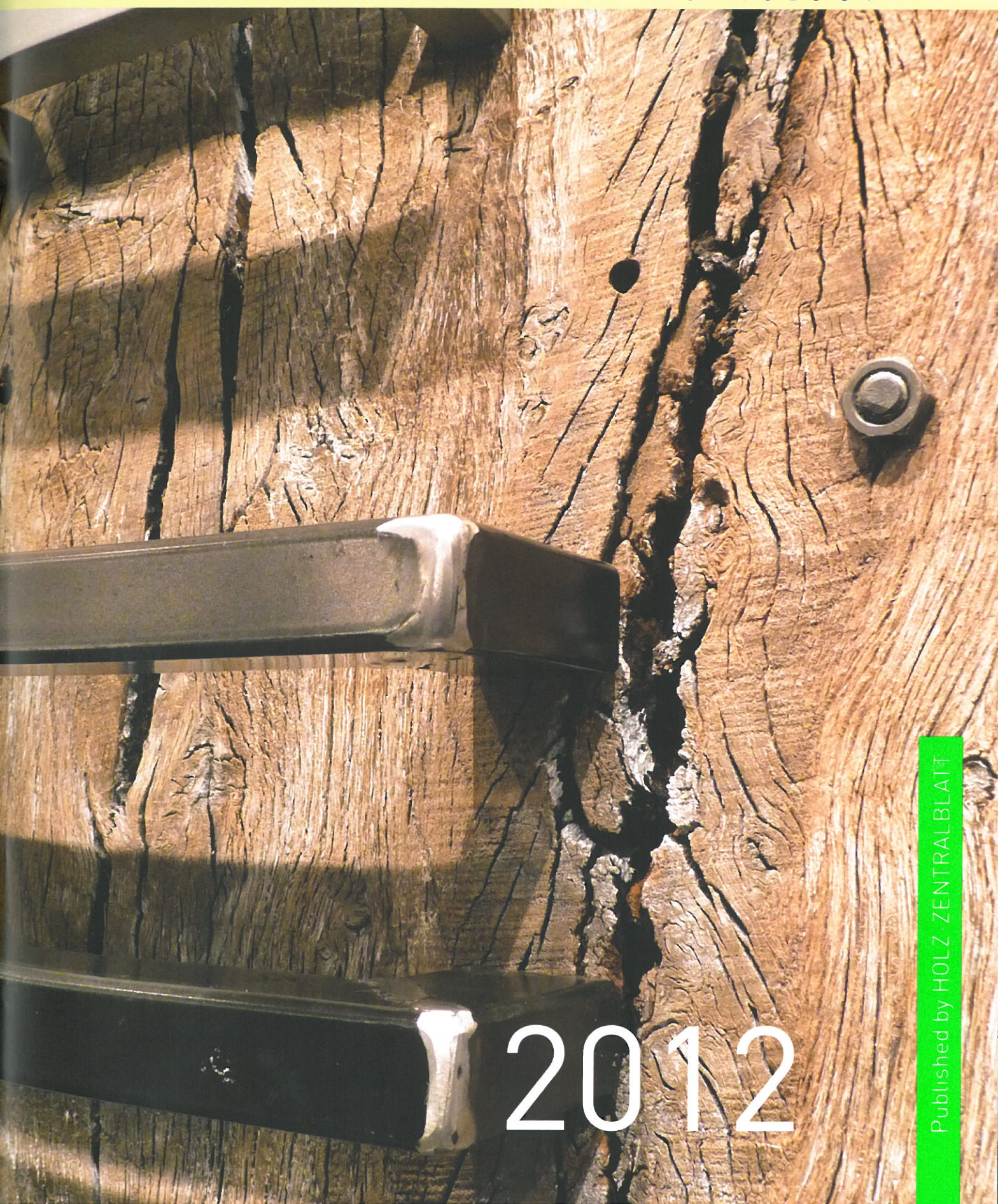


EUROPEAN WOODWORKING

MARKETS • PRODUCTS • TECHNOLOGY



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"Bullet proved" panel with larch decor and "HotCoating" surface
Photos: Kleiberit

Hot Coating on Top!

Klebchemie M.G. Becker GmbH & Co. KG, producer of Kleiberit adhesives, is a family owned company located in Weingarten Germany (near Heidelberg). Kleiberit is internationally renowned for its competence in polyurethane (PUR) adhesives and has set the standard in this field for more than twenty years. The company realized there was a chance to extend their competence in PUR hotmelts to the lacquer industry which ultimately resulted in an alternative to traditional lacquering technology with the added advantage of a much simpler application process.

