

# AWA Label Release Liner Seminar

*The annual update for the pressure-sensitive label industry*

One of the highlights of the label industry's year is the AWA Label Release Liner Industry Seminar, held annually just before Labelexpo in both Europe and the USA. It attracts a high percentage of industry participants across the value chain who come to update their knowledge and to network.

This year's event in Brussels -- with Dow Corning and UPM as platinum sponsors and Blue Star Silicones and Wacker as gold sponsors -- offered a complete program, highlighting the key issues facing the label release liner segment. It represented an opportunity to discuss a combination of leading-edge processing and converting practices, the status quo in recycling of spent label release liner, and the product identification and decoration technologies that today compete with pressure-sensitive labeling.

## **Market overview**

Setting the scene, Corey M Reardon, President and CEO of AWA Alexander Watson Associates, provided an overview of the global release liner market -- one of the core verticals in the company's market research and consulting activities. 'The release liner industry is characterized as consolidated on the supply side and highly fragmented on the demand side, he observed, making it 'challenging for companies on the demand side to have any influence on market dynamics.' Pressure-sensitive labelstock commands a 49% share of global release liner usage, with food and beverage together representing 37% of the end-use market.

Release liners are continuing to adapt to efficiency requirements for modern converting, as Mikko Rissanen, Business Development Director of UPM Label Papers showed. With its roots firmly in forest products, UPM has pioneered many practical routes to enhancing the profile of paper release liner substrates in terms of lower basis weights that still deliver high performance. Rissanen showed how the company is currently exploring nanocellulose Biofibrils technology, which promises several benefits for the future.

## **Linerless technology**

The benefits of linerless pressure-sensitive labels were the subject of a lively panel discussion, and of an innovative current case history in the delivery of high-volume thermal VIP labels -- not pre-cut -- from Roelof Klein, Commercial Manager of glueing technology and surface treatment specialists Maan Group. Discussing the linerless concept were expert panel members Mike Cooper, Business Development Director, Catchpoint Labels Ltd (who also moderated the session); Jakob Landberg, Sales Director of press manufacturers Nilpeter; and Jeffrey Arippol, President of Brazil-based label technology and converting specialists Novelprint, who have patented their Noveltech linerless system. Interesting insights emerged -- particularly concerning what Landberg described as the 'reuse of film liner as laminating film'. In this situation, spent clear film liner is adhesive coated in line and applied over the surface of the printed labels as a protective laminate, thus creating a genuine contribution to sustainability. Nilpeter has, said Landberg, 'manipulated the press technology to accommodate this'. The 'downside' of linerless was raised by the audience: the fact that the label shapes which can successfully be achieved are limited to more or less simple rectangles. As Mike Cooper pointed out, clever design and print -- particularly on clear film-based labels -- makes this argument irrelevant today.

## **End-of-life solutions**

The overarching issues of release liner recycling and end-of-life solutions were the topic of a second panel discussion moderated by Calvin Frost, Chairman, Channeled Resources Group -- a company with 40 years' experience in the field. As he explained, it is the label converter who is in the front line when it comes to creating the problem of release liner waste for the brand owner customer -- after all, he delivers the self-adhesive labels. Echoing the entire industry, Frost added 'Wouldn't it be great to offer a solution?' He was joined in the discussions by Petri Tani, Managing Director of dedicated liner recyclers Cycle4Green; Ernst Brunbauer, General Manager of liner recycling-friendly Lenzing Papier; Ulrich Leberle, Raw Materials Director of the Confederation of European Paper Industries, CEPI; Mark Macaré, Senior Public Affairs and Recycling Manager, Lejeune Association Management (home of the FINAT Secretariat); and Vincent Decabooter, Senior Account Manager, Mitsubishi Polyester Film. This knowledgeable team, all with a real interest in the issues in question, looked in depth at the current solutions base and the many challenges raised by organizing collection

schemes and identifying the right personnel in end-user companies who can instigate such schemes. There are already valuable supplier-instigated schemes in place for the re-collection of their own spent liner, but creating an overarching solution remains on the wish list.

