

■ KOSKISEN AND STORA ENSO INNOVATES ZERO PARTICLE BOARD

Koskisen implements NeoLigno by Stora Enso, a bio-based binder, to make furniture boards in place of fossil-based resins. The raw material for the furniture board and the binder are both made of wood and obtained through the production process flows of the two businesses. As a result, the Zero Particle Board's raw ingredients are 100% bio-based.

To create this brand-new bio-based product offering, Koskisen and Stora Enso's NeoLigno worked together to create a sustainable solution. Koskisen made finding ways to improve its CO² balance a top priority. Due to their typical fossil-based composition, the binders employed in the panels were one of the major contributors to CO² emissions during production. Koskisen collaborated with Stora Enso to address this problem because lignin-based NeoLigno makes the Zero Particle Board bio-based. It is a fantastic chance to introduce environment-friendly and sustainable products to the marketplace. Zero Particle Board is a great illustration of a circular economy product because it is bio-based. Wood chips, the primary raw material for the panel at Koskisen, are produced on-site.

Product lines will be extended to plywood and bio-based products as well. Koskisen's mentions that they are finalising and optimising the production of Zero Particle Board in Järvelä, Finland. Targeted launch of the commercial product and deliveries to customers is in autumn 2022. Further, implementing NeoLigno to plywood and the range of bio-based products is also thought of.

"Consumers are very eco-conscious and are aware of their health and indoor air quality. NeoLigno is a unique ingredient for indoor furniture, that is equally safe and reliable as it is sustainable. With Zero Furniture Board, we can fulfil our customers' requirements for indoor air quality, as well as for low-carbon products. The glue in wooden panels has been non-renewable for decades.

It has been very cost efficient and hard to replace with bio-based materials. We have studied different bio-based options for years at Koskisen, and now we have been able to take big steps forward with NeoLigno® by Stora Enso.

It is the most promising binder in bio-based glueing, and the first bio-based binder that can be integrated into our product says Eemi Valjakka, Product Manager at Koskisen.



Source: <https://www.woodandpanel.com/woodnews/article/koskisen-and-stora-enso-innovates-zero-particle-board/>

■ 3D-PRINTED CHAIR IN BIOCOMPOSITE

You can do a lot with sawdust from Moelven Notnäs. A 3D - printed chair in biocomposite - true symbol of the future. Malin's chair is 100 per cent recyclable and has attracted widespread attention from several quarters, including a spot at the Stockholm Furniture Fair in 2020.

But for Malin, it is about more than simply being a beautiful chair. *"It became a chair that would show what is possible. I consider it the starting point for a new and more sustainable way to design and produce furniture"* said Malin Fleen.

Producing furniture using 3D technology not only gave Malin the opportunity to test new shapes - it also meant an opportunity to combine materials in a new way. "It seemed unnecessary to replicate something that is already built traditionally. For me, it is about attempting to optimise the possibilities of the new technology.

3D technology also allows for softer shapes that can be difficult to achieve by hand. With this technology, I can also use less materials, as the combination of the materials together is so strong," Malin says.

Supporting innovation and identifying new ways to utilise by-products are two areas that Moelven is more than happy to contribute towards.



Source: <https://www.moelven.com/news/news-archive2/2021/3d-printed-chair/>

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