

Bond-Laminates at JEC World, March 6 – 8, 2018, Paris Nord Villepinte Exhibition Center, Hall 5, Stand N33

Thermoplastic composites for mass production

- Pioneer in new composite processing technologies
- Extensive customer service throughout the entire component development process

Cologne – LANXESS subsidiary Bond-Laminates will be attending the JEC World Composites Show & Conference 2018 in Paris. The event is said to be the leading trade fair for the global composite industry. "We are one of the few developers and manufacturers of continuous fiber-reinforced thermoplastic composites worldwide offering a wide range of tailor-made composites for mass production. Our focus of this year's presentation at the JEC is on mass-production applications of our Tepex brand composites in the automotive, consumer electronics and sports sectors," explains Dr. Dirk Bonefeld, head of Marketing and Sales at Bond-Laminates. "Other focal points are new processing technologies for thermoplastic composites and our 'HiAnt' customer service."

Mass production of thin-walled, decorated lightweight components

In cooperation with manufacturers of plastics machinery and automation technology, Bond-Laminates has succeeded in developing new processing technologies that go far beyond the thermoforming of Tepex semi-finished products. Bonefeld: "We see ourselves as pioneers of new processing methods that extend the application potential of our composites and increase the performance and functionality of the corresponding components." One example of this competence is hybrid molding. This one-shot-process makes it possible to shape a composite semi-finished product in the injection mold, to reinforce it at selected points with short-glass fiber-reinforced thermoplastics and to provide it with additional functions such as

LANXESS AG

Contact: Michael Fahrig Corporate Communications Spokesperson Trade & Technical Press 50569 Cologne Germany

Phone +49 221 8885-5041 michael.fahrig@lanxess.com

Page 1 of 4



fixings and guides. As Bonefeld reports, "Hybrid molding has meanwhile proven itself in the series production of numerous lightweight automotive components such as seat shells, bumper beams, brake pedals and module carriers." Another example of Bond-Laminates' technological expertise is a hybrid finishing process for the production of decorated lightweight components. It combines hybrid molding with IMD (In-Mold Decoration) technology and enables fully automatic mass production, without any reworking, of lightweight components with high-quality surface decoration. "We aim at extremely thin-walled yet exceptionally stiff housing parts for smart phones, notebooks and tablets," explains Bonefeld.

Customer service HiAnt – the way it works

Bond-Laminates sees itself not only as a pure material supplier, but also as a partner that supports its customers with comprehensive services throughout the entire component development process right up to the start of series production. The company, which is integrated into LANXESS's High Performance Materials business unit, can draw on the HiAnt competence brand, in which the business unit has bundled all its expertise in materials, composite technologies, simulation methods, component testing, processing and production to support customers. The services include, for example, topology optimization and tips on the correct overmolding of Tepex inserts as part of the component design. Further service elements include the simulation of the forming (drapery) and cooling behavior of composite semi-finished products as well as structural analyses, e. g. for calculating the mechanical load-bearing capacity of Tepex components. The results of these analyses are validated by component tests such as mechanical component or alternating climate tests. Bonefeld: "We also use our fully automated, near-series demonstrator cells to simulate the production processes of our customers in order to determine process parameters and identify possibilities for quality assurance and improvement."

LANXESS AG

Contact:
Michael Fahrig
Corporate Communications
Spokesperson Trade & Technical
Press
50569 Cologne
Germany

Phone: +49 221 8885-5041 michael.fahrig@lanxess.com

Page 2 of 4



LANXESS is a leading specialty chemicals company with sales of EUR 7.7 billion in 2016 and about 19,200 employees in 25 countries. The company is currently represented at 74 production sites worldwide. The core business of LANXESS is the development, manufacturing and marketing of chemical intermediates, additives, specialty chemicals and plastics. Through ARLANXEO, the joint venture with Saudi Aramco, LANXESS is also a leading supplier of synthetic rubber. LANXESS is listed in the leading sustainability indices Dow Jones Sustainability Index (DJSI World and Europe) and FTSE4Good.

Cologne, March 6, 2018 mfg/rei (2018-00013)

Forward-Looking Statements

This company release contains certain forward-looking statements, including assumptions, opinions, expectations and views of the company or cited from third party sources. Various known and unknown risks, uncertainties and other factors could cause the actual results, financial position, development or performance of LANXESS AG to differ materially from the estimations expressed or implied herein. LANXESS AG does not guarantee that the assumptions underlying such forward-looking statements are free from errors nor does it accept any responsibility for the future accuracy of the opinions expressed in this presentation or the actual occurrence of the forecast developments. No representation or warranty (expressed or implied) is made as to, and no reliance should be placed on, any information, estimates, targets and opinions, contained herein, and no liability whatsoever is accepted as to any errors, omissions or misstatements contained herein, and accordingly, no representative of LANXESS AG or any of its affiliated companies or any of such person's officers, directors or employees accept any liability whatsoever arising directly or indirectly from the use of this document.

Information for editors:

All LANXESS news releases and their accompanying photos can be found at http://press.lanxess.com. Recent photos of the Board of Management and other LANXESS image material are available at http://photos.lanxess.com. TV footage can be found at http://globe360.net/broadcast.lanxess/.

You can find further information concerning LANXESS chemistry in our WebMagazine at http://webmagazine.lanxess.com.

Follow us on Twitter, Facebook, Linkedin and YouTube:

http://www.twitter.com/LANXESS
http://www.facebook.com/LANXESS
http://www.linkedin.com/company/lanxess
http://www.youtube.com/lanxess

LANXESS AG

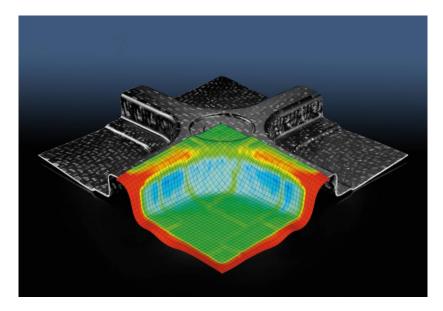
Contact:
Michael Fahrig
Corporate Communications
Spokesperson Trade & Technical
Press
50569 Cologne
Germany

Phone: +49 221 8885-5041 michael.fahrig@lanxess.com

Page 3 of 4



Image



Bond-Laminates supports customers throughout the entire component development process right up to the start of series production with comprehensive services. The company can draw on the HiAnt competence brand, in which the LANXESS High Performance Materials business unit has bundled all its expertise in materials, composite technologies, simulation methods, component testing, processing and production. Photo: LANXESS AG

LANXESS AG

Contact: Michael Fahrig Corporate Communications Spokesperson Trade & Technical Press 50569 Cologne Germany

Phone: +49 221 8885-5041 michael.fahrig@lanxess.com

Page 4 of 4