Plastic Film

US Industry Study with Forecasts to 2010 & 2015

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US demand to reach 15.2 billion pounds in 2010

Plastic film demand in the US is forecast to increase 2.6 percent annually to 15.2 billion pounds in 2010, valued at $12 billion (resin cost only). Total plastic film demand (including resins, additives, and processing and other costs) will expand 4.5 percent per annum to $28.6 billion. Advances will result from cost, performance and source reduction advantages over rigid packaging. Low density polyethylene will remain the leading film, accounting for 64 percent of the total in 2010, with polypropylene presenting the best opportunities. Average film prices are expected to moderate following the steep price increases between 2004 and 2006, that were caused by spikes in raw material and energy costs.

Polypropylene, HDPE film among fastest growing

Low density polyethylene film demand is projected to rise 2.8 percent per annum through 2010 to 9.7 billion pounds based on its competitive cost structure, versatility and opportunities in areas such as produce and snack packaging, stretch and shrink wrap, and trash bags. Slightly faster increases are expected for high density polyethylene film due to good growth in areas such as baked goods packaging and retail bags. Polypropylene film demand will expand 3.4 percent annually to 1.5 billion pounds in 2010, driven by produce, grain mill, dairy product and other food packaging applications.

Polyester film demand will decline through 2010 as a result of decreasing use in photographic film and magnetic tape brought about by the diffusion of new technologies such as digital cameras, CDs and DVDs. Nonetheless, opportunities are anticipated in food packaging applications, particularly snack foods, confections and frozen food, due to polyester’s higher barrier properties. Polyvinyl chloride film demand will advance marginally as a result of slow red meat consumption and competition from polyolefin films.

Secondary packaging to offer best opportunities

Packaging accounted for 73 percent of all plastic film use in 2005 due to cost, convenience and source reduction advantages over other materials. Best growth is expected in secondary packaging applications based on opportunities in stretch and shrink wrap, and retail bags. Food packaging will grow at an above average pace, driven by continued expansion in produce, confections and frozen food segments. Nonpackaging film advances will be fueled by trash bag growth, and constrained by declining photographic film and magnetic tape applications.
TYPES & APPLICATIONS

Secondary Packaging

Demand for low density polyethylene film in secondary packaging uses is projected to increase from 3.8 billion pounds in 2005 to 4.0 billion in 2010, driven by increasing demand for stretch wrap. Stretch wrap demand will grow at a rate of 5.4 percent annually to 1.4 billion pounds in 2010, a result of its high elongation rate, puncture and tear resistance, and competitive cost. Metallocene LLDPE films will be more widely used due to higher stretch characteristics, which lowers resin consumption.

Demand for LDPE shrink wrap is projected to grow at a rate of 4.8 percent yearly to 215 million pounds in 2010 based on cost and performance advantages in uses such as pallet wrap and product packaging. Further shrink wrap advances will be threatened by competition from stretch wrap, which has lower energy and equipment costs, and can be manually applied. Pallet wraps are used to fully encase a loaded pallet of boxes or other smaller shipping containers to provide greater load stability and protection from moisture or other damage.

Demand for low density polyethylene film in the production of retail bags (grocery, T-shirt, handle, drawstring and other retail bags) will advance 2.8 percent per annum to 920 million pounds in 2010. Retail bag advances will reflect retail sales growth and cost and performance advantages over paper bags. T-shirt bags will provide the best opportunities, with slower growth anticipated for handle and drawstring, and other self service bags due to their higher cost and saturated applications. Handle and drawstring bags are primarily used in premium department stores and other specialty stores. These bags often carry the store’s name and/or logo and are made from thicker films, reinforcing the quality image. Further LDPE retail bag advances will be threatened by competition from high molecular weight high density polyethylene (HMW-HDPE) bags, which have greater strength and tear resistance.

Table V-4

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<td>12.7</td>
<td>13.5</td>
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<td>lbs film/000$ food shpts</td>
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<td>% snacks</td>
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<td>24.7</td>
<td>25.2</td>
<td>25.4</td>
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<td>Food Packaging Film Demand</td>
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<td>3368</td>
<td>3790</td>
<td>4343</td>
<td>4930</td>
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</table>

Chart IX-1

US Plastic Film Market Share, 2005 ($23 billion)*

* market share figures include resins, additives & processing
Sample Profile, Table & Forecast

CompanY PrOfiles

Atlantis Plastics Incorporated
1870 The Exchange, Suite 200
Atlanta, GA 30339
770-953-4567
http://www.atlantisplastics.com

Sales: $424 million (2005)
Employment: 1,460 (2005)

Key Products: stretch films, monolayer and multilayer specialty films, and institutional products.


The Company participates in the US plastic film industry through the Plastic Films segment, which generated sales of $273 million in 2005. The segment offers three divisions: Stretch Films, Custom Films, and Institutional Products. Products manufactured by these divisions include stretch films, monolayer and multilayer specialty films, and disposable institutional products made from custom films.

Atlantis Plastics is one of the largest producers of stretch films in the world. These low density polyethylene-based products, which are manufactured using blown, cast, monoextrusion and coextrusion technologies, are marketed under the LINEAR brand name. Specific products in this line for machine application include LINEAR ECLIPSE one-sided cling stretch film; LINEAR ADVANTAGE ULTIMATE one-sided cling films for high-speed, non-standard loads;

Table VII-2
RETAIL BAG FILM DEMAND BY RESIN (million pounds)

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<td>Retail Bag Demand (bil units)</td>
<td>112</td>
<td>139</td>
<td>145</td>
<td>168</td>
<td>190</td>
</tr>
<tr>
<td>% plastic</td>
<td>80.4</td>
<td>84.9</td>
<td>90.3</td>
<td>90.5</td>
<td>91.1</td>
</tr>
<tr>
<td>Plastic Bag Demand (bil units)</td>
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</tr>
<tr>
<td>ounces/bag</td>
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<tr>
<td>Retail Bag Film Demand</td>
<td>1400</td>
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<tr>
<td>High Density Polyethylene</td>
<td>750</td>
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<td>Low Density Polyethylene</td>
<td>650</td>
<td></td>
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</tr>
<tr>
<td>% retail bags</td>
<td>44.5</td>
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</tr>
<tr>
<td>Secondary Packaging Film Demand</td>
<td>3148</td>
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“Demand for low density polyethylene film in retail bag applications is forecast to grow 2.8 percent yearly to 920 million pounds in 2010, driven by greater use of linear low density polyethylene, which has a softer touch and improved puncture resistance over conventional low density polyethylene. Metallocene grades of LLDPE are increasingly being used due to their better downgauging potential and puncture resistance capabilities.”

--Section VII, pg. 176

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<th>Plastic Film</th>
<th>$4400</th>
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<td>+ $2300</td>
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<tr>
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<td>Total (including selected option) $</td>
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