

## 3D printed and fully degradable sawdust lamp



Cocoon is a 3d printed decorative pendant celebrating craft and pushing the boundaries of new and sustainable technologies by transforming wood waste into an organic, technologically advanced light.

A collaboration between designers HagenHinderdael and 3d printing technologists ForustTM, Cocoon is a decorative pendant light celebrating an innovative way to reduce timber waste through rethinking deforestation and the take and make production process. From the form through to its materiality and manufacturing, we sought to develop a product that is not only eco-friendly but fully degradable.

The sculptural form of Cocoon has been developed to resemble an organic structure that speaks to the natural materials being used and creates an opportunity for beautiful protrusions to throw shadows of light on to the surrounding surfaces. The shell itself is made of 3d printed sawdust and has been developed in collaboration with ForustTM, a new 3d printing process by Desktop Metal that sustainably produces functional end-use wood parts through high-speed manufacturing, using methods that are non-destructive to our planet's ecology. It comes in two typologies each with their own unique shape. Using ground-breaking 3d printing technology, layers of powdered wood are bound together with lignin into a 250mm (w) x 460mm (h) Cocoon. Once out of the printer, each piece is carefully hand-stained and finished. In this process, there is also the opportunity to finish Cocoon in a wide variety of wood species including natural, oak, teak, and walnut.

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