



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**

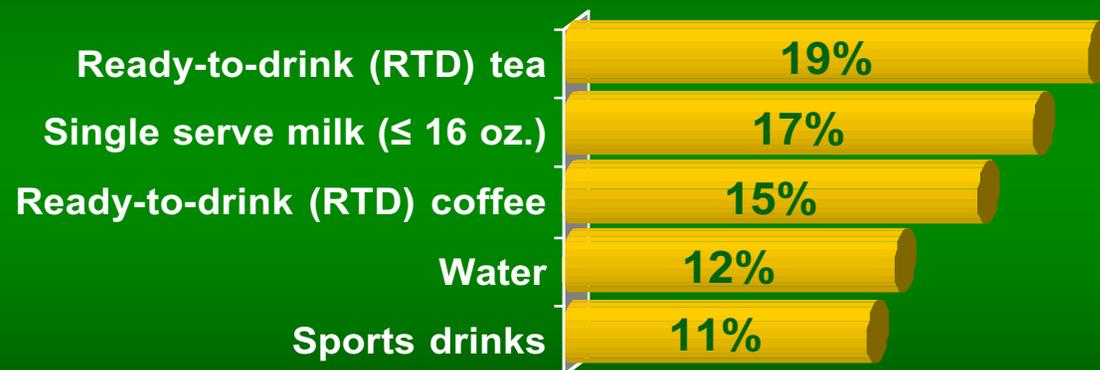
Key Products

- ★ **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

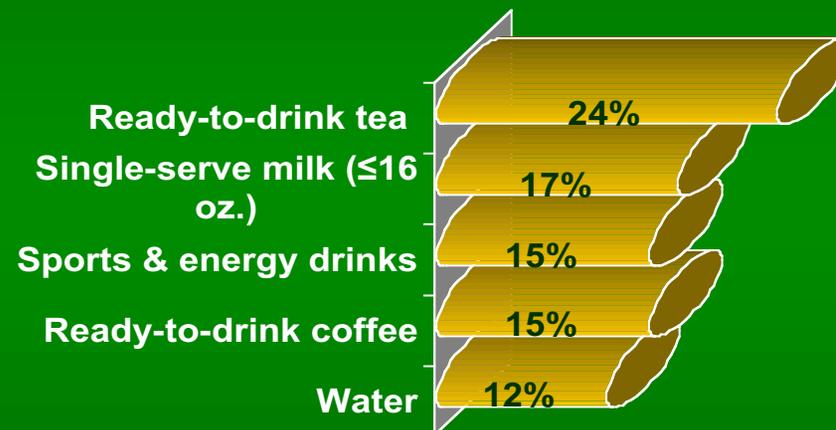
Projected Annual Category Growth 2002-2007



...creates major label growth!

- ★ Driven by category growth
- ★ Juice faster
 - ★ Tropicana
- ★ Other markets
 - ★ Snacks - Frito, P&G
 - ★ Coffee - RTD
 - ★ Soft drinks
 - ★ Yogurt drinks
 - ★ Foods - Condiments

Projected Annual Shrink Label Growth 2002-2007



Shrink Label Markets

★ Total Market:
\$525MM in 2007
in converter
sales

- ★ Bottles/cans/
containers
\$465MM
- ★ Milk started
growth, still
leads
- ★ Juices & teas
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
 - ◆ Salem

Alternative Beverages Major Users

- ★ Generally a unique item not exactly fitting category
- ★ Sometimes treated as category
 - ★ Combinations of tea, juice, water, etc.
 - ◆ Fruit smoothies (Whipper Snapple)
 - ◆ Teas w/fruit juices (Arizona)
 - ◆ Energy drinks (Atomic Nitro)
 - ◆ Coffee-milk (Havana, Blue Luna)
 - ◆ Flavored waters (Clearly Canadian)



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
- ★ 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's 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, Capseal
Ferolito, Vultaggio & Sons (Arizona Beverage)	Tea, Juice, Sports Drinks, Coffee, Beer
SC Johnson	Aerosols
Kraft Foods	Powdered drinks, Capseal
Nestle'	Milk, Capseal, Candy
Pepsico (Gatorade, Tropicana)	Sports & energy drinks
Cadbury Schweppes (Snapple, Mott's, etc.)	Tea, juice, liquor
Unilever	Wishbone RanchUp, Hellman's Dippin' Sauces

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
- ★ **Polyethylene terephthalate glycol (PETG) copolyester resin**
 - * Growing 52% annually
 - * Highest shrink (75%), perceived environmentally friendly
- ★ **Oriented polypropylene (OPP)**
 - * Dominant wraparound labels
 - * Lowest cost, but low shrink (<25%) only
 - * Higher shrink (40%) near release
- ★ **Polyethylene terephthalate (PET) - Limited use in US**
- ★ **Oriented polystyrene (OPS) - Many new applications**
 - * High shrink (60-80% reported)
 - * Potentially competitive with PVC

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 & PETG High & Medium Shrink**
 - ★ Klöckner Pentaplast, Gordonsville, VA (Calendared & extruded)
 - ★ Bonset America, Brown Summit, NC (Extruded only)
 - ★ Mitsubishi, Greer, SC (PETG Extruded only)
- ★ **OPP Low & Medium Shrink – All Extruded**
 - ★ AET, New Castle, DE
 - ★ ExxonMobil, Macedon, NY
 - ★ Treofan, Greensboro, NC (non-shrink only)
- ★ **PET – All extruded**
 - ★ SKC, Covington GA
 - ★ Toyobo, Japan imports
 - ★ DuPont Teijin supplying in Europe
- ★ **OPS High Shrink – All extruded**
 - ★ American Fuji Seal, Bardstown, KY
 - ★ Bonset America, Browns Summit, NC
 - ★ Alcoa/Kama, Hazleton PA
 - ★ 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 - second largest
- ★ Alcan Packaging (Lawson Mardon), Northbrook, IL
- ★ Alcoa Flexible Packaging (Reynolds), Richmond, VA
- ★ Gilbreth, Croydon, PA
- ★ Seal-It, Inc., Farmingdale, NY - probably 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

