

**Monday, October 12****Keynote Address: From Europa with Love: A Continental View on the Global Issue**

• **Kris Malowaniec, Paul Hartmann AG**

The paper will cover the converter's view on the raw material (especially nonwovens) supply market situation in Europe which appears different from the US market situation.

**Spunlaid Webs From a Greener Spunbond Process**

• **Hans Georg Geus and Detlef Frey, Reifenhäuser REICOFIL GmbH & Co. KG**

Global warming and the availability of energy resources are the main themes of this time. The utilization of neutral carbon footprint processes and processes with low usage of energy and resources are the right answer for long-term planning. The use of resins made of renewable resources can also be a solution for the future. But as long as we generate solutions like biodegradable resins made from food, where availability is also limited, this can only be part of the solution. There is a need for developing a new process in the near future which will produce resins made of renewable resources and from waste.

What can be done in the near term and beyond to help in this situation? This paper will report the efforts of Reicofil to minimize the consumption of energy and other resources by optimizing energy concepts and reducing fabric weight while maintaining key properties.

This paper will include a detailed description of the use of energy for this process, as well as actual and further energy savings programs. The reduction of basis weights while maintaining the key properties will be discussed, further trends will be shown, and the side effects of this development will be described.

**Hybrid Nonwoven Technology for Absorbent Products**

• **Rick Jezzi, A.D. Jezzi & Associates, Inc.**

This paper covers a hybrid nonwoven technology that can be adapted to introduce a variety of fibers into a melt-spun fiber matrix to manufacture a diversity of substrates that can be used in various disposable absorbent products. We will discuss the patent art of the base technology, some of the products that these nonwovens can be integrated into, and the technologies to manufacture the nonwoven itself.

**China Nonwovens Market 2009: Trends & Opportunities**

• **Warren Collier, John R. Starr, Inc.**

The Chinese nonwoven industry growth, especially in spunbond and spunlaced capacity, is well documented. What is less well known is the progress that makers of spunbond equipment have made. How far have Chinese spunbond equipment manufacturers come? They may be low cost, but what about their productivity and capability to produce lightweight, uniform webs? This paper will present an overview of the current performance parameters and cost competitiveness of the spunmelt polypropylene equipment offered by the leading Chinese equipment manufacturers with the lines currently supplied by leading Western spunmelt polypropylene equipment suppliers.

**Intellectual Property: The Key to Effective Product Development**

• **Bob Makolin, Abba Makolin Waldron & Associates, LLC**

A sure-fire project killer is waste or delay in your product development timeline, especially in today's economic climate. Laying out your intellectual property (IP) map up front eliminates both waste and delay by crystalizing the project goals to help plan the project path. It also protects your product, as well as future permutations, and eliminates the need to go back and circumnavigate IP barriers. Fitting the project IP into the overall company IP strategy is critical. This paper explains the different types of IP and gives examples of common development pitfalls and how to avoid them.

**The Next Generation of Spin Finishes and Process Auxiliaries for Fibers and Nonwovens**

• **Stefan Sulzmaier, Zschimmer & Schwarz GmbH & Co. KG**

In the past, spin finishes were predominantly used on fibers only to guarantee smooth and trouble-free processing. But spin finishes can do a lot more. They can help to realize a competitive edge both in fibers as well as in nonwovens production. This presentation describes four examples where spin finishes developed by Zschimmer & Schwarz have made new characteristics possible. The first example is a new and effective way to achieve enhanced moisture management in nonwoven fabrics. The second example details how fluorocarbon finishes can make fabrics repellent against blood, alcohol and many other liquid substances. The third example describes how improved rubber cohesion in technical filaments can be achieved. Finally the presentation describes ways to achieve greener products through spin finishes.

**The Impact of the Global Recession on Hygiene Market Growth & Profitability**

• **Pricie Hanna, John R. Starr, Inc.**

The hygiene industry is one of the most stable, non-cyclical industries in the global economy. The depth and duration of the current global recession, however, is impacting the market growth and profitability of specific hygiene market segments and product categories. The demand outlook for the major raw materials used to make hygiene products is also affected. This presentation will address the influence of the economy on key hygiene market trends in both the mature market regions as well as the developing and emerging markets.

**Tuesday, October 13****Baby Diapers - What Not To Do**

• **Yoav Nir, Yoav Nir Consulting**

The disposable absorbent products industry is relatively young but full of casualties. Although there are clear indications that this market's potential is far from being met, many entrepreneurs have failed in their attempts to enter this business and survive. This presentation outlines the main factors that need attention and consideration to ensure smooth entry and ongoing success in this promising but competitive field.

**What's New in Nano - An Overview of the Current Trends in Nanofibers**

• **Laura Frazier, SNS Nano Fiber Technology**

The field of nanofibers is rapidly changing. As it is a relatively new technology, especially when compared to the traditional nonwovens market, it is in many ways undeveloped. Not only are there more and more

applications being discovered, but more methods for making nanofibers are being implemented as well. This discussion will focus on providing an overall picture of what is occurring in the world of nanofibers today.

