

FLEXIBLE PACKAGING



THE OFFICIAL PUBLICATION
FOR THE FLEXIBLE PACKAGING
ASSOCIATION

MARCH 2012

www.flexpackmag.com

THE INDISPENSABLE TOOL FOR CONVERTERS & PRINTERS OF FLEXIBLE PACKAGING

PROFILING A FILM EXTRUDER:

a true

**FILM
SOLUTIONS
COMPANY**

A **bnp** PUBLICATION
media

INSIDE:

FILMS p.22

WEB WRINKLING p.26

TENSION CONTROL p.50

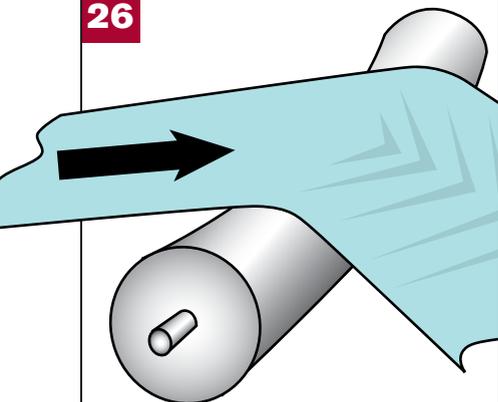
18 COVER FEATURE

PROFILING A FILM EXTRUDER

A True Film Solutions Company

NEX Performance Films offers a broad portfolio of sealant film solutions in its market platforms and has some interesting new developments in its hopper.

26



34



50



FEATURES

10 FPA UPDATE

Flexible Packaging Association Update

2012 FPA Annual Meeting...2012 Board of Directors Announced...Student Flexible Packaging Design Challenge...and New Members Welcomed.

22 TECHNOLOGY: FILMS

Sustainable Films and Substrates

Are today's films truly degradable or just recyclable? The key points, companies involved in innovation, and the latest in film developments are presented by Sixto Packaging's Felipe Sixto.

26 TECHNOLOGY:

WEB WRINKLING

The Top Seven Causes of Web Wrinkling

Identify the problem, and then determine the cure - at least that's Pete Eggen's advice for this problem that many converters deal with.

34 Q&A ON LABELS &

LABELING PROCESSES

(SPECIAL ADVERTISING SECTION)

50 Q&A: TENSION CONTROL

Set it and Forget it?

Mark Breen has been marketing manager at Dover Flexo Electronics for 16 years. His insight could help you achieve better tension control.

DEPARTMENTS

8 EDITOR'S FORUM

14 CONVERTER NEWS

Film Recycling Group Formed...Flexo Scholarship Announced...Partnerships & Growth Announcements.

32 INDUSTRY INSIGHTS

36 SUPPLIER NEWS

Converter Named the Highest Grossing for the Flexible Packaging Industry...An Aquisition...The End Result...and more.

38 HOT PRODUCTS

45 CLASSIFIEDS

49 CALENDAR OF EVENTS/ AD INDEX

SUSTAINABLE FILMS AND SUBSTRATES: DEGRADABLE OR RECYCLABLE?



By Felipe Sixto, Contributing writer

Sustainability and bioplastics, once considered a fad by many in the packaging industry, has quickly emerged as a main driver for research and development (R&D) investment and innovation.

According to recent studies by Ceresana Research and The Freedonia Group, the global bioplastics market will expand 17.8 percent annually and reach nearly \$2.9 billion million by 2015.

Bioplastics' Outlook

Bioplastics can be defined as a plastic that is either biodegradable, composed of biological materials or both. The most common bioplastics today are starch-based followed by polylactic acid (PLA). Several companies already produce PLA films that are synthesized from processed corn. These films come from renewable resources and may biodegrade under certain conditions. Furthermore, making PLA requires 30 percent to 50 percent less fossil fuel than polymers synthesized from hydrocarbons, thus reducing carbon

dioxide emissions. Other bio-based plastics (PHA/PHB, cellulose, PBS) as well as fossil-based biodegradable plastics accounted for just less than 17 percent of global demand.

Bioplastics are supposed to contribute to protecting the environment, reduce waste issues, minimize the dependence on non-renewable raw materials, and improve the image of plastic products. Freedonia's study notes that price considerations will be the primary determinant of bioplastic market success, and that rising petroleum costs will allow certain bioplastics to achieve price parity with conventional plastics by 2020. As a result, the demand for bioplastics will increase to 1.1 million tons by 2015.

Biodegradable plastics are currently dominating the market with roughly a 92 percent share. Despite the strong advances for biodegradables, non-biodegradable bio-based resins will be the primary driver of bioplastics demand through 2015 and beyond, Freedonia's report notes.

One such bioplastic, produced by India's Uflex Ltd, is GreenPET. The

polyethylene terephthalate (PET) is made from oxidized paraxylene PTA and a 30 percent ethanol based MEG resin. The film maintains the same properties as conventional PET.

In addition, last August, Cortec Corporation launched its new EcoOcean bioplastic. The film, which according to Cortec, is anaerobic and marine biodegradable, is one of several new advances in the sphere of sustainable plastics.

