

# surface & panel

UNITING MATERIALS, TECHNOLOGY AND DESIGN

BUILDING AN ENVIRONMENT FOR HEALING  
CRYSTAL BRIDGES MUSEUM STORE CEILING SOARS

**SURFACE DESIGN GUIDE 2012**

NORTH AMERICAN  
LIGHTWEIGHT PANEL PRODUCTION

THE FUTURE OF DECOR DESIGN

**SPECIAL SECTION:** FINISHING MATTERS

INKJET PRINTING FOR  
POLYMER ORGANIC LIGHT EMITTING DIODE



# KLEIBERIT HotCoating® & High Gloss Surfaces

**T**he innovative finishing system, KLEIBERIT HotCoating® has made a breakthrough in the market with machines commissioned worldwide, including several in North America. The process was demonstrated live with great interest at KLEIBERIT's booth during IWF 2012 in Atlanta, GA and a HotCoating® Symposium on September 25-27, 2012 in High Point, NC was also well received and offered interested parties another opportunity to have their materials coated on-site.

KLEIBERIT HotCoating® technology is a finishing system which can be used for both rolled and flat material. The innovative coating is based on a reactive, PUR hotmelt system. 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 TopCoat allows for precise variations in gloss level and coloring. In addition, it allows the PUR to cure over a longer period without damage because the UV TopCoat gives immediate scratch resistance.

Not only does KLEIBERIT HotCoating® offer many advantages in comparison to traditional lacquering technology, customizing features such as staining or printing (digital or direct) can also be easily integrated into



the KLEIBERIT HotCoating® inline 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.

## High Gloss 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.

## Laminating high gloss foils onto wood based panels with PUR hotmelt adhesive

The status quo in the furniture industry is laminating wood based panels (MDF, FPY) with high gloss foil. These foils are available in different thickness and quality, as panel or rolled material. The foils are often a combination of decorative layers (e.g. ABS) and a transparent and high gloss cover layer (e.g. PMMA). KLEIBERIT offers PUR hotmelt adhesives which are perfectly formulated for high gloss bonding applications. The company also helped develop various processing technologies (e.g. the roller bar slot nozzle technology).

## Bonding Transparent Materials with KLEIBERIT PUR Hotmelt Adhesives

By bonding transparent materials on decorative surfaces, a depth effect and high gloss can be achieved. For example, it is possible to bond glass or PMMA onto a decorative surface so that it is high gloss. The transparency of the materials to be bonded places even higher requirements on cleanliness and quality of the bonding process. Users profit from KLEIBERIT's many years experience in surface technology. Bonding transparent



material requires absolutely high quality and clear adhesives. Lightfast and transparency are required, as well as constancy of the chemical and physical parameters. Several KLEIBERIT PUR hotmelt adhesives were specifically developed for the requirements of bonding transparent materials and are well established in the market.

## KLEIBERIT HotCoating High Gloss

With the KLEIBERIT HotCoating® technology, even standard melamine faced panels can get a high quality high gloss surface with an easy processing technology. The key is the very good adhesion of HotCoating to melamine surfaces and smoothing the surface with the KLEIBERIT HotCoating® processing technology.

In the KLEIBERIT Technical Center in Weingarten Germany, processing technologies for a variety of applications are available in production scale. Product developments and customer demonstrations can be conducted in full scale there.







# Digital print and **KLEIBERIT HotCoating®**

High-end Technology  
for High Gloss Surfaces

