



The lightweight Lisocore board can be processed with standard tools; true also of edge-banding all grades of material.

Lightweight Solutions: Innovation Driver and Reliable Partner  
**NO-COMPROMISE LIGHTWEIGHT STRUCTURES**

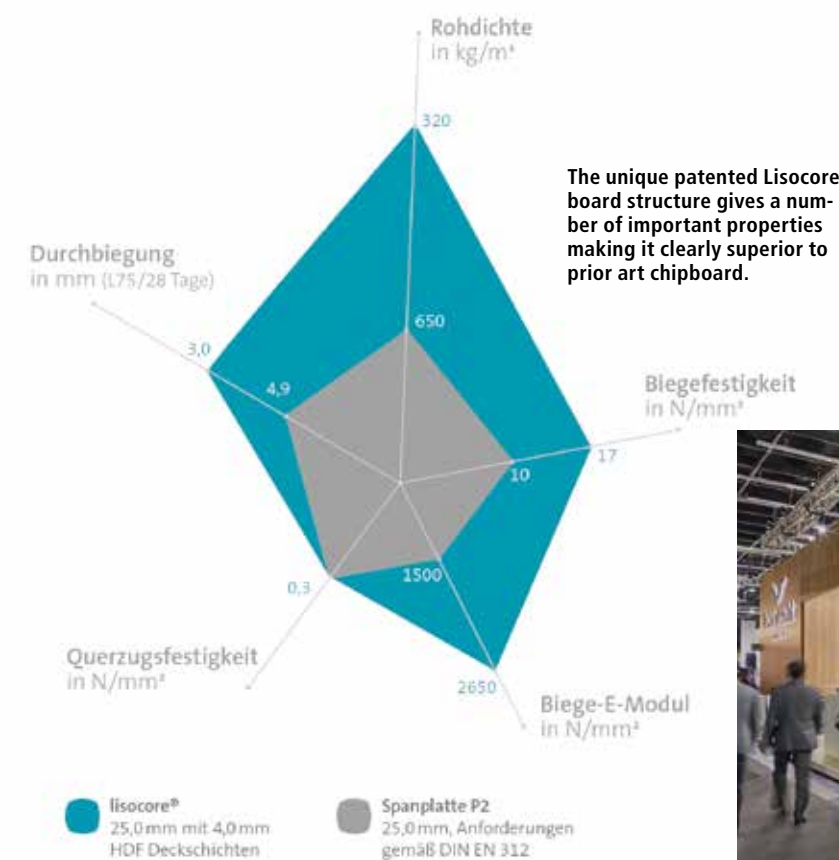
Lisocore has a wide range of uses, such as anchoring standard metal fittings, or the integration of functions inside the panel.



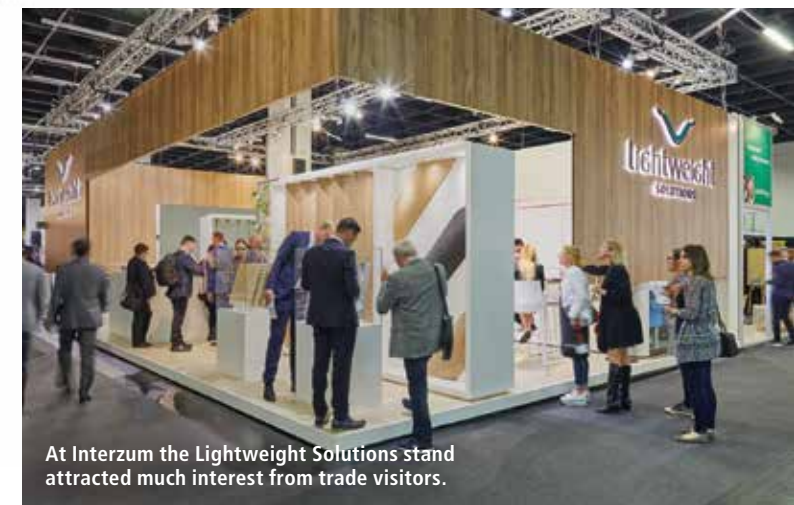
If there is a specialist producer of lightweight materials that is not merely reliable and creative – but has a product with a huge range of user options – then it has to be Lightweight Solutions of Bad Aibling in Germany. Not only are their ‘Lisocore’ boards and panels very easy to work without special tools, their unusual properties extend the range of possible functions and designs beyond those of earlier boards and panels. In addition, Lightweight Solutions now works increasingly with leading mass-producers and specialist suppliers to the furniture industry, providing even better access to supplies of innovative Lisocore products.

