



Highlights of an industry study

Presented to:



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**KEYMARK
ASSOCIATES**

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Study Overview

- ★ **Market for shrink & stretch film labels for bottles & other containers.**
 - ★ **Market size and growth**
 - ★ **Material usage and comparison to other label types, including non-shrink wraparound**
 - ★ **Technical requirements and specifications**
 - ★ **Customers and converters**
- ★ **Films used in North America**
 - ★ **Completely encircle all or part of bottle or other object.**
 - ★ **Shrink by application of heat to assume object shape**
- ★ **Focus: printed full body sleeves**

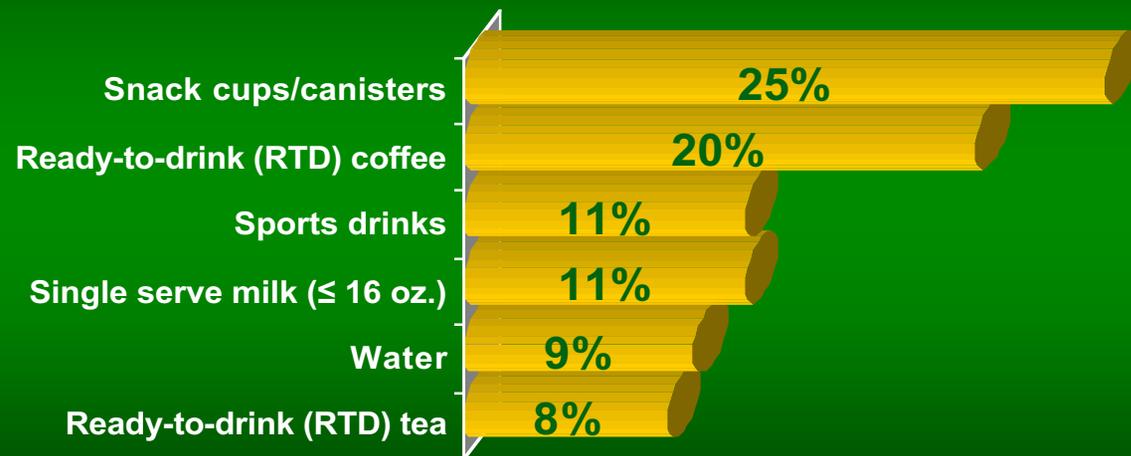
Key Products

- ★ **Seamless tubing**
 - ★ Directly extruded as tube
 - ★ Cheap, lower print quality
 - ★ Used for capseal, multipack, industrial
- ★ **Seamed sleeves**
 - ★ Flat film formed into tube
 - ★ High quality print, high shrink
- ★ **Wraparound label**
 - ★ Flat film formed around bottle or object
 - ★ High quality print, low shrink, moderate cost

Shrink Sleeves Used in Hot Markets...

- ★ High growth categories use shrink labels
- ★ Labels help drive growth
- ★ Popular beverages

Projected Annual Category Growth 2002-2007



...creates major label growth!

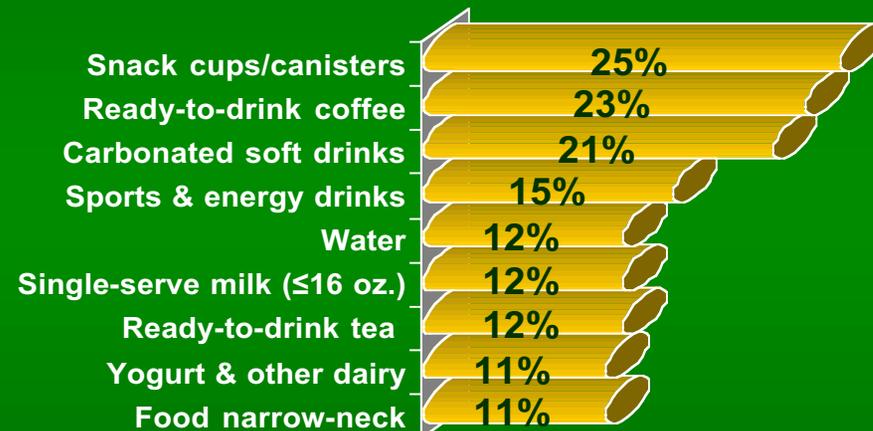
★ Driven by category growth

- ★ Snacks - Frito, P&G
- ★ Coffee - RTD - Jakada, Arizona
- ★ Sports drinks - Gatorade EDGE, POWERade
- ★ Water - Clearly Canadian
- ★ Single-serve milk - Chugs, Nesquik