### **Utilization of Fine Denier Spunbond to Reduce Meltblown Content in SMS Composites**

• **Matthias Schemken, Oerlikon Neumag**

Meltblown is generally used in SMS nonwovens to fulfill a barrier function against liquids. The amount of meltblown correlates with the hydrohead and the barrier properties desired for the composite materials. The meltblown part in a spunmelt process creates significantly higher investment and production costs compared to the spunbond part. With the production of fine denier spunbond nonwovens improvements in the composites can be made compared to more standard SMS type spunmelts. The functionality of the meltblown can be utilized more efficiently and the meltblown content can be reduced significantly while maintaining the complete product properties.

### **High Strength PLA Meltblown, Its Properties and Uses**

• **Vince Friemark, Biax Fiberfilm Corporation**

Low MFR Ingeo PLAs are used in this paper to show some of the benefits you can achieve by meltblowing Ingeo PLA instead of, or complementing, spunbond equipment. Tensile strengths, fiber sizes and electrostatic charging will be discussed. Finer fibers for filtration, fibers for wipes (wet and dry) and other composites are being explored for the "green consumer."

### **New Product Developments Like SteamJet Technology**

• **Alexander El Helw, Fleissner GmbH**

The Fleissner SteamJet is the latest technology under investigation at Fleissner. It is not commercialized yet, but Fleissner was able to manufacture the first products on its pilot line. The development work was a joint effort with STFI in Chemnitz, and Fleissner today is the sole owner of their patents. There are two focuses at the present time -- subsequent structuring of thermally bonded products, and the manufacturing of superabsorbent webs.

### **In-Line vs. Off-Line Slitting and Winding: Pros & Cons**

• **Jesús López Marin, Edelmann Technology GmbH & Co. KG**

Although diesel engines were invented first, petrol engines had, and still have in the US, a dominant position for many decades. New technological advancements in the 1990s led, in Europe, to a renaissance of diesel engines, achieving a market share above 50%, and the market entrance for new alternative concepts such as the hybrid drive systems.

In the winder-and-slitter business for the nonwoven industry we see some analogy to this.

This presentation will analyze the significant factors of the in-line and off-line processes and thus provide guidance for a better choice for your specific requirement. Furthermore it will give some insight into future "hybrid" winding concepts.

### **Who is Who in Baby Diapers? An Emphasis on Emerging Markets**

• **Carlos E. Richer, Richer Investments**

This paper will concentrate on the different kinds of baby diapers currently available in many emerging markets, but more specifically in Africa, Latin America, and India. The paper will also review current raw material trends and will attempt to explain how diaper market segmentation is addressed differently in each one of these markets. Some diaper laboratory results comparing diaper performance between national and local brands will be presented.

**Wednesday, October 14**

### **Adult Incontinence Market in Europe: A Bittersweet Opportunity**

• **Gabriele Bertocchi and Massimiliano Bertocchi, Arendi Service s.a.s.**

The adult incontinence market in most of the countries in Europe is based on either a reimbursement or classification system. These systems, while structured differently, are financed directly or indirectly by local governments. Due to the recent well-known financial crisis, the budgets for sustaining these systems experienced funding limitations, enhancing the already established propensity to reduce institutional costs. This situation opens a new target for the development of adult incontinence hygiene absorbent products. New research is addressed even more toward cheaper basic products while still maintaining, and preferably improving, consumer satisfaction.

### **Better Than Carbon Footprint, Cradle to Grave Eco-Efficiency**

• **Jim Robinson, BASF**

Carbon footprint and carbon dioxide equivalents are often presented as the base measure for the ecological impact of products and businesses. These concepts cover only a tiny fraction of the ecological impact of any activity and cater to the emotional aspects of environmental impact. Only a cradle-to-grave life cycle analysis gives a complete picture of ecological impact. When this is combined with the economic impact of the same activities, truly sustainable concepts can be developed that have a verifiable positive impact on the changing environment. Eco-efficiency analysis, a tool combining ecological and economic analysis of products and production, allows strategic, objective evaluation of different concepts and activities, allows comparison of different options, and provides a method to monitor continual improvement of products and processes, fostering improved environmental impact for manufacturers and consumers.

### **European Downturn: At the Bottom, the Only Way is Up! A Nonwoven Perspective**

• **Jean-Michel Anspach, EDANA**

This paper will present the latest trends observed in the European nonwovens industry and analyze its main drivers.

