

# Information

---

Advantages of using 3D-veneer

September 2011

Made by REHOLZ® GmbH

---

1. With 3D-veneer now it is possible to realize a design-language which is well known up to now only from fields of deformation of plastics and metals. Following them, it is possible to use different advantages of a three dimensional deformation like for example

- the ergonomic design of seating- and rest furniture, handles and others
- realization of light weight constructions with reduced material thickness on one hand and high stiffness and strength on the other hand (weight of GUBI chair shell is only 1.880 g),
- enclosing a volume with only few pieces for example for living furniture or bags.

Chairs made of 3D-veneer were honoured with important design awards and are placed in the permanent exhibitions for example of the Museum of modern Art in New York and the Danish Museum of Decorative art.

Awards of GUBI chair:

- Danish Design Prize,
- The BLUEPRINT Award, London,
- 1st prize Best Product overall, BO Bedre, Denmark,
- Neocon Award Most Innovative Design, Chicago,
- Forsnäs Award, Stockholm,
- Red Dot Award for Product Design, Germany

The renowned successful Danish design furniture company Fredericia introduced at the International Furniture Fair Cologne 2008 the rocking chair Stingray, first time produced with 3D-veneer. Since then this company observes great success with this chair. Meanwhile Stingray Wood achieved several international awards.

Awards Stingray:

- Interior Innovation Design Award, IMM 2008
- Red Dot Design Award 2008
- Design Award 2008 der Zeitschrift „Bolig Magasinet“ in der Kategorie „Bestes Design“
- Dänischer Designpreis 2008/2009

2. On one hand 3D-veneer is a young material with an enormous design potential which is only partly used up to now. On the other hand 3D-veneer has proved his serial usefulness. During the fair Interzum in April 2003 REHOLZ presented first time 3D-veneer used in the first two chairs (which were introduced in the marked just before) and otherwise a lot of prototypes, ideas and first beginnings. Today there are more than 100 products in the market which are produced under use of 3D-veneer.

For example the famous Italian furniture manufacturer Lapalma extended at the Milan Furniture Fair 2011 for the sixth time its 3D-veneer furniture family. After bench ZA Angle and OC chair in 2004, COX chair and VOLTA bench in 2005, OTIUM bench 2010 now they presented the MIUNN barstool.

---

Continuation from page 1

---

3. 3D-plywood mouldings can be used in combination with conventional 2D-plywood mouldings, because they can be made of the same initial material. In this way a conventional seat can be combined with an impressive, ergonomic 3D-back.
4. If conventional plywood moulding are pressed on the border of that what is possible in deformation, than a high percentage is pressed with mistakes. 3D-veneer can be the alternative surface material to spare waste and money and to guaranty mouldings without mistakes.
5. Mouldings made of 3D-veneer are produced in an industrial way. Established manufacturers of moulded plywood are using therefore their conventional machinery and UF-glue like in the conventional plywood production which is running parallel.
6. Furthermore 3D-veneer is used for coating of three dimensional non-woodbased-materials like for example plastics or metal. By this way since 2005 housings of Siemens Magnetom AVANTO are coated by REHOLZ with one layer of 3D-maple-veneer. Especially for that, REHOLZ developed and build a suitable application- and gluing equipment and is offering this achievement for other fields of products too.  
For example the company Loewe Opta GmbH presented during the IFA fair 2005 one housing of a flat screen model Individual 32" coated with 3D-Zebrano veneer.  
REHOLZ is delivering veneer coated side parts for the TV screens serially since this time.
7. Also for special application for exclusive interior designs 3D-veneer can be a solution. Our special solutions team is producing according to your specifications small series or single parts for exclusive furniture or 3D-veneer components for show cars, luxury yachts or aircraft.
8. REHOLZ® GmbH is delivering a complete package which is starting with the discussion and support of design and product development and is going up to the production of pressing tools and pressed 3D-plywood-mouldings like they are coming from the pressing machine – equal if it is prototype- or serial production scale.