★ Other markets

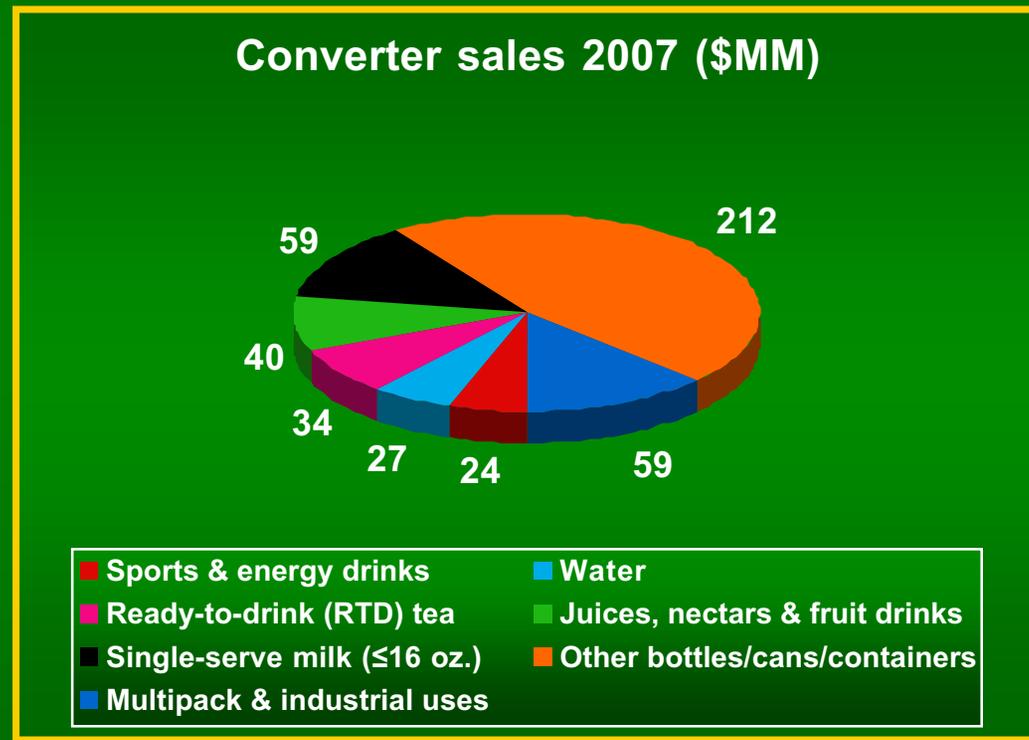
- ★ Soft drinks
- ★ Yogurt drinks
- ★ Foods - narrow neck

Projected Annual Shrink Label Growth 2002-2007



Shrink Label Markets

- ★ Total Market: \$415MM in 2007 in converter sales
- ★ Bottles/cans/containers \$356 MM
- ★ Milk started growth, still leads
- ★ Juices, teas, water & sports drinks also significant



Wraparound labels

★ Non-shrink

- * Huge markets
 - ◆ Carbonated soft drinks
 - Largest by far
 - Slower growth
 - ◆ Juice
 - ◆ Bottled water
 - ◆ Sports drinks
- * Converters
 - ◆ Printpack
 - ◆ Alcan
 - ◆ Pechiney

★ Shrink

- * Specialty markets
 - ◆ Aerosol cans
 - ◆ Coffee
 - Folgers loss
 - ◆ Powdered drinks
 - ◆ Dieting aids
- * Converters
 - ◆ CL & D
 - ◆ Seneca Salem