### **Absorbent Cores: Paper or Plastic?**

• **Phillip Mango, Phillip Mango Consulting**

In 2008 Procter & Gamble introduced Infinity, a new feminine hygiene ultrathin maxipad using a polymeric foam core in place of the traditional airlaid core. This has set off a round of rushed development work by many major competitors in the feminine hygiene market. Early sales of the foam core-based product appear promising. While it appears counterintuitive to replace a core based on a biodegradable, sustainable, renewable resource

(sourced in North America and Europe) with one based on petroleum (sourced in the Middle East), there are reasons why some of the world's savviest marketers would fund expensive research, development, and commercialization of just such a product. This paper will explore those reasons, as well as determine the actual performance of traditional product cores, Infinity's core and other next generation core products. Ultimately, it may come down to market domination of paper (fluff based cores) vs. plastic (foam based cores).

### **3-Dimensionally Designed Absorbent Products - Achieving Better Fit with Less Material**

• **Christoph Schmitz, Concepts for Success**

From a consumer standpoint, the main driver towards a new generation of 3-D shaped absorbent products is expected to be its underwear-like design. The products are assembled of essentially rectangular pieces in such a way that they assume a 3-D cup-like shape and a reliable seal around the legs with no elastic, or if desired, very few gentle elastic elements all contracting around the body, rather than in the front-to-back direction. This generates a high level of wearing comfort, discreteness, and security for the wearer.

A new folding and assembling technique allows the production of these products without any cutaway material pieces. For the manufacturer of the products, lower material usage and, hence, product costs are among the main drivers towards the new technology, in addition to lower capital costs due to less complex, shorter lines with improved flexibility for minimal downtime changeovers.

Last, but not least, lower material usage of the new generation of products has a very positive impact on the environment.

### **Fluff and Absorbent Paper Pulps - Supply, Demand and Dynamics**

• **Kurt Schaefer, RISI**

While the fluff pulp market has its own unique drivers of supply and demand, the price of fluff pulp remains highly correlated over time with the price of papergrade bleached softwood kraft pulp. This paper will discuss the two-year outlook for world markets in both papergrade and fluff pulp, covering supply and demand considerations in light of recent developments in the macroeconomy, foreign exchange markets, and biomass demand for raw woodfiber.

### **Incredible! India - Developments in Hygiene**

• **Krystyna Boryk-Józefowicz, TZMO SA**

The search for new opportunities for hygiene product producers inevitably turns to developing markets in places where disposables' share is low but growing, and where opportunities to match product offerings to local cultures and economic conditions are possible. Incredible India is high on the list of opportunities, and its complexity and diversity is perhaps unique for absorbent product producers. This presentation will provide some illumination on the market place, potentials and product examples.

**Thursday, October 15**

### **Spunlace Innovations for the Nonwoven Wipes Market**

• **Frederic Noelle, Rieter Perfojet SAS**

From the early 1970s to date, the innovation in spunlace machines and technology sustained the growth of the nonwoven wipes market. From wet to dry wipes, from durable microfibers to flushable wipes, from synthetic to natural fibers wipes, a lot has already been invented in the field of spunlace technology to meet with the nonwoven wipes market requirements. What's new? You would not believe how frequently this question is asked. And this is the purpose of this paper: to answer it, with new Rieter spunlace innovations coming on stream.

### **Global Trends and Opportunities in the Baby Diapers Market**

• **Phil Park, Euromonitor International**

This paper will offer a current assessment of the global baby diapers industry reviewing volume/value sizes, brand and company shares as well as trends. The presentation will look to the future with analysis of the forecast market, new product development, and growth opportunities worldwide.

### **Reinventing the Obvious**

• **Dr. Edmund H. Carus, Carus Consulting Services**

It is very clear that despite advances in modern thinking appertaining to wound care products, many items currently used are a disgrace in terms of patient care and performance. The necessary criteria required for good wound care materials have been known for many years. Properly addressing these criteria can result in very simple materials and products which will improve the lot of patients and careers.

Suitable approaches will be advocated to hopefully initiate new thinking in viable wound care research and development. Spin-offs in hygiene applications will be apparent.

### **The Wheel of Time - The Diaper Testing Debacle Revisited**

• **James P. Hanson and Mark Bolyen, Marketing Technology Service**

For more than 2 decades proper predictive testing methods have been available to the industry for designing and qualifying baby diapers and adult incontinence disposables. Several dozen companies all over the world use these instruments to predict leakage performance in the real world and also to adjust core formulas and other features to optimize the cost/performance equations for their market offerings. Given the proven performance of dynamic testing techniques, it is strange to see association groups and ISO repeatedly ignore these in favor of agreeing on primitive dunk and drain, cylinder tests, and other extremely dubious techniques which offer little actual predictive value, but which satisfy the underlying politics and influences that take precedence over science. Now, a new round of test procedure development has begun again, with the same cast of players, and with the same political and territorial issues in play.

This paper is about this situation and will provide some very specific predictive data from the instruments compared to people studies on several new designs of diapers now reaching the U.S. market place, including Pampers Premium Protection, Huggies Overnites, and Pampers Cruisers Premium Absorbency, all of special interest in the discussion of advanced testing techniques.