### **Achieving quality products**

Robyn Buma, Global Procurement Director, Paper, for Avery Dennison, looked at paper and film release liners in labels and graphics applications, globally, in terms of product quality. Covering multiple suppliers across all regions, her three-year research identified interesting key trends. Paper liners showed a moderate improvement in the top quality issues experienced – wrinkled, damaged, dirty material, and silicone release issues, for example -- during the period. Film liners, however, exhibited a significant improvement trend across the same parameters. ‘But’, said Buma, ‘it’s manufacturing, right? Stuff’s going to happen!’ – so she adjured suppliers to apply the highest standards of quality control, and robust and systematic problem solving processes and actions. After all, she added, ‘our customers expect the same from us.’

Hans Oerley, Business Development Manager for Dr Schenk Industriemesstechnik identified one route to achieving quality pressure-sensitive film labels: the installation of automatic inline optical inspection. With a ROI of just two years, the company’s EasyInspect and EasyMeasure systems can identify defects, especially in adhesive and silicone layers, at an early stage during the production process. They ensure a high-quality result and significantly reduce downstream waste in both film label materials and silicone coatings.

### **Silicone coatings panel discussion**

The topic of silicone coatings was the focus of a third expert panel discussion featuring three leading industry players: Dr Hans Lautenschlager, Senior Technical Manager, Release Coating Care and Coatings, Wacker Chemie; Alex Knott, AETS Senior Specialist, Dow Corning; and Sean Duffy, Global Business Manager, Silicone Release Coatings, Bluestar Silicones. Together, with 75 years’ of collective industry experience, they were able to identify key advances, both today, and for tomorrow, and Lautenschlager expressed the industry’s prime mission: ‘to create as stable as possible a release liner for our customers’ needs.’ Throughout the discussion, interaction between panelists and the audience was considerable – evidence that this program feature was of prime importance and interest.

Moderator Corey Reardon posed the key question: what are the alternatives to silicone? ‘It would require a massive investment to develop a new chemistry’, said Duffy; and Knott commended silicone’s ‘weird properties’ which have proved so useful to the industry. Reardon moved on to question the use of platinum as the cure catalyst, in the light of current cost concerns. Both Knott and Duffy praised platinum’s performance, and Lautenschlager admitted that the industry ‘hasn’t found a viable alternative’ yet, adding that ‘the only chance is to significantly reduce the amount of platinum used’.

Asked to highlight significant industry innovations in the past year, Duffy commented that ‘it has been too much about costs’, and Knott added, perhaps significantly, that ‘this is a mature industry now’. However, Duffy went on to highlight some industry ‘good news’ – the advent of UV silicones – but he had to add that ‘there is a downside: the cost of the silicones themselves. Knott said that, ‘going forward, we are now looking at employing different silicones – emulsion and solvent for films, for example. Also, importantly, a low-temperature silicone cure already exists.’ Duffy added activatable adhesives as another available option.

### **Competitor technologies**

Dan Muenzer’s review of the ‘label’ technologies that are today competing with pressure-sensitive certainly set the seminar program in context, visiting many examples of how, today, brand owners are ‘using the label to communicate’ and to differentiate their products. The Vice President, Marketing, for Constantia Flexibles presented fine examples – including the advances in variability in print, exemplified by the Coca-Cola campaigns and Heineken’s multiple label designs on Indio beer. In-mold labeling; flexible packaging; and direct-to-container print are all taking their toll – but Muenzer had good news, too – such as the conversion of Budweiser from cut-and-stack labels to pressure-sensitive, using a metallized film, to make efficiency increases and reduce the total applied cost. The pressure-sensitive label industry is also contributing real innovation in terms of non-contaminant labelstocks for application to PET bottles, he added.

All in all, the AWA Label Release Liner Industry Seminar brought together, in just one day, the main threads of the opportunities and the challenges faced by the sector which has, as Corey Reardon underlines, 'such a major influence on the world of packaging today.' [www.awa-bv.com](http://www.awa-bv.com)