

Stand-up Pouches – 2009 to 2012

Global Markets, Technology, and Opportunities

Section I:

Introduction

- A. Stand-up pouch defined
 - B. The difference between a bag and a pouch
 - C. Geographic regions
 - D. Included in the study
 - E. Methodology and organization of this study
 - F. Conventions

Section II:

Executive Summary

- A. Market forces
 - 1. Differentiation
 - 2. Environmental impact
 - 3. Applications
 - 4. Infrastructure
 - 5. Equipment productivity
 - 6. Competitive response
 - 7. Cost
- B. Projection
 - 1. End-use
 - 2. Geographic region
 - 3. Spouts
- C. Conclusion

Section III:

Pouch Construction

- A. Stand-up pouch designs
 - 1. *Doyen*-style pouch

2. *Poucher* pouch
 3. *CornerZip* pouch from Hosokawa
 4. *ID* pouch from Fujimori
 5. *Double Doyen* pouch
 6. Non-*Doyen* pouches with top and bottom gussets
 7. True flat-bottom pouches
 8. *SIP* pouch
 9. Pouch standing on fitment
- B. Partially stable bags and pouches
1. Side-gusseted pouch
 2. Four-corner-seal pouch
 3. *Cheer Pack* pouch
 4. *Spread-R-Pak* pouch
 5. *SipTop* pouch
 6. *Smartcube* k-bottom bag
 7. W-bottom or plow bottom pouch
- C. Standard pouches and bag designs (not stable)
1. Three-side-seal pouch
 2. Four-side-seal pouch
 3. Center-seal pouch
 4. Pillow pouch
 5. End-seal bag
 6. Side-seal bag
 7. Center-seal bag
 8. Pillow bag
 9. Implications for stand-up pouches
- D. Rigid packaging concepts
1. Retort Carton
 2. Paper cans
 3. Aluminum bottle
 4. *TULC* can and *aTULC* can
 5. Implications for stand-up pouches
- E. Spouts
1. Base design
 2. Spout position
 3. Spout cost
 4. No spill spouts
 5. Tamper-evident spouts
 6. Flexible spouts
 7. Concepts to eliminate spout inserting
 8. Specialty
 9. One-piece spouts

- 10. Cut-off spouts
- 11. Designer spouts
- 12. Spout summary
- F. Reclosable zippers
 - 1. Zipper styles
 - 2. Zipper construction
 - 3. Zipper developments
 - 4. Zipper summary
- G. Vents
 - 1. Vented pouches with rigid vents
 - 2. Vented pouches with flexible vents
- H. Shapes
- I. New and emerging technologies
 - 1. *Cartridge Pack System*
 - 2. Pouches for carbonated products
- J. Films and laminates
 - 1. Universal requirements
 - 2. Special techniques
 - 3. Pouch suppliers

Section IV:

Equipment Technology

- A. Fabricating pre-formed pouches
- B. Pre-formed pouch equipment
 - 1. Dedicated pouch machines
 - 2. Pouch machine suppliers
- C. Filling stand-up pouches
 - 1. Two-step process – making and filling pouches
 - 2. One-step process – horizontal
 - 3. One-step process – vertical
- D. Filling technology developments
 - 1. Liquid fill/seal
 - 2. Form/fill/seal equipment
 - 3. Ultrasonic sealing equipment
 - 4. Other equipment
 - 5. Filler suppliers
 - 6. Inserting fitments
 - 7. Pouch handling
- E. Other developments
 - 1. Food processing techniques

2. New designs

Section V:

Economics and Environmental

- F. Case 1: Stand-up pouch manufacturing (Pet food)
 1. Assumptions
 2. Economic results
- G. Case 2: Aluminum can manufacturing (Pet food)
 1. Assumptions
 2. Economic results
- H. Case 3: Comparison of Case 1 and Case 2
 1. Material cost
 2. Labor cost
 3. Transportation cost
 4. Plant margin and prices
- I. Case 4: Stand-up pouch filling (Pet food)
 1. Assumptions
 2. Economic results
- J. Case 5: Aluminum can filling (Pet food)
 1. Assumptions
 2. Economic results
- K. Case 6: Comparison of Case 4 and Case 5
 1. Material cost
 2. Labor cost
 3. Transportation cost
 4. Plant margin and prices
- L. Case 7: Stand-up pouch LCA
 1. Energy
 2. Greenhouse gas releases
 3. End of life
- M. Case 8: Aluminum can LCA
 1. Energy
 2. Greenhouse gas releases
 3. End of life
- N. Case 9: Comparison of Case 7 and Case 8
 1. Energy
 2. Greenhouse gas releases
 3. End of life
- O. Case 10: Stand-up pouch manufacture (Refill)
 1. Assumptions

- 2. Economic results
- P. Case 11: Manufacture a PET bottle (Refill)
 - 1. Assumptions
 - 2. Economic results
- Q. Case 12: Comparison of Case 10 and Case 11
 - 1. Material cost
 - 2. Labor cost
 - 3. Transportation cost
 - 4. Plant margin and prices
- R. Case 13: Spouted stand-up pouch filling (Refill)
 - 1. Assumptions
 - 2. Economic results
- S. Case 14: PET bottle filling (Refill)
 - 1. Assumptions
 - 2. Economic results
- T. Case 15: Comparison of Case 13 and Case 14
 - 1. Material cost
 - 2. Labor cost
 - 3. Transportation cost
 - 4. Plant margin and prices
- U. Case 16: Spouted pouch LCA
 - 1. Energy
 - 2. Greenhouse gas releases
 - 3. End of life
- V. Case 17: PET bottle LCA
 - 1. Energy
 - 2. Greenhouse gas releases
 - 3. End of life
- W. Case 18: Comparison of Case 16 and Case 17
 - 1. Energy
 - 2. Greenhouse gas releases
 - 3. End of life

Section VI:

Market Analysis

- A. Trends
 - 1. Consumers
 - 2. Retailers
 - 3. Consumer product companies
- B. Market projection

- C. Liquid food
 - 1. Fruit-flavored drinks
 - 2. Aseptically packaged liquid food
 - 3. Other
 - 4. Projection
- D. Food
 - 1. Retorted food
 - 2. Frozen food
 - 3. Prepared drinks
 - 4. Dried fruit
 - 5. Confectionery
 - 6. Salty snacks
 - 7. Dry mixes
 - 8. Other
 - 9. Projection
- E. Pet food
- F. Non-food
 - 1. Detergent
 - 2. Agricultural and chemical
 - 3. Health and beauty
 - 4. Automotive lubricants
 - 5. Projection
- G. Geographic
- H. Retort
- I. Pouch design
- J. Reclosable zipper
- K. Spouts
- L. Pouch filling concept (pre-made versus form/fill/seal)
- M. Summary of projection

Section VII:
Equipment Supplier Profiles

Section VIII:
Producer Profiles

Section IX:
Glossary