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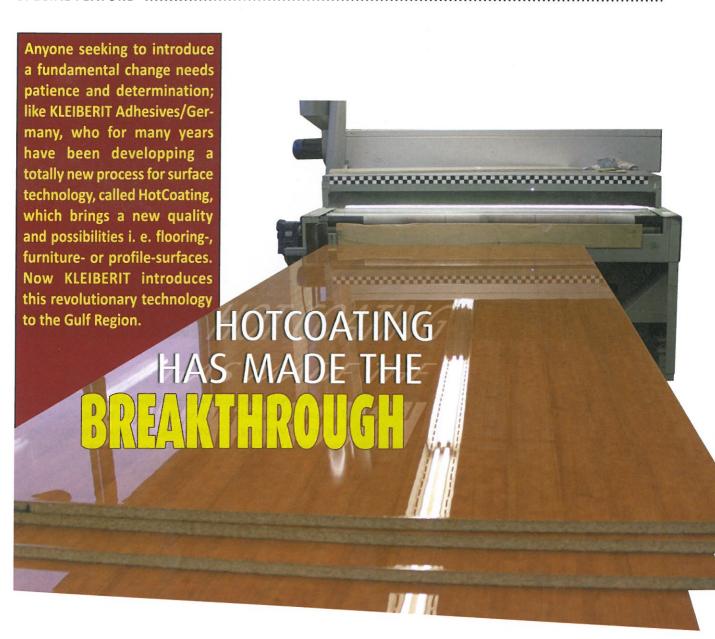
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n abrasion resistant surface for parquet, cork flooring, decorative paper, laminate and even for vinyl flooring which can be applied in one step using a line that is barely seven meters long – this amounts to a revolution in the coating of flooring. Above all the costs can be up to 30% less than the multilayered lacquer application in the very complicated coating lines of the flooring manufacturers.

## What exactly is HotCoating?

What does the process do, where are the

advantages and do the limitations lay? KLEIBERIT adhesives is the developer. The place where innovations occur and their marketability is achieved is the Technical Center in Weingarten which was opened three years ago. Industrial customers come and work together with KLEIBERIT on the correct coating of material.

The adhesive manufacturer founded in 1948 in Ingolstadt, Germany, regards itself as a specialist and with its trademark KLEIBERIT is a partner with industry, retail and handicraft. The fields

of application range from automotive to window construction.

With the HotCoating product, KLEIBERIT has bundled its knowledge of EVA hotmelt adhesives and PUR adhesives. HotCoating differs from lacquer in many ways. The product is filled up in the factory in a hot state and in the same process additives are included which create the desired properties. For example, corundum makes the surface abrasion resistant, wax and silicone influence the haptic and other additives are for gloss.





After cooling down, the additives are uniformly distributed in a solid block. This is how the product arrives to the flooring manufacturer. It doesn't have to be identified as dangerous goods and the additives do not settle on the bottom. Therefore types of corundum can be used which are not used in liquid lacquering. For coating, flooring, HotCoating is melted at 130°C to a viscous mass with consistency of honey. Application takes place with a roller in a line from the Spanish machine manufacturer Barberan.

A big difficulty during the development of HotCoating was smoothing the surface. The fact that the surface is not tacky is not a matter of course. The company is sure that the solution found for this cannot be copied so easily. "The advance in know-how amounts to several years" reports the manufacturer with optimism.

## A hot application and then lacquering

Flat surfaces are coated before cutting and profiling. Structured décor and brushed surfaced are not suitable. To nevertheless create a structure which can be slightly felt, a structured roller can be integrated downstream in the line. A big advantage of HotCoating is application in just one step—in comparison to seven times with standard lacquer coating with intermediate sanding and UV drying. Depending on the thickness of the layer, HotCoating increases the flooring class. Abrasion class AC1 to AC5 according to the laminate flooring norm can be achieved with the KLEIBERIT process by simply adjusting the application quantity.

The thermoplastic wear layer which is still warm is then covered with 10 g of UV lacquer. There are really two layers. The lacquer basically fulfills two functions. It protects the HotCoating layer during its 24 hour curing while stacked and defines the desired gloss rate of the surface. The lacquer is the visible sales layer, explains Rainer Kampwerth, Surface Material Sales Manager.

The close technical relation of HotCoating to adhesives allows the product to adhere especially well. That applies for all possible substrates, whether glass, melamine, decorative paper, foil or a difficult wood like teak. HotCoating penetrates in the open pores but not deep in the wood. Due to its elasticity, the melted coating is especially well suited for cork flooring. But also for

wrapping foils for baseboards. "In the end it is impossible to tell the difference in smoothness on a surface coated with HotCoating with corundum and without" explains Peter W. Mansky, Marketing / Communication Manager.

HotCoating is an emission and solvent free product. In comparison to conventionally coated laminate floors, surfaces produced with HotCoating have a warm character. Trials are currently testing the long-term effect of wind and weather on the coating. And the lines in which the product is used are convertible for high gloss coating of furniture components as well as flooring production. "Glossy furniture surfaces is a trend which can quickly change" says Rainer Kampwerth, "therefore we see stable potential for HotCoating in flooring production".

KLEIBERIT considers HotCoating more competitive against UV lacquer in smooth parquet flooring. The price-performance calculation for laminate flooring is still pending but manufacturers are keeping it in mind. The process has all of the necessary certificates. "IHD Dresden has tested HotCoating in details concerning the laminate flooring norms" reports Rainer Kampwerth.