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Corrugated & Paperboard Boxes

Industry Study with Forecasts for **2016 & 2021**

Study #2868 | March 2012 | \$5100 | 333 pages

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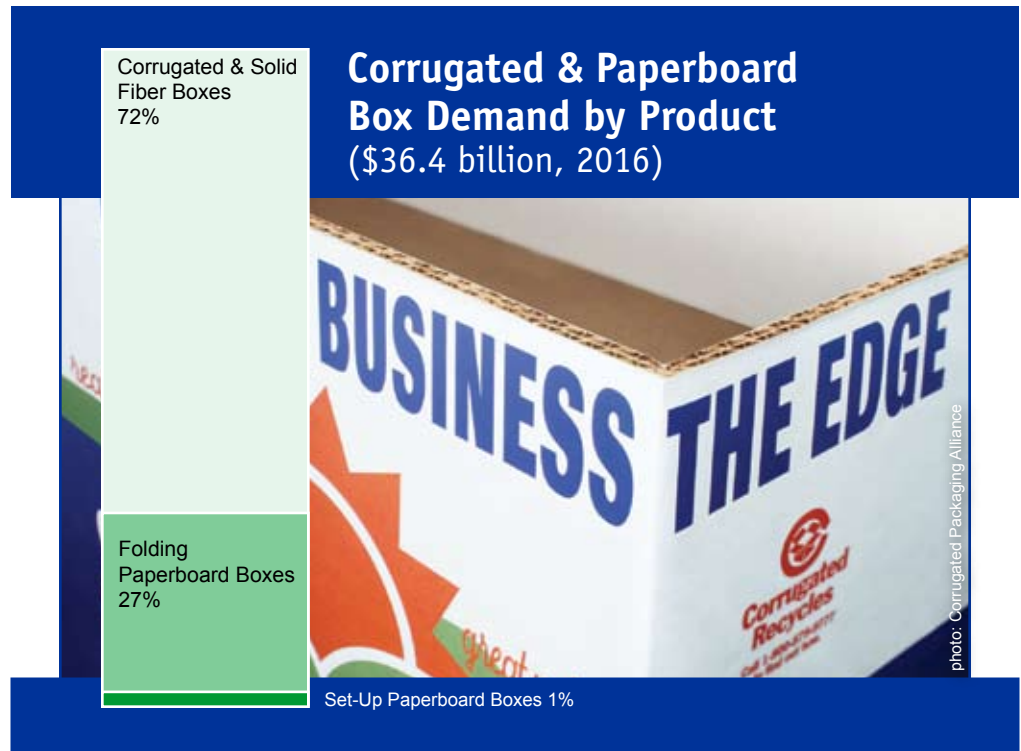
A stronger US economy, expanded food, beverage and durable goods output, and a rebound in construction spending will all benefit demand for corrugated and paperboard boxes.

US demand to exceed \$36 billion in 2016

Demand for corrugated and paperboard boxes in the US is projected to rise 2.3 percent annually to \$36.4 billion in 2016, boosted by an overall strengthening of the US economy following the 2007-2009 recession. In particular, growth will benefit from expanded food, beverage and durable goods output, as well as from a rebound in construction spending, which will stimulate demand for goods and materials (and their related boxes) used in construction applications. Gains will also be aided by a trend toward more expensive boxes, such as corrugated boxes and folding cartons that offer high-quality graphics and printing.

Corrugated, solid fiber boxes to lead demand

Corrugated and solid fiber box demand is forecast to climb 2.5 percent per year through 2016, supported by a rebound in manufacturing activity and accelerated growth in consumer spending. In addition, corrugated and solid fiber box demand will be supported by their well-entrenched position as the shipping container of choice in a number of markets due to their cost-effectiveness, excellent protective performance and limited competition from other packaging alternatives. Production volume will rebound but will be moderated by sustainability efforts and heightened use of high-performance, lighter basis weight grades of linerboard and medium that can provide sufficient compression strength for shipping boxes.



Demand for folding paperboard boxes is expected to rise 1.7 percent per annum through 2016, trailing the corrugated box pace as a result of strong competition from other packaging formats -- mainly flexible packaging and mini-flute corrugated boxes. Source reduction efforts will also limit advances. Nonetheless, gains will benefit from a rebound in nondurable goods output and continued use in many markets because of their low cost, functionality and ability to provide considerable billboard space for eye-catching graphics and printing. Set-up box demand will grow modestly due to inroads by less costly options like folding cartons and plastic containers, but will benefit from usage as upscale packaging for premium confectionery products and fragrances.