"HotCoating® technology", for both rolled materials and flat substrates, offers a wide variety of advantages: One processing step – no interim sanding – 100% solid content – smaller production area – lower capital expenditure – reliable production – variable.

"HotCoating®" is an innovative coating based on a reactive, PUR hot melt sys-

tem. It is solid at room temperature and is melted with a pre-melter before being applied to the substrate – coat weight is adjustable depending on customer requirements. The chemical cross linking with humidity of the PUR material results in a very resistant surface which is extremely shock and wear resistant (up to AC3). An additional very thin layer (inline) application of Kleiberit's UV curing Top Coat allows for precise variations in gloss level and variations in colouring. In addition it allows the PUR to cure over a longer period without damage because the UV Top Coat gives immediate scratch resistance.

Not only does "HotCoating®" offer many advantages in comparison to traditional lacquering technology, customizing fea-

tures such as staining or printing (digital or direct) can also be easily integrated into the process. This means that wrapping materials such as veneer and decorative paper can be individually designed and finished in a single piece flow according to customer requirements.

Kleiberit customers are already producing veneer rolls which are individually coloured with stain before "HotCoating®" is



applied to achieve a perfect surface coating which protects the veneer and makes it very flexible.

Digital printing: The trend toward individualization in design and technology is in practically all industrial areas like interior, furniture and flooring. This leads to smaller batch sizes accordingly. Manufacturers must adjust with flexible technologies and manufacturing logistics. As a result, digital print has become a very attractive technology and even more presentable due to further developments in print and ink technology over the last few years.

The “Hot Coating®” technology offers an innovative alternative as a surface coating for flooring, furniture and building components and follows the same philosophy as digital print: Easy processing technology / Individual and quickly adjustable to different requirements.

With “Hot Coating®”, an exceptionally resistant surface is achieved which is highly flexible.

- Highly abrasion resistant surfaces › AC5 according the Laminate Flooring Norm EN 13329 (S42)
- Unbeatable flexibility / shock resistance
- Inline embossing of three dimensional structures
- Optimal on surface technologies for digital print
- Colored, highly resistant technical coating for facades, housing, panels, etc.
- Easy application technology for panel substrates and roll material (roll-to-roll). The result is a digitally printed and highly resistant wrapping material which has a

three dimensional texture. This material is not only producible in small batch sizes, it is also highly flexible despite high abrasion resistance and is therefore perfectly suited for wrapping.

Flooring: The flooring market is no longer just reduced to parquet: solid wood flooring vs. laminate flooring. New products and further developments led to differentiation, and the field of solid wood products has expanded to include solid wood flooring, engineered multi-layer parquet, veneer flooring with HDF or MDF cores and printed veneer floor. Laminated flooring has also expanded and is no longer just traditional made laminate floor produced as DPL, this field has also expanded to include high pressure laminate (HPL/CPL), direct pressure laminate (DPL), printed direct laminate (PDL), digital printed laminate and paper flooring. Regardless of veneer flooring, paper flooring, direct printed or digital printed flooring, the following holds true: Protection required with a resistant coating – sanding is not possible – Additional requirements: natural haptic, pores, transparent coatings

The “Hot Coating®” technology meets these requirements with a simple to use, compact technology:-

Protection with AC3 coating – no intermediate sanding required – transparent – universal adhesion – imprinting of three dimensional structure, i.e. pores.

In the flooring market differentiation and customization are also in demand, and there are a wide variety of systems attempting to meet customer’s demands in different ways.

Finishing Surfaces: Decorative and digital or direct print surfaces need to be protected with a shock and wear resistant coating, but the surface can not be sanded prior to the coating process. “Hot Coating®” has excellent universal adhesion to various materials such as paper, print colours and lacquer systems making it the ideal coating for decorative and printed surfaces - sanding is not required! “Hot Coating®” is transparent, so it does not affect the optic of the surface. It is also very shock and wear resistant so the finished product is very durable. Flooring applications with decorative surfaces or digital/direct printing are suited for long-term use when coated with “Hot Coating®”. As a result of the extraordinary flexibility, there is no micro-cracking which can destroy the sealing characteristics. Even with a low coat weight, “Hot Coating®” offers a very high wear resistance.

Glossy Surfaces: The worldwide trend toward high gloss surfaces in interiors, furniture and flooring places new requirements on processes and products.

Kleiberit has developed diverse innovations specifically for high gloss which are tailored to the corresponding requirements. The perfect high gloss surface stands in connection with cost effectiveness and technical feasibility. Main factors are: Maximum gloss level – Smooth surface – Depth effect – Resistance – Costs – Process technology – Design variety. The generally recognized high end area is mirror and real glass surface. There are several ways to create a high gloss surface. Kleiberit offers a solution for all.

More informations: www.kleiberit.com