



**KLEIBERIT®**

ADHESIVES • COATINGS



Surface Finishing



# HotCoating Furniture

Competence **PUR**



**KLEBCHÉMIE** M. G. Becker GmbH & Co. KG, producer of **KLEIBERIT** products – modern and innovative. The company's competence is especially reflected in the tremendous development and productivity in PUR-adhesives, which is why **KLEIBERIT** products have become market leaders in this future technology sector – worldwide!

In our modern laboratories, experienced, innovative and highly qualified chemists develop high quality products in accordance to customer requirements. Emphasis is placed on the development of environmentally friendly and ecologically clean adhesives.

Our applications laboratory has an extensive range of machinery, so our skilled technicians and engineers are able to conduct tests under "real life" conditions.

The combination of our inbound quality control, production quality control and constant product development ensures that our customers will only receive quality products.

**KLEIBERIT** products are being used worldwide by many well known companies in the wood-working, plastics and automotive industries.

Modern  
Technology,  
Know-how,  
Commitment...

... are the components  
that determine  
success – today and  
in the future.



- PUR-Adhesive: One and two components
- PUR-Hotmelts, PUR-Glue
- Dispersions: PUR, EVA, PVAC
- Hotmelts: PUR, EVA, PO, PA, PE
- Two component PUR and Epoxy Systems
- Foams and Sealing Compounds
- Solvent based Adhesives

Working internally and in the field, our highly motivated employees always provide the best customer service through excellent customer care, high quality technical assistance, fast order processing, and quick, worldwide delivery.



... we hold the  
world together



**KLEIBERIT®**

ADHESIVES • COATINGS

# **KLEIBERIT HotCoating®**

## Premium Quality Surfaces



«Super Matte to Piano Finish»

Competence **PUR**

# KLEIBERIT HotCoating® – Premium Quality

## HotCoating High Gloss

### Premium quality high gloss panel finishing

With the KLEIBERIT HotCoating® technology, even standard melamine coated panels can easily be finished with a high quality, high gloss surface. The key is the good adhesion of HotCoating to melamine surfaces and smoothing of the surface with the KLEIBERIT HotCoating® process. Panels can be taken from the shelf as they are. Complex sanding processes or pre-treatments are not necessary. Even texturing melamine surfaces (e.g. mini pearl) is not an issue in the HotCoating process. In comparison to other processes,



the resulting high gloss surface is in the high end sector in regards to gloss, surface smoothness and depth effect.

- Use of cost effective, direct coated panels with a wide variety of designs
- HotCoating offers excellent adhesion to melamine
- Structured surfaces with spatula effect
- Impressive depth effect
- Highest gloss level
- Very good micro-scratch resistance
- Smooth surfaces
- Low cost per m<sup>2</sup>
- Extremely impressive mirror effect
- Reliable production concept

## HotCoating Design Edge

### Direct postforming of melamine panels with high quality HotCoating high gloss surfaces

Furniture and building component design especially requires a continuous form without a visible glue line between the surface and the edge. In the meantime the direct postforming process is optimized so that even the smallest radius is possible - as required for modern furniture design. KLEIBERIT adhesives especially developed for this process are ideal. Traditional high gloss surfaces often reach their limits in this application due to their thick, hard and brittle coat. It is extremely difficult to shape to a small radius without cracking. Due to



HotCoating's excellent flexibility, high quality, high gloss melamine surfaces can be shaped in the direct postforming process.

- Continuous look of surface and edge
- No glue line
- Brilliant high gloss and very good scratch resistance
- Small radius possible due to high flexibility of HotCoating
- Unlimited design variety - from solid colors to creative patterns in digital print
- Secure adhesion of HotCoating to melamine
- Excellent depth and mirror effect with relatively low coat weight



# y Surfaces

## HotCoating Super Matte

**Naturally matte surfaces with a warm feel, texture and highest resistance**

The trend towards naturally matte surfaces with a pleasant and warm feel follows examples taken from nature. Materials such as cork or wood exhibit these properties and offer noticeable pore structures. With the HotCoating super matte technology, surfaces can be created which possess exactly these properties and also perfectly protect the decorative layer with high abrasion, scratch and shock resistance. With the excimer technology which has been integrated in the HotCoating multifunction line, gloss levels can be switched from high



gloss (>90 GU) to super matte (<5 GU) at the push of a button. The highly flexible HotCoating film allows for interesting three dimensional textures with simple embossing calendar technology.

