From Wood Fiber to Filling: An Overview of Multiwall Paper Bags
Focused on Sustainability

**Renewable**
- Replenishing what was consumed. If responsibly managed, generation after generation will still have a natural resource. Therefore, as a member of the Sustainable Forestry Initiative® (SFI), we can trace our paper fiber in our products back to its forest location to ensure relationships with responsible suppliers.

**Reduce**
- 3 ply natural kraft bags ➔ 2 ply high performance construction, while maintaining bag performance. In turn, increase # bags/pallet = more on a truck = less shipping costs = lower bag costs.
- Lower gauge film constructions

**Recycle**
- Recycled film components
- Paper bags with no film can be recycled where facilities exist.
Tree selection and pulp properties

- Cold verses hot climate trees

- Northern fibre trees include lodgepole and jackpine, white and black spruce, and alpine fir.
- Cold climate trees grow slower and create long thin fibres that collapse and create the strongest paper.
Paper making process
Paper properties

- Tensile strength
- Stretch
- TEA (Total Energy Absorption)
- Tear
- Porosity
- Stiffness

- Cross direction versus Machine direction
Very Strong Paper
Paper grades

- Natural Kraft
- Semi-Extensible
- Extensible (High Performance)
- Bleach grades
- Specialty grades (Clay coated, poly coated, etc)
Paper bag manufacturing 101

SIMPLE ORIGAMI BAG
Real paper bag manufacturing
Printing
Tubing
Multiwall paper bag types

- PVSE
- PBOM
- SOM
- SOS
• Completely fabricated at the bag manufacturing plant
• Highest bag filling rates attainable
• No filled bag closing equipment or materials required (depaendent on valve type)
• Provides best palletized loads on the smallest pallet size
• Most popular bag style in the world
• Can be made tamper proof with heat sealed closure
• Provides best silt resistance of any multiwall bag
• Provides highest level of barrier protection
• Has pre-applied hot melt that does not require additional closing materials
• Requires precision closing operations
Oldest method of open mouth bagging
Highest bag cost per unit
Offers cost effective easy open with single thread
Ends of bags have needle holes and can sift and are not tamper proof
Slowest filling rates and high amount of closing materials needed
SOS

• Square bottom for standing upright at retail
• Suitable for products with variable densities as sewn closure can be adjusted to height of product in bag
• Forms wedge shape that stacks well forming a stable pallet load
• Various closure methods
Thank you