\$569	19.5x	7.7x	12.8x
Rock-Tenn Co. (NYSE:RKT)	\$33.25	\$33.84	\$12.54	\$2,182	\$1,273	\$762	23.8x	8.2x	14.2x
Smurfit-Stone Container Corp. (NasdaqNM:SSCC)	\$11.76	\$15.15	\$9.77	\$7,157	\$2,965	\$3,625	NM	9.8x	22.3x
<b>Label Companies</b>									
Avery Dennison Corp. (NYSE:AVY)	\$67.81	\$71.35	\$54.95	\$5,576	\$7,552	\$910	19.4x	11.8x	16.4x
Brady Corp. (NYSE:BRC)	\$38.16	\$42.79	\$32.90	\$1,118	\$2,041	\$288	18.2x	11.4x	14.2x
CCL Industries Inc. (TSX: CCL.B)	\$27.23	\$29.99	\$22.85	\$1,063	\$874	\$291	16.2x	6.7x	10.6x
Multi-Color Corp. (NasdaqNM:LABL)	\$33.35	\$36.90	\$26.35	\$217	\$224	\$10	21.6x	8.7x	11.4x
Paxar Corp. (NYSE:PRX)*	\$22.60	\$23.45	\$17.00	\$857	\$908	\$3	20.1x	9.3x	14.3x

Source: Public Filings, Capital IQ

Note: Companies denoted by "\*" have not released Q4 earnings as of the publishing of this DealReader

## About Lincoln International

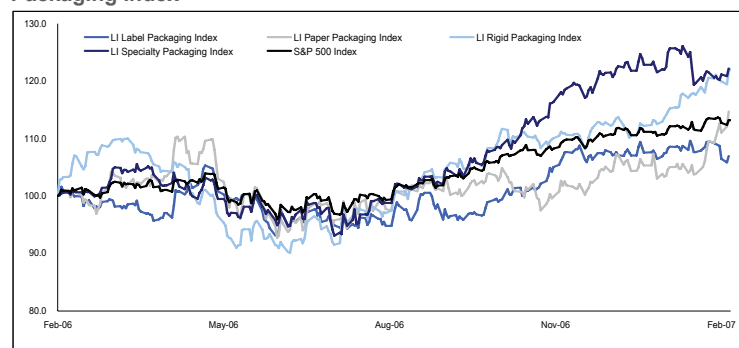
Lincoln International specializes in merger and acquisition services and private capital raising for leading organizations involved in mid-market transactions. With offices in Chicago, Frankfurt, Los Angeles, New York, and Paris, and strategic partnerships with China Everbright and other partner firms in Asia, Lincoln International has strong local knowledge and contact in the key global economies. The organization provides clients with senior-level attention, in-depth industry experience, and integrated resources. By being focused and independent, Lincoln International serves its clients without conflicts of interest. More information about Lincoln International can be obtained at [www.lincolninternational.com](http://www.lincolninternational.com).



CHICAGO | FRANKFURT | LOS ANGELES | NEW YORK | PARIS

Results you can rely on

## Packaging Index



Source: Capital IQ

## Officer Contacts

### NORTH AMERICA

Eric Malchow  
Managing Director  
emalchow@lincolninternational.com  
+1-312-580-8337

Kyle Bolenbaugh  
Vice President  
kbolenbaugh@lincolninternational.com  
+1-312-580-6560

### FRANKFURT

Dirk Langenbach  
Managing Director  
d.langenbach@lincolninternational.de  
+49-69-97-105-420

### PARIS

Jean René Hartpence  
Managing Director  
jr.hartpence@lincolninternational.fr  
+33-1-53-53-18-21

## Contributors

Cory Allen, Senior Associate, callen@lincolninternational.com  
Matt Kunz, Analyst, mkunz@lincolninternational.com