- Switch from super matte to high gloss at the push of a button
- Low gloss rates <5 GU
- Pleasant, warm and velvety feel
- Extremely good scratch resistance
- Resistant to fingerprints and shining
- Pleasant sound properties due to flexibility of HotCoating
- Highest abrasion and shock resistance (>AC5)
- Possibility for deep structuring of surface
- Ecological (no emissions from plasticizers or formaldehyde)

## HotCoating Digital Print

**Surface protection and printing base**

The trend toward individualization in design and technology continues in industrial sectors such as interiors, furniture and flooring. Digital printing has therefore become a particularly attractive technology and more economically feasible over the years due to developments in print and ink technology. The KLEIBERIT HotCoating® technology offers an innovative alternative in various fields of application as a surface coating for flooring, furniture and building components and follows the philosophy of digital printing:



- 1.) Simple processing technology
- 2.) Quick individual adjustment for different requirements
  - Highly abrasion resistant surfaces >AC5 according to Laminate Flooring Norm EN 13329 (S42)
  - Unrivalled flexibility/shock resistance
  - Inline embossing of three dimensional structures

The very good adhesion properties of KLEIBERIT HotCoating® to wood based materials and ink allows it to be used as protective finishing or as a sealing base for printing.

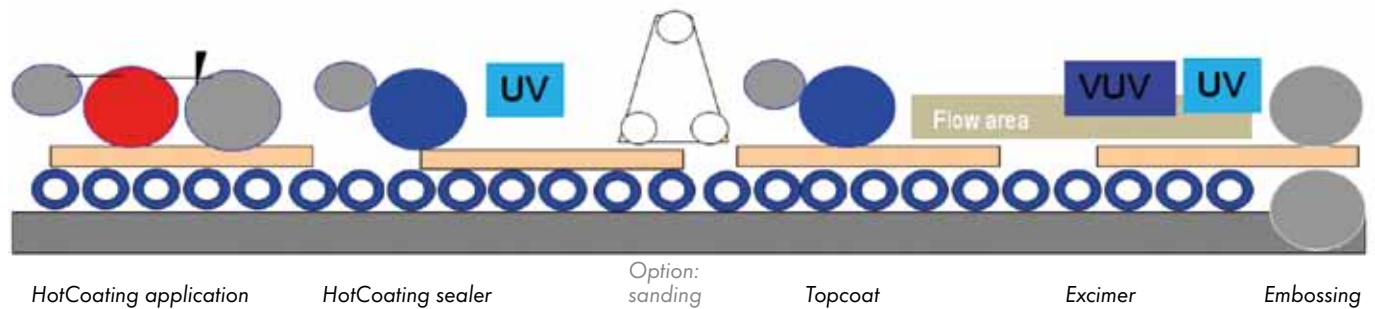
White HotCoating is applied as a smooth film with intelligent roller technology to wood based materials and therefore replaces complex, multi-layered base coat required at the respective drying zones and intermediate sanding.

- Very good coverage of white pigmented HotCoating
- Simplified processing technology without intermediate sanding and drying zones
- Very good adhesion and cohesion of HotCoating printing base

