



Smart pallets for cost-effective supply chains: Resistant thanks to Elastocoat® C from BASF

- Pallets from Ahrma boast a new kind of "Internet of Things" (IoT) technology with innovative functionalities
- Elastocoat® C allows optimum protection, a longer life time and coating in an automated spraying process

BASF is collaborating with the Dutch start-up company Ahrma Holding B.V., whose aim is to launch a completely new pallet concept on the logistics market. For the purpose of coating the extremely robust hybrid pallets made from medium density fiberboard (MDF) and plastic, the formulation of BASF's Elastocoat® C spray system was developed further.

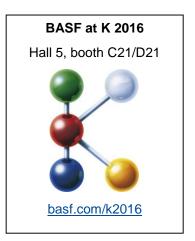
The result is that the PU coating improves the resistance and durability of these pallets and it can now be sprayed on directly in continuous, automated spraying units. There is no need for any further primer coat. The MDF pallets sealed with Elastocoat C are not just more stable and around 25% lighter than traditional pallets, but also boast an innovative, comprehensive track and trace system. The life span of the pallets is extended considerably to up to 10 years and individual components of the pallets can be dismantled and replaced.

Big data in the supply chain thanks to innovative transponder

Using the transponder that is integrated in the pallets and the software from Ahrma, Supply Chain Big Data (SCBD system), the company is able to record not just the position and movement of the pallets, but also their ambient temperature and load state and any possible impact

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or dropping of the pallets. This offers a series of benefits and cost savings for customers: It means that unused pallets can be located and optimum use can be guaranteed. Costs as a result of unused, lost or stolen pallets are reduced. Interruptions in the cold chain or any loss incurred can also be demonstrated and processes improved accordingly. The pallets remain the property of Ahrma and are loaned to customers as required.

BASF's coating ensures durability

BASF's contribution: The Elastocoat C spray system seals the pallet surfaces efficiently, quickly and permanently and thus provides optimum protection against water, dirt, microbial infestation and abrasion. This increases the durability of the pallets and can also help to protect the goods stored on them.

"There have not been any innovations in the pallet industry for more than fifty years. Our solution is to lease reusable smart pallets on attractive terms," explains Erik de Bokx, CEO of Ahrma Holding B.V. "The Elastocoat C PU spray system from BASF contributes to this by enabling continuous and rapid coating in an automated process."

In addition, thanks to the coating the pallets can be cleaned and thus reused quickly. This is an attribute that is particularly important especially for customers in the food, beverages and pharmaceutical sectors. Elastocoat C is also resistant to chemicals, flexible, crack bridging and wear-resistant. It is resistant to low temperatures, quickly hardens following application, and offers a non-slip surface which makes the load even more secure.

"The cooperation with Ahrma is the result of successful teamwork. The first contact came about through our colleagues in the Netherlands. BASF then worked together closely with Ahrma to come up with a customized solution," says Gorm Carsting, Sales Team Leader, BASF Performance Materials Europe.

The customized Greenpanel[®] MDF blanks for the pallets are supplied by the company Makers B.V. The concept of MDF panels sprayed with Elastocoat can be flexibly deployed and is also used in exhibition Page 3 P242/16e

stand construction, for example, as a floor panel with an appropriately adapted shape.

BASF at K 2016

Where your ideas become ideal solutions: BASF at K fair from October 19-26, 2016 in Dusseldorf, Germany, in hall 5, booth C21/D21. You can find all related press releases, photos and further information here: basf.com/k2016.

About Ahrma Holding B.V.

Ahrma Holding BV was founded in 2014. Headquarters and the production plant are located in The Netherlands (Deventer). On short notice Ahrma will open affiliate regional offices in 5 countries worldwide, serving clients' logistics in the industrial food, beverage, pharmaceutical and retail industries. Please find more information online www.ahrmapooling.com.

About BASF's Performance Materials Division

BASF's Performance Materials division encompasses the entire materials know-how of BASF regarding innovative, customized plastics under one roof. Globally active in four major industry sectors - transportation, construction, industrial applications and consumer goods – the division has a strong portfolio of products and services combined with a deep understanding of application-oriented system solutions. Key drivers of profitability and growth are our close collaboration with customers and a clear focus on solutions. Strong capabilities in R&D provide the basis to develop innovative products and applications. In 2015, the Performance Materials division achieved global sales of € 6.7 bn. More information online: www.performance-materials.basf.com.

About BASF

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