

Mondi launches biodegradable packaging solutions

24th April 2008

At the 'Bioplastics in Packaging' exhibition at Interpack 2008, Mondi launched its unique portfolio of innovative biodegradable packaging solutions under the brand name Sustainex.

Sustainability is an absolute necessity for the leading businesses of today and Mondi has made a public commitment to integrating sustainable development into its business model. This includes the concept of product responsibility, which starts with the raw materials and ends with the downstream effects of the products.

Mondi is one of the pioneering companies that attach strategic relevance to bioplastics and is therefore taking a lead role in the development of sustainable packaging. Although bioplastics go back to the very beginnings of the modern plastics industry, their use as a flexible packaging material as we know it today is not only relatively new but also very promising. There is no generally accepted definition of bioplastics; basically they are a family of polymers with various major differences in properties. The industry association European Bioplastics, in line with other associations, considers there to be two separate classes within bioplastics:

- Plastics based on renewable resources: products do not necessarily have to be biodegradable or compostable
- Biodegradable polymers, which meet all the scientifically recognised standards for biodegradability and compostability of plastics and plastic products (the relevant European standard is EN 13432): products do not necessarily have to be based on renewable materials.

Usually, a high percentage of renewable resources is used in both classes in polymer production. At present, production of bioplastics is already dominated by renewable raw materials such as starch, vegetable oils and cellulose.

Dr. Peter Prader, project coordinator within the Mondi Innovation programme, commented: "Product innovations with sustainable customer value have always been top priority for Mondi. This applies especially to bioplastics, which are currently used for numerous innovative developments in sustainable packaging."

Under the brand name Sustainex, Mondi Consumer Flexibles also launched an innovative and novel blown film for Form-Fill-and-Seal (FFS) applications. This bioplastics film is made from biopolymers based on vegetable oils. It has excellent print properties, workability, and mechanical properties such as strength, impact, and tear-resistance.

The goal in developing this film was to ensure customers do not have to compromise, as it can be used universally on various FFS bag-making machines. Sustainex features include its double-sided heat sealability, allowing overlapping (Lap-Seal) as well as fin-shaped (Fin-Seal) longitudinal welds, and the fact that it can be used on production machinery with permanently heated sealing tools. Sustainex bioplastics packaging film has the similar visual and characteristics as standard plastic film. Therefore there are numerous potential applications; initial trials are currently in progress at leading frozen foods producers.

Following extensive development work, Mondi Coating & Release is now able to offer sustainable extrusion-coated and laminated packaging materials that use biopolymers, also under the brand name Sustainex. During the extrusion coating process, the biopolymer melt is applied as a functional coating to a carrier substrate such as paper. In extrusion laminating, the biopolymer melt is used as a "glue" to combine substrates. Both technologies require the polymer to have high thermal stability and melt resistance, which biopolymers do not inherently possess. Mondi engineers have found a technique that allows using biopolymers in the extrusion-coating and -lamination process.

Sustainex combines the material properties of paper or board with those of biopolymers. It is a versatile biodegradable and sustainable packaging material thanks to its excellent sealability, gas and grease barrier, and thermal resistance. Dr. Jürgen Betz, head of product development at Mondi Coating Zeltweg, sees enormous potential and numerous applications for Sustainex, e.g. dry food and fast food, milk and dairy, single-use paper cups and bowls, and hygiene products.

About Mondi Group

Mondi is an international paper and packaging group and in 2007 had revenues of € 6.3 billion. Its key operations and interests are in western Europe, emerging Europe, Russia and South Africa.

The Group is principally involved in the manufacture of packaging paper and converted packaging products; uncoated fine paper; and speciality products and processes, including coating, release liner and consumer flexibles.

Mondi is fully integrated across the paper and packaging process, from the growing of wood and manufacture of pulp (including recycled materials) and paper to the converting of packaging papers into corrugated packaging and industrial bags. Mondi has production operations across 35 countries and had an average of 35,000 employees in 2007.

About Mondi Consumer Flexibles

Mondi Consumer Flexibles is an innovative supplier of active and convenient packaging for the pet food, food & non-food, confectionary & snacks as well as medical & pharmaceutical industry. These solutions include high-quality monofilms and printed laminates, industrial packaging, agricultural and barrier films, paper and plastic bags as well as stand-up pouches.

Mondi Consumer Flexibles provides flexible packaging solutions with a variety of features such as barrier properties, professional printing and end-user functionalities like easy opening, pourability and microwaveability. Our production sites are BRC/loP and ISO 9000:2000 certified. Product development and innovation are key priorities of Mondi Consumer Flexibles, enabling them to offer tailor-made solutions to protect and promote their customers' products.

Last change: 15/05/2008

Contact

Alexandra Lindenthal
Marketing Manager Consumer Flexibles
Tel: +43 (1) 790 13 4968
Fax: +43 (1) 790 13 967

Contact

Doris Kainz
Marketing Assistant Coating & Release
Tel: +43 (1) 790 13 4147
Fax: +43 (1) 790 13 945

Contact

Angelika Silber
Marketing Manager Europe & International
Tel: +43 (1) 790 13 4057
Fax: +43 (1) 790 13 960