Frozen food and beverages market to remain dominant

Food and beverages, which accounted for half of US box demand in 2011, is the largest box market. Through 2016, frozen food and beverage applications are expected to exhibit the fastest gains among food and beverage markets. Among other nondurable goods box markets, pharmaceuticals, and rubber and plastic products are expected to see above average growth. Durable goods markets will rebound favorably from their 2006-2011 performance, fueled by gains in production of machinery and equipment. A recovery in construction activity will drive demand for durables such as appliances, furniture and plumbing products, as well as related boxes.

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Sample Text, Table & Chart

MATERIALS

Semichemical Board

Demand for semichemical board, a major component of corrugated boxes, is projected to increase at a rate of 1.5 percent per year through 2016, reaching \$1.8 billion in 2016. This represents a rebound from the sharp loss of demand during the period when the 2007-2009 recession curtailed corrugating output, hurting demand for corrugated boxes. During this period were also caused by the recession in the corrugating medium. As manufacturers' shipments of corrugated boxes will likewise recover, stimulating both sales and production of semichemical board. Additionally, demand will be helped by some movement back to semichemical, which possesses higher strength than recycled medium.

Semichemical board is utilized almost exclusively as corrugating medium, the fluting material in corrugated boxes. Although semichemical board has traditionally been the material of choice for corrugating medium, recycled board has stepped up its use in this application, rising from about two million tons in 1990 to 4.4 million tons in 2011. By contrast, annual semichemical corrugating medium production has generally hovered between 5.5 and 6.5 million tons during most of this period. Despite market maturity and competition from recycled paperboard, semichemical board demand is projected to rise at a faster pace than recycled board, aided by the generally higher quality and strength properties of semichemical board compared to recycled board. Moreover, the trend toward lighter-weight linerboard will stimulate demand for semichemical, as a strong core enhances the strength of such boxes. Production of semichemical board will be supported by additional entrants into the market, such as Sonoco Products, which began producing semichemical medium commercially available from its Hartsville, South Carolina plant in January 2010.

Semichemical board is defined as containing no more than 50 percent recycled fiber, although in practice up to 50 percent recycled fiber.

TABLE IV-5

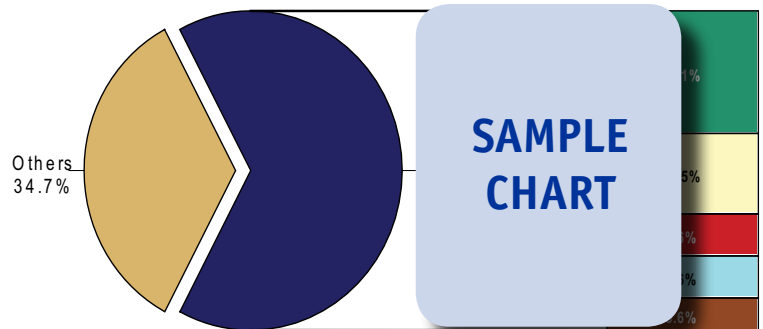
CORRUGATED & SOLID FIBER BOX DEMAND BY MARKET
 (million dollars)

Item	2001	2006	2011	2016	2021
Manufacturers' Shipments (bil \$)					
\$ boxes/000\$ mfg					
Corrugated & Solid Fiber Box Demand					
Nondurables:					
Food & Beverages					
Paper & Publishing					
Chemical & Pharmaceutical					
Other Nondurables					
Durables					
Nonmanufacturing					

SAMPLE TABLE

CHART VI-1

US CORRUGATED & PAPERBOARD BOX MARKET SHARE
 (\$32.5 billion, 2011)

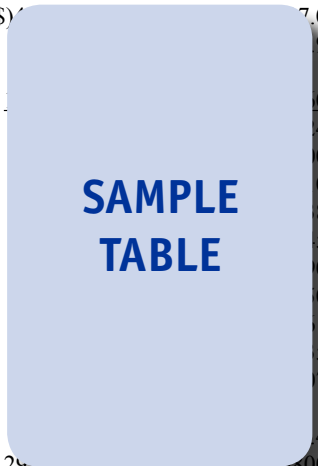


SAMPLE CHART

Sample Profile, Table & Forecast

TABLE V-3
FOOD & BEVERAGE BOX MARKET
(million dollars)

Item	2001	2006	2011	2016	2021
Food & Beverage Product Shpts (bil \$)					7.0
\$ boxes/000\$ food & beverage					9
Food & Beverage Box Demand					0
Beverages					4
Meat, Poultry & Seafood					0
Grain Mill Products					0
Fresh Produce					8
Frozen Foods					5
Canned Foods					0
Dairy Products					0
Bakery Products					1
Sugar & Confectionery					5
Other Foods					7
% food & beverages					4
Corrugated/Paperboard Box Demand	29	31	32	33	34