Alternative Beverages Major Users

- ★ Generally a unique item not exactly fitting category
- ★ Sometimes treated as category
 - ★ Combinations of tea, juice, water, etc.
 - ◆ Smoothies (Nouriche, Frusion, Tropicana)
 - ◆ Flavored waters (Clearly Canadian)
 - ◆ Coffee-milk (Havana, Blue Luna, Jakada)
 - ◆ Teas w/fruit juices (Arizona)



Used for promotions

- ★ **Enlivens existing brand**
 - ★ Bailey's Irish Cream
 - ★ Canadian Club whiskey
 - ★ Other liquor brands
- ★ **Special short-run items**
 - ★ Mott's Shagadelic Shakers
 - ◆ Austin Powers promo
 - ◆ Includes fitments for mixing



Outstanding graphic appeal

- ★ Uses full container for display
- ★ Vivid, high quality prints
 - ★ Ragu Rich & Meaty
- ★ Emphasizes uniquely shaped containers
- ★ Appeal to children
 - ★ Cartoon characters
 - ◆ Nesquik flavored milks
 - ◆ J&J Disney shampoo
 - ◆ Danimals drinkable yogurt
 - ◆ Belly Washers juices
 - ★ Fun products
 - ◆ Heinz EZ squirt colored ketchup
 - ◆ Kick'rs flavored ketchups



Major Endusers

- ★ Mostly beverage companies.
- ★ Several recent acquisitions
 - ★ Pepsico bought Gatorade
 - ★ Suiza merged with Dean
 - ★ Cadbury bought Snapple
- ★ High growth creates interest

Endusers	Applications
Dean Foods	Milk Chugs, Marie's Salad dressing, Capseal
Hornel Brewing (Arizona Beverage)	Arizona Tea, Juice, Sports Drinks, Coffee, Beer
SC Johnson	Aerosols
Campbell Soup	Prego Pasta sauce, Pace Mexican sauce
Kraft Foods	Powdered drinks, Capseal
Nestle'	Nesquik Milk, Carnation Creamers, Capseal, Candy
Pepsico (Gatorade, Tropicana)	Gatorade Sports & energy drinks, Tropicana Juice
Cadbury Schweppes (Snapple, Mott's, Dr. Pepper)	Snapple health drinks, Raging Cow milk, liquor
Unilever	Wishbone RanchUp, Hellman's Dippin' Sauces
Procter & Gamble	Coffee, snacks, capseal

Costly materials & equipment

- ★ **Material cost 3x non-shrink wraparound**
 - ★ Even higher v. glue applied paper or pressure-sensitive (PS)
 - ★ Stretch film labels much less expensive
 - ★ Some specialty labels approach shrink in price
 - ◆ Larger, full wrap PS labels, fold out inserts, clear
- ★ **Automatic high-speed labeling machines expensive**
 - ★ \$350-500M include heat tunnel
 - ★ Up to 800/min., some higher speeds (1200+) claimed
- ★ **Wraparound labelers \$90-200M**
- ★ **PS label applicators \$75-200M**

Sleeve Application Equipment

- ★ **Sleeves/Caps: Intersleeve, PDC, Axon, Krones**
 - ★ Manual - Pre-forms, Low volume, odd-size multipack
 - ★ Automatic - Roll Fed, High volume (100-700 ppm), uniform objects
 - ◆ Machine feeds sleeve above object
 - ◆ Sleeve cut to length and opened
 - ◆ Sleeve put on object
 - ◆ Cost \$50-200M caps, \$200-500M sleeves
- ★ **Wraparound: Trine, B&H, Krones**
 - ★ All automatic, roll-fed, sleeve formed on bottle 500-1000 bpm
 - ★ Cost: 650 bpm - \$166,000; 300 bpm - \$90M