Not only is Lightweight Solutions a manufacturer of lightweight boards; it is also a specialist in lightweight construction. The company develops and manufactures materials and products specifically to meet the requirements of modern lightweight structures. This adds value and removes previous design limitations, combined with ease of working and high quality.

Lightweight boards make efficient and reduced use of raw materials, while they also have advantages for the furniture maker and not least the end-user. These are all prime objectives for Lightweight Solutions, which not only has a superb basic range, but also makes lightweight products for individual customers, in every case perfectly honed to meet a particular need and application.



The unique patented Lisocore board structure gives a number of important properties making it clearly superior to prior art chipboard.



At Interzum the Lightweight Solutions stand attracted much interest from trade visitors.

Quite obviously such products are perfectly in tune with the times, in particular with respect to sustainability, because the Lisocore board makes highly efficient use of materials and energy. Further, the manufacturing process has ultra-low emissions and needs minimal quantities of adhesive. This year Lisocore was chosen by virtue of its sustainable qualities for inclusion in the Green Product Selection; it is presented and described at exhibitions and trade fairs as an ecological high-performance material.

Fundamentally, Lisocore is a generation of materials that opens up a wide range of new options with respect to both design and function. Each board has at least two thin facing layers joined by a three-dimensional core structure. The inner face of each outer layer has an array of milled pinpoint detents, each of which receives the tip of the matching three-dimensional core. Each matching tip and detent are bonded together by an ultra-strong adhesive.

The technology embodied in the boards combines low weight with incredible static properties, and the ability to achieve very high functionality. Together, these can result in products that trigger new ideas with potential consumers; for example, the voids within the core structure can form the space for a secondary installation of some kind. Low-cost electric installations are quite straightforward.

Eltec chief executive Thomas Wülbeck: “We find that Lisocore has a wide range of user processing-options, choice of surface, adhesives and edge-banding processes. It fits perfectly within our portfolio and has an excellent price-performance ratio.”

Increasing numbers of industrial processors find that, in contrast with other lightweight materials, Lisocore has no limitations with respect to its

working characteristics. Oliver Hunger, chief executive of Hunger Möbelproduktions GmbH says: “From the industrial point of view, the material is very easy to work. As far as I am concerned, it is the best lightweight board on the market.” Lightweight Solutions makes boards of from 12 to 120 mm and is able to set the thickness specified by the customer to within one tenth of a millimetre.

The chief executive of Christian-Kröger Klaus Mattszik is similarly enthusiastic: “By virtue of its very fine tolerances and different board shapes, we are able to make flexible use of Lisocore. We have absolutely no problems working this material at any stage of production.”

Likewise, Lisocore takes a wide range of functional or decorative coating materials such as HPL, CPL, foil, paint, lacquer or veneer, so there is no surprise that it has found uses in a wide range of industries and products. For example ‘Lisocore’ is used by well-known companies in furniture, trade fair stand construction, shop-fitting, caravans, cruise ships and building interior completion applications. Similarly, the lightweight boards have found increasing use in the growing market of ultra-compact homes. Lisocore is also perfectly suited for large components combining light weight with great strength such as sliding doors, workbenches, tabletops and upholstered furniture.

One outcome of the development has been that this type of lightweight material is an innovation driver. The combination of light weight and other characteristics has resulted in completely new product construction and new design horizons. By choosing Lisocore and working with Lightweight Solutions, creative manufacturers can make products that are totally different from those of their competitors, while giving their customers added value.





Ophelis specialises in designing modern office furniture and uses Lisocore in the Ophelis Deem for agile project work. They chose this board for its strength, light weight and easy handling. (Foto: Ophelis)



This year for the first time Lightweight Solutions exhibited at Interzum. Not only did they get much attention, but the event was the starting point for cooperation with new industrial partners and mass producers. At present the lightweight boards are sold through the trade by such companies as Klöpferholz, Weltholz and ZEG, to manufacturers of semi-finished or finished products by companies such as Christian Kröger, Erform, Eltec, Formaplan, Timbertex, Leitopal, Schweikart, Ackermann Vöhringer, Heckwerth and Stengele. In addition to the standard-sized boards from Lightweight Solutions, there are also unfinished sliding doors with birch multiplex braced edges.

