

Saltigo actively participates in the 5th International EUMOS Conference in Vienna, Austria, on September 14 and 15, 2017

Keeping inertial forces under control

Leverkusen – Saltigo GmbH, a wholly owned subsidiary of specialty chemicals company LANXESS based in Leverkusen, assigns safety a high priority, and not just during the production process. This is illustrated by its commitment to ensuring the reliable and safe transportation and flow of chemical raw materials and products.

Hermann Korn, head of Logistics at Saltigo, will deliver a lecture focusing on current aspects of load safety at this year's 5th international conference of the European Safe Logistics Association (EUMOS), which will be held in the Austrian capital Vienna on September 14 and 15, 2017. His lecture is entitled: "Optimized loading units according to EUMOS 40509:2012: practical load securing in the chemical industry."

Where pure force rules...

Anyone who has ever experienced an emergency stop in a car or on the train will be well aware of the huge effects that inertia forces can have. We are also regularly subjected to considerable acceleration forces during the take-off and landing of airplanes. Those forces can have a devastating effect, especially on people who are not wearing a seatbelt. The same is true of transportation containers if they are not secured or are not secured correctly. The sudden displacement of loads also has a direct impact on road safety. "Organizational and technical measures go hand-in-hand, and must be planned and implemented accordingly to prevent damage or accidents, thereby ensuring the disruption-free flow of materials throughout the value chain," explains Hermann Korn.

Containers used to transport chemical substances are often particularly challenging, as the type of packaging used is largely dependent on the properties of the substance being transported: frequently used transport containers include drums and sacks, Intermediate Bulk Containers (IBCs) or Big Bags. These also come in a number of different shapes and sizes. This often necessitates the use

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of tools or auxiliary constructions on the loading bed to enable the containers to be arranged in an interlocking or press-fitting manner. "In this respect, chemical logistics poses a significantly greater challenge than the shipping of standard-sized boxes containing commercial products," continues Korn. In regulated sectors, such as with active pharmaceutical ingredients, there are additional requirements, particularly with regard to the provision of complete documentation in accordance with GMP (Good Manufacturing Practice).

Systematic securing of loads

Technical load securing measures, such as tensioning straps, are used to reduce the risk of loads shifting and the resulting damage to transportation containers. In many cases, the usual approaches taken in the chemical industry are no longer sufficient to meet its specific requirements.

This is the challenge that Saltigo is aiming to overcome, together with its logistics service providers and various providers of load securing technology. By cooperating in this way, insights can be gained into the typical types of damage incurred, their causes and the possibilities for preventing such damage. This benefits all the companies that are directly involved in the logistics process and particularly the customers, as they are spared the inconvenience of damaged goods and the associated complaints.

Consistent implementation of options

Among the safety systems that are commercially available are special brackets that allow containers made up of a number of drums to be anchored securely on a chemical pallet. These not only withstand static tipping tests (lean tests) but also acceleration in dynamic driving tests. In addition, truck loading beds can be equipped with freely-configurable locking bar systems. This makes it possible to place containers together in individual compartments. The forces generated during acceleration can then be distributed across each of the compartments rather than being amplified across the entire loading bed. "It is crucial that measures of this nature are implemented consistently and correctly by our own employees and by our service providers. Only then will we be able in the long term to prevent accidents and damage caused by inadequately secured loads", says Korn.





Employing creativity for the development of new solutions

In addition, the logistics experts at Saltigo are working alongside specialists and providers of load securing technology to improve existing systems and develop new solutions. For example, wooden constructions that are simple and cost-effective to manufacture and can be infinitely adjusted in the same way as a scissor table can be used to fill empty spaces alongside and between containers on a loading bed. They are considered to be superior to the air cushions that were previously widely used, as their dimensions do not change, even when subjected to changing environmental conditions such as air pressure or temperature. "Sufficiently stable loading units and the effective securing of loads do not always have to result in additional costs. On the contrary: when goods can be turned around more quickly, the reduced logistical costs quickly offset the additional technical expenses," concludes Korn.

Saltigo GmbH is a leading supplier in the field of custom synthesis. The company of specialty chemicals group LANXESS belongs to the Advanced Intermediates segment, which achieved total sales in 2016 of EUR 1,742 million. Saltigo, headquartered in Leverkusen and with production facilities in Leverkusen and Dormagen, employs around 1,200 staff worldwide.

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Forward-Looking Statements

This news release may contain forward-looking statements based on current assumptions and forecasts made by LANXESS AG management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

Information for editors:

All Saltigo news releases and their accompanying photos can be found at http://media.lanxess.com.

Detailed information about the company can be found on the internet at http://www.saltigo.com. You can find further information concerning LANXESS chemistry in our WebMagazine at http://webmagazine.lanxess.com





Pictures



To secure loads, Saltigo GmbH uses special brackets that allow containers to be anchored securely on a chemical pallet. These not only withstand static tipping tests (lean tests) but also acceleration in dynamic driving tests. Photo: Saltigo GmbH



Fixing plastic drums on a pallet. Photo: Saltigo GmbH







Smaller containers too can be stored together as a stable loading unit with the aid of boltings. Essential here is an even contact pressure that links the wooden structure with the pallet.

Photo: Saltigo GmbH