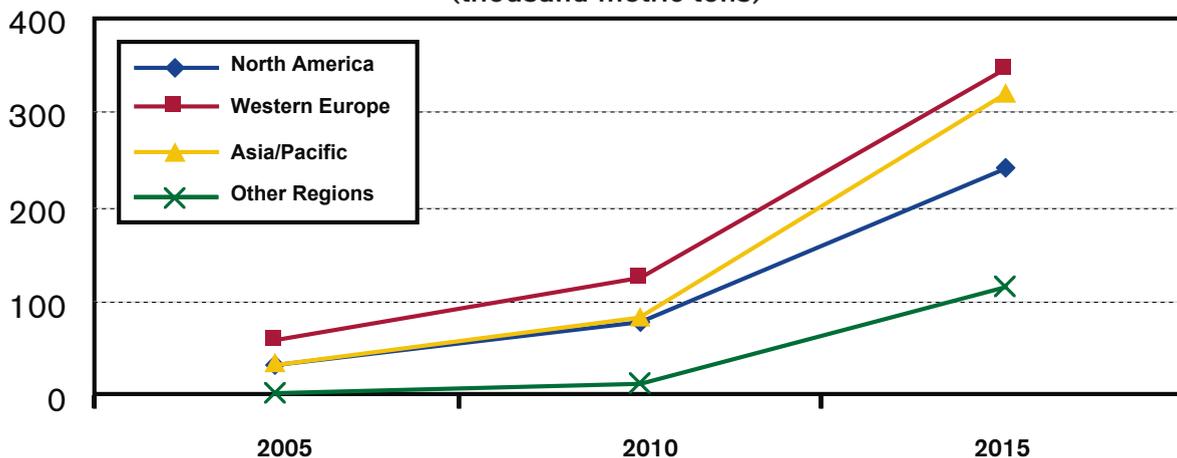
Another resin additive that can help reduce carbon footprints, Oshenite, produced by U.S. Aragonite, is a naturally occurring form of purified calcium carbonate that can be used for film and sheet extruding and thermoforming.

Recyclable Plastics

According to Freedonia's study recycled packaging makes up almost 90 percent of sustainable green packaging in the United States. In fact, by 2014, the market will climb to \$37.25 billion.

Many companies, including Uflex,

WORLD BIOPLASTICS DEMAND
(thousand metric tons)



Source: The Freedonia Group, Inc.

are producing PET film made from at least 30 percent post-consumer waste recycled PET resin. The film, which has similar properties to conventional PET, has a serious drawback, however: A considerably higher price.

Although there are some examples of mono-web polyethylene recyclable packaging, laminated films remain a challenge. Recently, the American Chemistry Council created a new Flexible Film Recycling Group, whose focus will be to try to improve the recycling rate of plastic films, particularly laminates.

Furthermore, Kraft Foods and Nestlé have partnered with Enval, a British provider of recycling and environmental technology solutions. According to Enval, its patented technology will offer a genuine recycling route for flexible laminate packaging that to date have not been recyclable. According to Enval, the process opens the way for packaging systems such as pouches for drinks and pet food, aseptic drink cartons and laminates to

be completely recycled. The technology is capable of handling material either as scrap from the production and filling processes or as post-consumer waste.

Fraudulent Sustainability Claims?

Demand for sustainable packaging is definitely out there. But, when faced with budgetary constraints and competitive pressures, some packaging companies blatantly mislead consumers with false claims. In fact, amid rumors of fake and undocumented sustainability claims by bioplastics processors, the Biodegradable Products Institute (BPI) announced its appointment of NSF International to administer Certified Compostable program in January.

According to David S. Brooks, BPI Certification program administrator, "There's so much pseudo-science out there, such as additives that are supposed to magically transform any plastic into a biodegradable material and ASTM standards used incorrectly that unless

you have an independent organization verifying those tests, you can have unscrupulous people putting out products that aren't what they claim."

With so many new materials entering the packaging market, it's easy for a flexible packaging converter to be confused. Not to mention that consumers do not clearly understand the packaging end-of-life. Biodegradable, like recyclable, merely describe the composition of packages. Plastics, including most bioplastics do not degrade in landfills. If flexible packaging is sent to a landfill, and not disposed of properly in proper composting facility or recycle, it is still not sustainable, no matter what it is made of.

Many in the industry debate as to the merits of biodegradability versus recyclability. Proponents of each school of thought produce studies that support their claims. What is certain from a converter's standpoint is that coupled with the robust growth in global demand for flexible packaging, consumer preferences for

THE MEETING THAT CAN CHANGE YOUR POINT OF VIEW

2012 TAPPI PLACE Conference

May 6-9, 2012 • Grand Hyatt Seattle • Seattle, Washington USA

It's more than the **knowledge** shared, **lessons learned** or problems solved. The reason you GO is the industry you advance.