At present the boards are only available in Germany, Austria and Switzerland, but Lightweight Solutions is in the process of appointing stockists in Italy, Sweden, Slovenia, Turkey, Russia, India, China, New Zealand, Australia and Canada.

Given its useful properties, increasing numbers of users such as Ophelis adopt the boards for innovative products.

Ophelis designs and builds modern office equipment with a focus on creating a modern environment and handling the associated changes. The company has a product portfolio and concepts that create a working environment in which people feel well and work better. They always take the comprehensive approach – something they share with Lightweight Solutions. The products are made at Bad Schönborn in South Germany.

The company supplies tools for agile project work within the Ophelis Deem set. This also includes Deem Memo and Deem Memo Wall boards. Further, they make analogue images and processes forming an important part of agile project work. The boards are the central meeting place for agile teams and the nodal points for information exchange.

Deem Memo is a movable presentation surface that can be used as a whiteboard or projection screen and supports the product with visualisation; it can be moved about the room on castors.

By contrast the Deem Memo Wall is fixed to the wall and used as a presentation surface. The removable whiteboard is 1200 x 1200 mm.

Lisocore is used in both products. Ophelis manager Holger Bajak says: "Lightweight Solutions showed us how Lisocore provides for an innovative design providing the basis for our product. It combines light weight with strength to provide simplified handling for our end-product." The bonus is that Lisocore has advantages for both the Lightweight-Solutions customer and the end-user.

The same holds good for the carpentry business of Lisocore-user Wilhelm Bruckbauer GmbH, which used the material to fabricate three large-format sliding doors with solid oak faces, with an overall length of almost 30 metres. Each door section is 1.80 x 2.60 metres and several attempts to make them with prior art lightweight materials failed. Willi Bruckbauer: "If the facing panels are too thin it is impossible to anchor any fittings. But with Lisocore I can choose the type and strength of the facing panel to meet the customer requirement. We always use this material if we need a combination of strength and light weight, or require great width and no visible deformation." Bruckbauer also likes the fact that the boards are easily handled: "Lisocore saves me a lot of time with respect to the entire logistics chain."

For these reasons Lightweight Solutions will exhibit Lisocore at more trade fairs to promote the product's advantages and company strengths to a wider audience. They will be at this year's 'Sicam' in Pordenone, Northern Italy; also 'Mebel' in Moscow. Next year trade visitors will find Lightweight Solutions at ZOW in Bad Salzflun, Euroshop in Düsseldorf and Holz Handwerk in Nuremberg. Definitely worth a visit.

@ Further Information: [www.lightweight-solutions.de](http://www.lightweight-solutions.de)



The unfinished lightweight Lisocore sliding door elements with edges closed up by multiplex birch strip, were used by the Bruckbauer carpentry and interior finishing company at the Munich Paulaner Brewery, and greatly reduced the handling problems.

## Helmut Nerf, Sales and Distribution Manager, Erform GmbH



"We are suppliers of pre-fabricated furniture components and composite panels and also specialise in post-forming, for which reason easy handling and easy working properties materials during production are of great importance.

We have found that Lisocore meets all our requirements.

For example, there are no limits on the final surface finish. It makes no difference whether we need high gloss, super-matt laminates or other coating materials. The board tolerances are very fine and the very

flat outer face gives a perfect quality surface finish.

One of our customers is Ophelis, and they agree with us. In addition, we use a wide range of cutting, shaping and finishing processes, quickly and easily. We can use precise drilling/milling on any type of complex formed component, or edge banding and this gets us great respect from our customers. The three-dimensional core structure and strong facing panel mean we can easily incorporate electrical wiring in furniture. The structure also makes it easy to fit and anchor screw fittings directly to the surface, or fit spreading blind rivet nuts. But Lisocore boards are absolutely tops with their light weight. Because of its versatile uses, we recommend Lisocore for the creation of flexible workspaces and complex projects. Of equal importance for happy customers is a good and reliable working relationship with the supplier. With Lightweight Solutions, it all works perfectly.



Carpenters and building interior completion firm Wilhelm Bruckbauer GmbH was tasked with the demanding installation of wall cladding and sliding doors at the Paulaner Brewery in Munich and chose Lisocore for the job.

(Fotos: Judith Bruckbauer)