# HotCoating Process

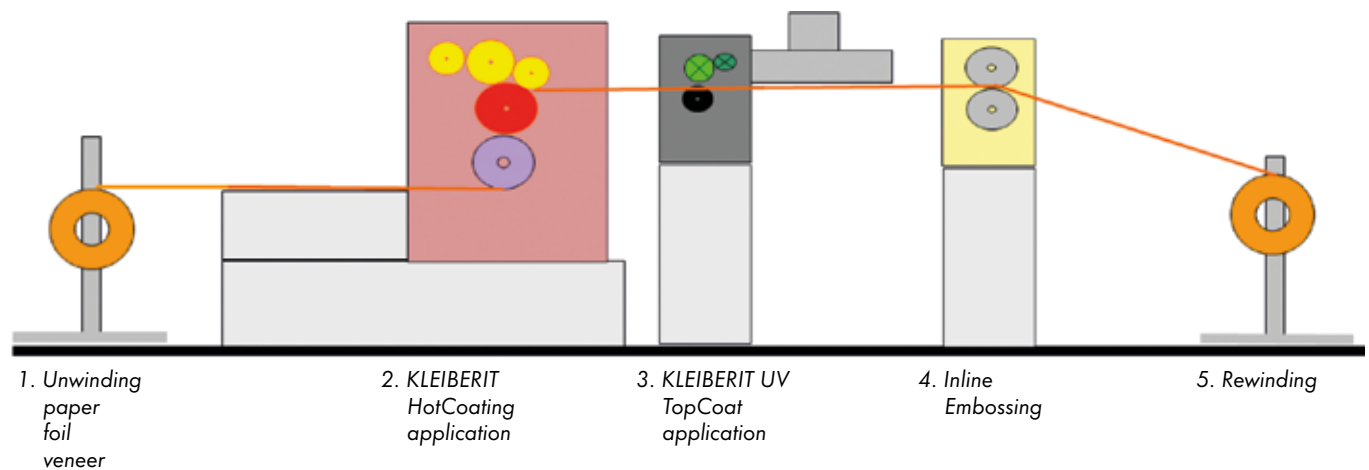
## HotCoating line for panel materials

boards, furniture, flooring, doors



## HotCoating line for roll materials

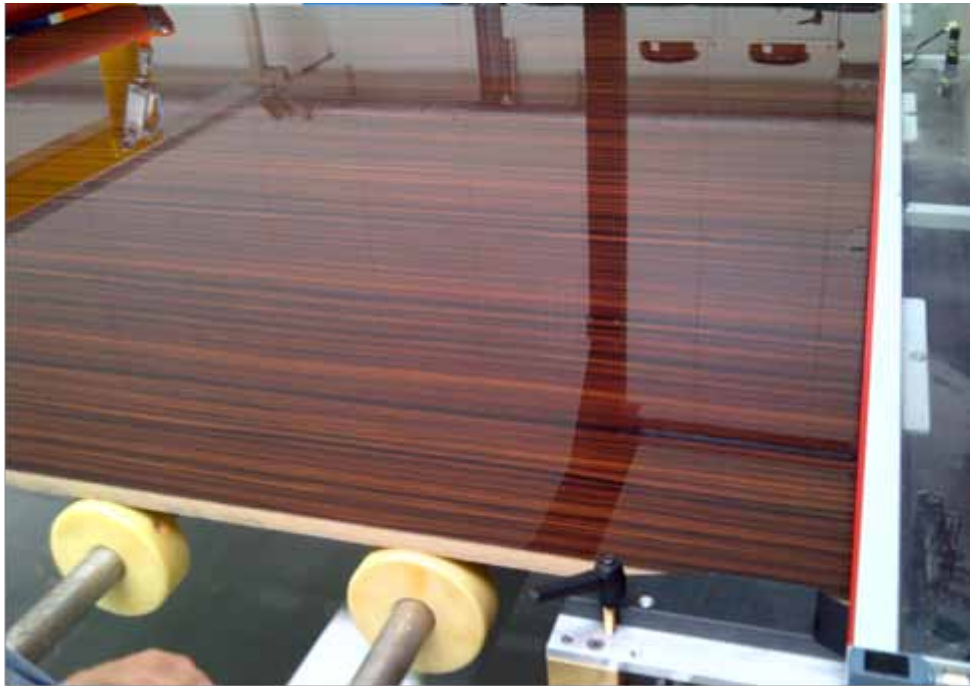
paper, foil, veneer



<b>PUR HC 717.1</b>	HotCoating	flexible, excellent universal adhesion, also to melamine surfaces
<b>PUR HC 717.5</b>	HotCoating	high abrasion resistance > AC5, extremely good shock resistance
<b>PUR HC 9383/581</b>	HotCoating Base	ideal print base: white coverage, water resistant, high cohesion strength
<b>KLEIBERIT 654</b>	Basecoat	good application properties, very good sanding, transparent or white pigmented
<b>KLEIBERIT 659</b>	Topcoat	very good flow properties, high scratch resistance, gloss level > 95 GU, transparent or white pigmented



Wood product manufacturers and furniture producers worldwide are using the KLEIBERIT HotCoating® high gloss technology on an industrial scale to finish full-sized melamine panels with a high quality, high gloss surface. Working widths from 1400 to 2400 mm are in use.



**KLEIBERIT**  
**HotCoating®**

High Gloss  
in the  
Industry



Due to the excellent adhesion properties and flexibility of the HotCoating coating, further processing of these high gloss surfaces is easy. Chips and damage common curing processing due to mechanical force on the brittle, glass-like high gloss are a thing of the past.

The HotCoating high gloss surface can be rejuvenated as needed with a suitable polish.



## Efficient Processing

- Milling
- Drilling
- Cutting
- Edging
  
- No breaking
- Precise edges
- Good scratch resistance
  
- Polishable



HotCoating surfaces have been tested according to the relevant international norms for furniture surfaces (DIN 68861, DIN EN 14322, DIN EN 438, ISO-MAT 0066, etc) and feature among other things extremely good micro-scratch resistance, abrasion and shock resistance.

## Prooven Quality

Property	Norm	Value
Gloss level	DIN 67530	> 90 GE (60°)
Micro-scratch resistance	IHD-W-466	Class 1, Method A
Scratch resistance	DIN 68 861 T4 / EN 14322	> 0,6 N
Abrasion resistance	IHD-W-461	> 2000 U    Class 3
Chemical resistance	DIN 68 861 T1 /IHD-W-460/ ISO-MAT 0066/ FIRA 6250	Fulfilled
Adhesion strength	DIN EN ISO 2409 / IHD-W-464	GK 1
Tape resistance	IHD-W-463	0 / (16h; 7d and 21d)
light exposure	DIN 15 187	Level 6
Shock resistance	EN 438-2 / EN 14322	15 N /27 N
Reaction to steam	EN 438-2 / EN 14322	Grade 4
Cracking	EN 14322	Level 5
Dry heat	DIN 68 861, Teil 8 /	8 B
Moist heat	DIN EN 12721	passed
Moisture and climate resistance	AMK Guide	passed
Cold - Check - Test	Cold - Check - Test	(25 cycles)