Materials Overview

- ★ **Polyvinyl chloride (PVC) - Currently dominant material**
 - ★ Broad shrink range, lowest cost high shrink (65%) material
- ★ **Modified polyethylene terephthalate (PET) copolyester**
 - ★ Mostly polyethylene terephthalate glycol (PETG)
 - ◆ Eastman proprietary resin
 - ★ Grew 52% annually through 2001
 - ★ Highest shrink (75%), perceived environmentally friendly
- ★ **Oriented polypropylene (OPP)**
 - ★ Dominant wraparound labels
 - ★ Lowest cost, but low shrink (<25%) only
 - ★ Higher shrink (40%) near release
- ★ **Oriented polystyrene (OPS) - Many new applications**
 - ★ Very high shrink (60-80% reported)
 - ★ Potentially competitive with PVC
 - ★ Fast growing now

Environmental & Recycling Issues

- ★ **Confusing mix of perceptions, policies & laws**
- ★ **In USA/Canada, few national rules on label materials**
- ★ **No bans on PVC or other materials now or in future**
- ★ **Most environmental material selection company practice**
 - ★ **Responding to real or anticipated consumer pressure**
 - ★ **Common product for global markets**
- ★ **Few incinerators in USA/Canada now or planned soon**
- ★ **Focus on recycling, composting & reuse**
 - ★ **Aluminum cans very successful (56%)**
 - ★ **PET (24%) and glass (29%) bottles somewhat successful**
- ★ **PET beverage (and other) bottle systems set for OPP labels**

Key Film Suppliers

- ★ **PVC & PET High & Medium Shrink**
 - ★ Bonset America, Brown Summit, NC (Extruded only)
 - ★ Klöckner Pentaplast, Gordonsville, VA (Calendared & extruded)
 - ★ Mitsubishi, Greer, SC (PETG Extruded only)
- ★ **PET – All extruded**
 - ★ DuPont Teijin supplying in Europe
 - ★ SKC, Covington GA
 - ★ Toyobo, Japan imports
- ★ **OPP Low & Medium Shrink – All Extruded**
 - ★ AET, New Castle, DE
 - ★ ExxonMobil, Macedon, NY
- ★ **OPS High Shrink – All extruded**
 - ★ Alcoa/Kama, Hazleton PA
 - ★ American Fuji Seal, Bardstown, KY
 - ★ Bonset America, Browns Summit, NC
 - ★ Plastic Suppliers, Columbus OH

Label Manufacturing

★ Basic process

- ★ Film extruded/tentered/slit to printer width
 - ◆ Wraparound often laminated
- ★ Film printed/slit
 - ◆ Wraparound to label height
 - ◆ Sleeves to bottle circumference (plus allowance for seam and clearance)

★ Sleeves only

- ★ Film formed into sleeve and solvent seamed
- ★ Sleeve rolled up or cut to final length
- ★ Deceptively simple
 - ◆ Too much heat may cause shrinkage & loss of registration
 - ◆ Consistently durable seams difficult

Shrink Sleeve Seaming Equipment

- ★ **Cost \$30-200,000**
 - ★ Higher cost includes inspection/doctoring
 - ★ Lower cost seaming only
- ★ **Few Manufacturers**
 - ★ DCM Group (France) largest - Novaflex represents
 - ★ HCI (Taiwan) - Karlville Development represents

Converters

★ Key players

- ★ American Fuji Seal, Bardstown, KY - 1st or 2nd largest
- ★ Alcan Packaging (Lawson Mardon)/Pechiney, Chicago, IL
- ★ Alcoa Flexible Packaging (Reynolds), Richmond, VA
- ★ Gilbreth, Croydon, PA
- ★ Seal-It, Inc., Farmingdale, NY - 1st or 2nd largest

★ Trends

- ★ Many recent changes in accounts & rankings
- ★ Several new entries
- ★ Consolidation of smaller players likely

Opportunities in Shrink & Stretch Labels 2007

- ★ **Fast growth markets**
 - ★ Outstanding merchandising tool, generates purchase
- ★ **Attracting many players**
 - ★ Continued new material development
 - ◆ Costs will decline somewhat
 - ◆ Improved, more consistent performance
 - ★ New products provide new entry opportunities
 - ◆ Fools will rush in, many casualties will result
 - ◆ Treacherous even for experienced & qualified
- ★ **Well-defined entry plan critical**
 - ★ Thorough market knowledge
 - ★ Careful analysis of trends/opportunities
 - ★ Strategic fit

