

Awards: Winner of NÖ-INNOVATIONSPREIS 2018

Award ceremony on 17th of January, 2019

Author: asma-GmbH Weitra Kunststofftechnik Pur

The "**Karl Ritter von Ghega Prize**" is the most important award for innovative projects of Lower Austrian companies as well as for innovative developments of Lower Austria research institutes. Asma GmbH is the winner in the category: "Best Innovation from large and medium-sized companies"

Project: Innovative roller coatings which allow the efficient and loss-free application of UV-curing paint (even with level differences of up to 10 mm) in the production of modern furniture and floor surfaces.



President of chamber of commerce Sonja Zwagl, Economics Councillor Dr. Petra Bohuslav, Karin and Rainer Poiss (Development manager Fa. Asma), Raiffeisenlandesbank NÖ-Wien and Vicedirector Mag. Reinhard Karl. Source: WKNÖ/Kraus



DI (FH) Rainer Baumgartner (asma Development), Development Manager Rainer Poiss with wife Karin und Alexander Herzog (asma Development)

The submitted topic was "EasyPren and XtraFlex - PUR roller coatings - Production of modern furniture and floor surfaces in the highly efficient, less-free rolling application of UV-curing paint".

Up to now, it was only possible to coat flat and almost non-structured surfaces with industrial roller coating process (with rubber roller coatings). The maximum level difference at the surface was 0.5 mm. The initial target of the development was to enable a roll-paint of contoured and structured surfaces with a level difference up to 3 mm by using the elasticity of PUR roller coatings.

PUR roller coatings have not been used in the roller painting process previously because they are significantly more difficult to manufacture and to grind, compared to rubber roller coating (air pockets, inhomogeneities, hardness variations, high wear resistance).

In addition to the optimal PUR formulation, the appropriate manufacturing and mechanical processing (grinding) had to be developed. After about 2 years of development and numerous field tests, the PUR roller coatings were launched under the brand name EasyPren. With the successful use of these coatings and their new application options, customers wondered whether it is possible to implement even more deformability to be able to paint even larger differences in height. Another PUR roller coating, with a compressible, highly deformable substructure, was created after a further year of development. This product, with the name XtraFlex, is manufactured for several customers with special requirements.

Thereby roll painting with a level difference of up to 10 mm is possible. About 90% of the applications can be covered with EasyPren. The remaining 10% will be served by XtraFlex. EasyPren roller coatings are already being successfully used in Central and Eastern Europe, as well as in Malaysia, Mexico and China.