COMPANY PROFILES

PaperWorks Industries Incorporated
 5000 Flat Rock Road
 Philadelphia, PA 19127
 215-984-7000
 http://www.paperworks.com

Annual Sales: \$1.2 billion, 2/12
 Employment: 1,200

Key Products: Paperboard and packaging

PaperWorks Industries is a manufacturer of coated recycled paperboard and paperboard packaging. The Company is an affiliate of Sun Capital Partners Incorporated (Boca Raton, Florida), a private equity firm. PaperWorks Industries operates through two divisions: Paperboard Group and Packaging Group.

The Company is active in the US corrugated and paperboard box industry through both divisions. Via these divisions, PaperWorks Industries manufactures recycled paperboard and folding cartons.

Paperboard Group -- Paperboard is made by PaperWorks Industries via the Paperboard Group division, and comprises coated recycled board (CRB) and uncoated recycled board (URB) types. CRB is produced under the MASTERWORKS brand name and includes the PLUS, LITE, NEWS, FREEZE and BEV grades. Prior to August 2009, the Company sold its paperboard products under the MASTERPRINT tradename.

MASTERWORKS PLUS CRB features high kraft fiber content and is suitable for packaging applications requiring high strength. The

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“Demand for boxes used in beverage packaging is forecast to climb 2.8 percent annually through 2016 to \$3.3 billion, outpacing the food and beverage box market average but decelerating from the 2006-2011 pace as beverage shipment growth moderates. Gains for corrugated boxes will be supported by favorable prospects for such beverages as sports drinks, iced tea, wine and various ready-to-drink products such as energy drinks, protein drinks and flavored waters. Demand for folding cartons will be based on ...”
 --Section V, pg. 136

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OTHER STUDIES

Rigid Bulk Packaging

US demand for rigid bulk packaging will rise 3.9 percent yearly to \$7.0 billion in 2017, led by RIBCs and material handling containers. Chemicals and pharmaceuticals, and plastic, rubber and fiber markets will drive gains in the dominant nondurables segment. Among container materials, plastic will grow the fastest. This study analyzes the \$5.7 billion US rigid bulk packaging industry, with forecasts for 2017 and 2022 by material, product and market. The study also considers market environment factors, evaluates company market share and profiles industry players.
 #2993 February 2013 \$5100

World Protective Packaging

World demand for protective packaging will rise 6.3 percent annually to \$24.5 billion in 2016. Foamed plastics will remain the largest segment but will lose market share to bioplastic and nonplastic products such as molded pulp and bamboo. Developing regions will see the fastest advances in demand. This study analyzes the \$18 billion world protective packaging industry, with forecasts for 2016 and 2021 by product, material, function, market, world region and for 24 major countries. The study also evaluates company market share and profiles industry participants.
 #2943 September 2012 \$6100

World Rigid Packaging

World demand for rigid packaging is forecast to increase 6.4% per year to \$472 billion in 2016. The most rapid increases in demand will be seen in developing areas, especially in the Asia/Pacific region. Plastic will be the fastest growing container material, while beverages will remain the largest market. This study analyzes the \$345 billion world rigid container industry, with forecasts for 2016 and 2021 by container material, market, world region and for 19 major countries. The study also evaluates company market share and profiles industry competitors.
 #2909 July 2012 \$6100

World Aseptic Packaging

World demand for aseptic packaging is projected to grow 9.1 percent annually to \$35.8 billion in 2015. India and China will experience the fastest increases in demand. Gains in the US will reflect the broadening aseptic filling requirements for liquid pharmaceuticals. Beverages will remain the dominant market worldwide. This study analyzes the \$23.2 billion world aseptic packaging industry, with forecasts for 2015 and 2020 by product, market, world region and for 17 countries. The study also evaluates company market share and profiles industry competitors.
 #2859 March 2012 \$5900

Protective Packaging

Protective packaging demand in the US is projected to increase 5.0 percent annually to \$5.9 billion in 2016. The increasing popularity of Internet shopping will benefit protective mailers, air pillows and bubble packaging. A recovery in manufacturing will spur gains for foam and molded pulp protective packaging. This study analyzes the \$4.6 billion US protective packaging industry, with forecasts for 2016 and 2021 by function, market and product. The study also evaluates company market share and profiles industry players.
 #2839 January 2012 \$5100

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- Chemicals • Plastics • Life Sciences • Packaging • Building Materials • Security & Electronics • Industrial Components & Equipment • Automotive & Transportation Equipment • Household Goods • Energy/Power Equipment

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