

Veneer for bedroom furniture

Wood industry consultant *Michael Buckley* explores in this second of a series of veneer workshops, some of the applications and technical issues relating to the modern use of wood veneer, with particular focus on bedroom furniture.

Modern technology and high resolution photography today allows furniture makers to use foils and laminates that are often hard to distinguish from the real thing - wood. With prices of high quality hardwoods such as black walnut, red alder and many types of oak in vogue, there are real cost advantages with substitutes.

However, consumers have continued to show a preference for real wood ever since its markets were undercut by plastic products, and people continue to pay for the privilege of a natural product. This is not least, in that inner sanctum, the bedroom. And whether consumers are first time buyers at IKEA or mature homeowners shopping at Singapore's Park Mall, the demand for true hardwood can be satisfied with affordable wooden furniture with a range of choices facilitated by veneer.

Consider the humble birch, a temperate hardwood growing sustainably throughout the northern hemisphere from North America to Russia. This species is so strong that it was the chosen species for early aircraft construction, and remained the number one species for plywood for decades after its invention. For years birch has been at the centre of IKEA'S light-coloured furniture style, used often as veneer on MDF.

As a wood that stains, paints and finishes well, its real advantage is its performance as a wood that peels and slices easily for veneer. Another wood with similar but even better credentials is hard maple from the US and Canada. Better, perhaps because it is more fashionable, but more importantly, because of the very high quality finish that can be achieved. However, not all consumers want the modern light coloured contemporary look of maple, and in recent years, the trend has gone darker for both residential bedroom furniture as well as for interiors created by designers for hotels.

The halfway house in colour and richness is oak – especially when lightly waxed or finished. This is the most available and variable temperate hardwood preferred almost universally throughout the world's furniture markets. Compared to beech, a rather bland wood growing mainly in Europe, oak comes in all shapes and sizes, colours and grains. It grows from China and Japan, through Russia to Europe and right across the North American continent to Canada and the US.

According to the individual species – as there are very many – it varies in colour and texture. American red oak is open grain and not always reddish, whereas European oak

is rather brown compared to American white oak. When sliced on the quarter, as is usual in France, or rift as in the US, the grain produces great figure (character); and when flat cut, it produces a “cathedral” effect. Quartered oak is the species of old academia, for any one who has visited Oxford or Cambridge in the UK; and the species of the nobility for those who have seen French Chateaux. But oak is also the material of contemporary designers, who continue to create their new bedroom collections in every shade of oak imaginable.

For many modern furniture designers, especially those in contract or the hotel sector and those designing for retail chains in the mass market, re-constituted veneer “Alpilignum” – pioneered by Alpi in Italy – is increasingly popular. The consistency of the colour and grain patterns can be controlled, providing the advantages of manufactured foils with the advantage of real wood.

Alpi (www.alpi.it) claims even more:

Alpilignum is a multi-laminar wood veneer obtained by gluing, pressing and slicing sheets of dyed wood. It offers almost unlimited scope for producing colours and grains that reproduce high-quality woods, as well as creative textures. Using raw materials originating from environmentally managed forests and from agricultural plantations, Alpi technicians reconstruct high-quality woods through a precise industrial process, offering the furniture industry a top-quality semi-finished product with dimensional and physical/mechanical characteristics superior to those of natural products. The process also maintains the utmost respect for the environment.

These properties were also at the centre of the German veneer group Danzer’s objectives when they launched their architectural veneer product “Vinterio”, which claims an



American Black Walnut Vinterio veneer by Danzer

entirely new look and numerous advantages over conventional wooden surfaces, thus delivering many benefits. The number of individual, exclusive surface designs that can be created with Vinterio is almost unlimited. Surface patterns can always be repeated in exact detail and with the highest quality. Vinterio is made completely from real wood species and brings out the beauty of natural wood in a brand-new way and it claims is unique. Due to the design and an innovative manufacturing process, Vinterio allows for accurate cost calculation and cost-efficient processing.

The availability of manufactured wood is not, however, always appropriate, especially for furniture producers needing to match solid wood, as in bed legs, with head boards requiring the use of veneer on MDF or plywood. There are many species available in one form or the other but not always in both. Use of readily available species is the key solution to this, especially if commercial freedom to play the market is a key cost factor. So the use of ash, beech, cherry maple, oak, and walnut, for example, may be commercially expedient.

Tropical species, including those from Southeast Asia, Africa and especially South America, may be less easily matched for lumber and veneer, although there are several furniture favourites, such as sapele, teak and wenge, that normally can be. With this issue in mind there is also the question of edging



Drinks cabinet in Birds Eye Maple veneer by Philip Koomen



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Edinburgh Supreme Law Courts in American cherry by Luke Hughes

veneer, and here the re-constituted producers often have an advantage with matching wood edge-banding. Alpi's is made of multi-laminar veneer bonded to a non-woven fabric, available in several finishes – particularly good for soft-forming and covering curved surfaces.


The reconstituted producers have now gone one step further. For example, Alpikord is a lacquered multi-laminar veneer built into a high pressure laminate. Developed from multi-laminar wood technology, this product unites the beauty of real wood with the versatility of HP laminate. The result is a pre-finished sheet of wood, available as large size (3,050 x 1,300 mm) and ready for application, which reduces working, lacquering and laying times compared to traditional multi-laminar veneer. Alpikord is said to maintain its beauty over time, complementing the distinctive warmth of wood with the characteristics of resistance, stability, homogeneity and a consistent colour and grain pattern.

This rather brings us full circle back to plastic foils, as far as the real touch of wood is concerned, for high pressure laminate on real wood still looks rather like plastic!

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American white oak veneered bed by John Hetherington
Photo: AHEC



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Mr Michael Buckley's expertise is on the uses and market applications of hardwood species and products. With a Masters in the US and EU hardwoods, Mr Buckley is a Fellow of the Institute of Wood Science and commenced his career working in tropical plywood and panelling in Europe and Asia. He is a Liveryman of the Worshipful Company of Carpenters, an ancient craft guild in the City of London. In recent years he has taken a keen interest in designing with timber, working with leading furniture designers and many architects. Now based in Singapore, he continues close ties with furniture and panel industries in the region.