Turn to 2012 PLACE for:

- **Education:** 15 knowledge-packed sessions on key trends and new advances in Flexible Packaging; and more!
- **Products and Services:** Take advantage of the Table Top exhibit chock-full of insight from the best minds in the business.
- **Networking Events:** Connect with other professionals during plentiful breaks, receptions, and evening events.
- **Next Generation Thinking:** Expanded Student Poster Session and support PLACE's new scholarship program PLUS – see how Gen Y can bring a new viewpoint to your business.

Join the conversation. Register by April 30 and Save!

For best rates, join TAPPI. Learn more at <http://events.tappiplace.org>.

Mt. Ranier Level Sponsor:



Space Needle Level Sponsors:



Welcome Reception Sponsor:



Dinner Gala Cruise Sponsor:

Media Partners:



sustainable materials, improved product performance, price parity with petroleum-based plastics, and the continued drive, bioplastics will continue to drive innovations in the realm of film, substrates, and flexible packaging in general well into the future.

CPG Drive for Innovation

Many consumer packaged goods (CPG) companies have been at the forefront of bioplastics development.

In December 2011, Coca-Cola invested millions of dollars in three bio-based companies in an effort to accelerate the development of a PlantBottle made entirely from plants. One of those companies Gevo, Inc. has developed a 100 percent renewable isobutanol, which is a building block for paraxylene. Using Gevo's biobased paraxylene, Toray Industries, Inc.

has succeeded in producing laboratory-scale samples of the world's first fully renewable bio-based PET film and fiber. According to Toray, this bio-based PET has exhibited properties almost equivalent to petro-based PET in laboratory conditions.

In December 2011, Johnson & Johnson Brazil launched its Sundown line of sunscreen products in new packaging containing 60 percent bioplastic produced from sugarcane ethanol and 40 percent recycled material by Braskem a producer of bioplastics in Brazil with a 200,000-metric-ton-per-year capacity. In addition, Diageo and Sprint have followed other companies and released new sustainable packaging guidelines.

There is much demand for bio-based flexible packaging films, and it seems both industry research and company advances are responding to that demand. **FP**

About the Author

Felipe E. Sixto is the director of sales & marketing at Sixto Packaging, and can be reached at Felipe@sixtopack.com. Sixto Packaging is a family owned and operated flexible packaging converter. Sixto's capabilities include up to 8 color flexographic printing; solventless laminations of films, paper, and foil; shrink sleeves for bottles; in addition to manufacturing bags and pouches in many sizes and styles; packaging structure R&D and marketing services.

Sixto Packaging
(305) 662-7144; www.sixtopack.com

Ceresana Research
+49 7531 942930; www.ceresana.com/en/

The Freedonia Group, Inc.
(440) 684-9600; www.freedoniagroup.com

Uflex Ltd.
+91 112 6440917; www.uflexltd.com/index.asp

Cortec Corporation
(651) 429-1100; www.cortecvci.com

U.S. Aragonite
(410) 708-9010; www.usaragonite.com

American Chemistry Council
(202) 249-7000; www.americanchemistry.com

Enval
+44 0845 2997566; www.enval.com/index.php

Biodegradable Products Institute
(888) BPI-LOGO; www.bpiworld.org/

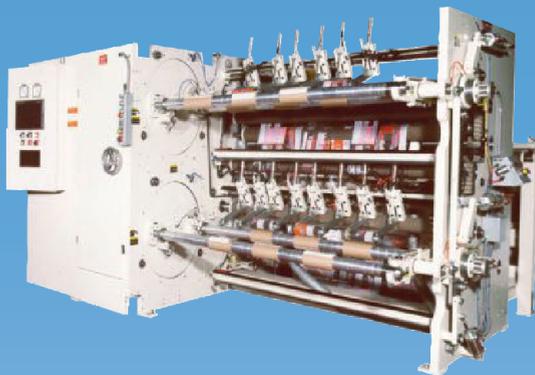
NSF International
(800) NSF-MARK; www.nsf.org/

Gevo, Inc.
(303) 858-8358; www.gevo.com/

Toray Industries, Inc.
+81 3 3245-5179; www.toray.com/

Braskem
www.braskem.com

Designed for productivity, loaded with practicality



The Dusenbery® 335 Duplex Turretting Center Slitter/Rewinder's cantilevered rewind shafts offer fast finished roll removal and core placement. Its duplex turret design with automatic roll starts provides exceptional roll quality on 3" or 6" cores up to 30" diameter using contact or minimum gap modes. It has an operating speed to 2,000 FPM, plus optional roll pushers and core locating systems.

Designed for practicality, impressive in productivity



The Dusenbery® Genesis 700 Center Driven Duplex Slitter/Rewinder offers integral unwind with self loading arms; pull roll and slitting section; duplex cantilevered rewind mandrels; integral control enclosure and HMI; and a single point utility connection. The 700 has an operating speed to 1,500 FPM. Unwind capacity is 40 inch diameter. Rewind capacity is 30 inch diameter.

 PARKINSON TECHNOLOGIES INC



BOOTH 6269
APRIL 1-5 ORLANDO, FL



www.parkinsontechnologies.com