

Leather - an extraordinary material

Leather chemicals manufacturer Lanxess organised its third annual leather industry seminar in January. On this occasion, the main theme of the presentations was what differentiates leather from substitute materials.



Around 70 people travelled to Cologne, Germany in January to attend a seminar organised by leather chemicals manufacturer Lanxess. Held annually for the past three years, the event brought together a diverse group of people from across the leather industry, with good representation from brands that use leather in their product lines. Those in attendance were treated to presentations from a number of leather industry figures, all of whom gave talks around the main theme of what differentiates leather from substitute materials. Lanxess said the primary objective of the seminar was to provide brands with a better understanding of leather as a material, in particular with regards to the use of chemicals.

After some opening remarks from Luis López Ramón, head of the Lanxess leather business unit, the first presentation was delivered by Dr Volke Rabe, head of technical product management for tanning at the company, who offered information about the physical and chemical properties of leather. He explained the different stages of the leather production process and how this process has evolved. This included showing the improvements that have been made over the years and how stricter rules and guidelines have helped bring about these improvements. He also highlighted some of the misleading stories to have appeared in the press which aimed to discredit leather. This served as a lesson to all that constant vigilance is needed to protect the industry's image.

Dr Rabe was followed onto the stage by Victoria Addy of the BLC Leather Technology Centre, who dealt with the subject of the changing landscape of chemical compliance. She began her presentation by discussing some of the concerns held by

brands and the public in relation to possible health hazards in the fashion supply chain, before demonstrating how the industry has responded. Ms Addy then explored the major shifts in attitude that have taken place over the past 20 years; at first these came from individual brands, but more recently there has been a more coordinated approach with leading industry players working together.

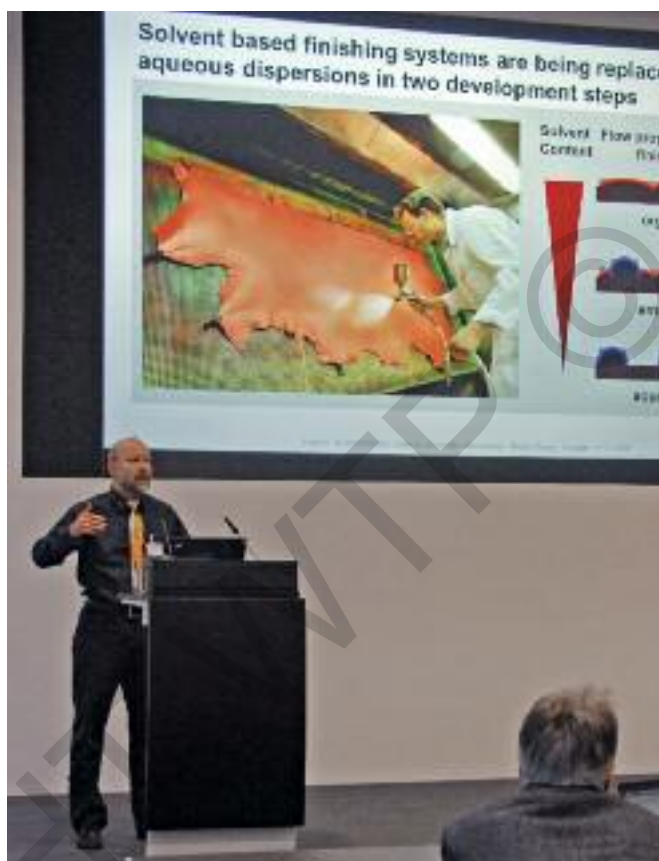
The latest example of this is the Zero Discharge of Hazardous Chemicals (ZDHC) programme, which has led to a move away from looking purely at the chemicals in leather towards an examination of the original chemicals supplied to leather manufacturers. Rather than having a restricted substance list (RSL) for the final leather, there is now a manufacturing restricted substance list (MRSL) to prevent anything undesirable being used at any stage during the manufacture of the leather.

Dr Marc Hombeck, head of product management PTA for Lanxess, offered an update on the use of fungicides in the leather industry. This remains an extremely complex issue; fungicides are required at various stages to prevent leathers from being damaged, especially during wet processing. In order to effectively prevent this damage, they need to be strong and aggressive. The matter is further complicated if tanners have to meet differing restricted substance lists, so it would be better to move towards a universal agreement on which fungicides may or may not be used. The list has already been reduced and suppliers of fungicides continue to look for the best solutions to this problem.

The next presentation was delivered by Dr Haiko Schulz, managing director of Forschungsinstitut für Leder und Kunststoffbahnen (FILK), who commented on the progress of



Dr Dietrich Tegtmeier offered insight into what the future of leather manufacturing might look like.



Dr Martin Kleban delivered the presentation 'Leather – physically extraordinary'.

the Oeko-Tex leather standard, which was launched at the end of 2016. Primarily involved in setting standards for the textile industry, Oeko-Tex is now one of four bodies approved by the ZDHC group to provide verification services for leather. Dr Schulz's presentation covered the development of the Oeko-Tex leather standard and looked ahead to what is to come in 2018.

The opening day of the seminar concluded with a presentation from Dr Martin Kleban, who leads the management team of the business unit. Entitled 'Leather – physically extraordinary', he gave an extremely detailed analysis of leather's performance in the areas of flameproofing, volatile organic compound (VOC) emissions, water vapour permeability, waterproofing and anti-soiling. He showed that leather can meet the highest standards for all these properties and that it actually outperforms many alternative materials in these areas.

The second day was opened by Liselotte Vijselaar, head of material testing for Pirmasens-based leather research body Prüf- und Forschungsinstitut (PFI). She focused on quality transparency for materials and shoes, offering a detailed overview of test methods for shoe leathers. She insisted that these tests can accurately predict the performance of the leathers, but cautioned that insufficient work has been done into the combined properties of different materials used in shoe production.

Given the concerns over the possibility of traces of chrome VI being found in leather, the presentation by Dr Christoph Lutermann of the EU Directives Consultancy (EuDiCo) was of high interest. It provided an update on chromium in the

leather industry, explaining that the whole issue is complex due to the relative instability of chrome VI and the difficulty of getting accurate test results.

Dr Mike Redwood of Leather Naturally outlined the organisation's objectives, which include ensuring any statements made concerning leather are accurate, fair and truthful. He offered those in attendance in Cologne plenty of examples of when this has not been the case.

The final presentation was delivered by Dr Dietrich Tegtmeier, the event's main organiser. He discussed the future of leather manufacturing and showed how traditional leather making has been extremely inefficient. A remarkable statistic that he offered was that for every kilogramme of leather made, there are around six kilogrammes of waste produced. He gave details about the new technologies that are helping to resolve this issue, including Lanxess's own 'Resource-efficient production of leather chemicals' (ReeL) project, which allows waste material to be recycled into retanning agents. This can be carried out on-site at tanneries, allowing manufacturers to produce retanning agents of their own.

The event ended with a question and answer session. It was good to see such a high level of interest from the brands in attendance, which was demonstrated by the number and quality of the questions and comments. The seminar certainly offered a great deal to think about and demonstrated that the only way forward for the leather industry is for the whole supply chain to pull together. This will ensure that leather as a material is accurately represented and that genuine concerns are addressed in an effective and professional manner. 🌱