

## **Introduction: IMPROVED SUSTAINABILITY DOES NOT HAVE TO COME AT A HIGHER COST**

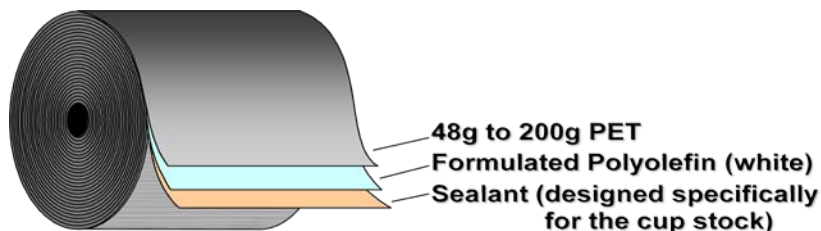
In comparison to other lidding substrates, American Packaging Corporation (APC) All Plastic Lidding material provides substantial improvement in overall cost and functionality. APC spent years developing and perfecting a non-foil die cut lidding with proven results. The new structure offers advancements in sustainability, performance and aesthetics.

### **The problem:**

Historically die-cut lidding has been restricted to heavy foil structures due to standard pick-n-place equipment in the marketplace. The heavy weight, thick foil structures provided the rigidity and flatness necessary for proper dispensing from these magazine fed type equipment. Other non-foil lidding options provided the rigidity and flatness; however, the sealing operating window was very narrow, the container stock options were limited and the cost was high.

### **APC Solution:**

APC's award winning technical innovation addresses these shortcomings at a reduced price and with improved environmental characteristics. Starting with a conventional 200 gauge PET which can be reverse printed for superior graphics appeal. Then a proprietary polymeric foundation layer is extrusion applied (either white or clear) providing functionality and proper anchorage the PET substrate. Finally, a unique sealant surface is extrusion applied under proprietary process conditions which controls the internal structural stresses producing a perfectly flat and rigid lidding product.



### **Sustainability Improvements, Performance Advancements, Other Attributes:**

- Cost improvement

- Source reduction: > 20% reduction in weight
- < 50% reduction in energy required to manufacture components: reduced carbon footprint
- Elimination of solvent laden heat seal coating used in most foil die-cut lids
- 10 fold improvement in puncture resistance
- Non metallic option allows direct metal detection
- Capable of reverse/trap print
- Improved shelf appeal: higher gloss and reduced shop worn appearance
- Increased tear and tensile strength
- Available in white, metalized, and clear (translucent)
- No curl for magazine fed applications
- Ability to seal through contamination
- Capable of sealing to a wide range of container stock at over 2 lbs/in (PP, HIPS, PVC, PETE, PETG, and CPET)
- Withstands 12" Hg vacuum > 2 minutes
- Very wide heat sealing range: > 100°F
- Suitable for hot fill applications up to 190°F
- Capable of self venting in microwave
- Barrier properties of metalized lidding after embossing:

MVTR: < 0.02 gm/100 in<sup>2</sup>/24hrs@100°F, 90% RH

OTR: < 0.03 cc/100 in<sup>2</sup>/24hrs@73°F, 0% RH

#### **Conclusion:**

APC's All Plastic Die-cut Lidding is a major breakthrough in lidding technology. Extensive tests have revealed several economic, performance and environmental benefits. The structure allows the use of high-end graphics for improved consumer acceptance and shelf appeal. The unique characteristic of the sealant polymer facilitates sealing through contamination with a very wide operating window. Removing foil from the specification permits direct metal detection. Reduction in costs, material, and energy consumption while enhancing functionality has a positive impact to the bottom line. Improved sustainability does not have to come at a higher cost.

#### **ABOUT AMERICAN PACKAGING CORPORATION**

American Packaging Corporation is an ISO 9001:2000 company specializing in the manufacture of flexible packaging laminations for a variety of specialty markets. The company has three process focused facilities: Rotogravure Printing and Laminating, Flexographic Printing and Laminating, Extrusion Laminating and Coating.

The company is privately-held and has been serving the packaging industry for over 100 years.

Corporate Headquarters – 777 Driving Park Avenue – Rochester, NY 14613

Phone (585) 254-9500, Fax (585) 254-5801, [www.ampkcorp.com](http://www.ampkcorp.com)