

Newsletter



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REX- The deposit chair

New Dutch furniture brand Circuform has launched REX, a recycled plastic "deposit chair" designed by Dutch designer Ineke Hans, with the promise that customers can return the product after extended use and receive a partial refund. The brand's philosophy is rooted in the circular economy, the concept of a production and use model that designs out waste and puts minimal strain on natural resources.

The chair is designed to have as little environmental impact as possible, through innovations at both the start and end of the product lifecycle. It is made using recycled plastic from fishing nets, toothbrushes, office chair components and other industrial waste. The retail price includes a 20 euro deposit, which Circuform will refund to the customer if they return the chair after use. Old chairs can then either be repaired and reused or recycled to create new chairs. The company has set up a series of deposit stations around the Netherlands, to make the process of returning old chairs straightforward for customers.

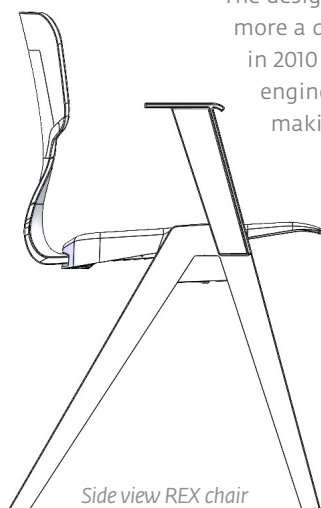


Parts of the REX chair

assembly and disassembly techniques and the optimisation of transport and resources. Having researched sourcing of materials and suppliers, in the end the choice was made to make REX of a specific type of recycled plastic, PA6, using injection moulding. This thermoplastic, commonly known as nylon, offers good durability and is easily and reliably sourced, as it is widely used.

The complete engineering to production ready status was then done by BPO, ironing out the compromises that had to be made in 2010. The seat and legs are produced in one-piece,

The design of Ineke Hans was developed more a decade ago, it was launched in 2010 as the Ahrend 380. BPO had engineered that version as well, making sure the strength and stiffness demands were met, while having an aesthetically pleasing form. While the original version was also made of recycled materials, Hans felt the design was never fully resolved, due to technical limitations at the time.



Side view REX chair

BPO consulted Circuform on the environmental impact of materials, production,



Ineke Hans

interchangeable mould parts are used that make the chair suitable to be supplied with or without armrest. The backrest is made separately, but slots easily into a gap in the rear of the seat. "Otherwise, you don't get the flexibility that you need in the backrest, while having the appropriate sturdiness in the seat and legs," said Hans. The chair was also optimised to be better stackable, making it easier to use for businesses.

"We wanted to make a chair that works for everyone," said Hans. "Now it is finally done as it was meant to be."

For more information, go to:
www.circuform.com;
www.inekehans.com

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Ineke Hans with the REX chair

Latest Injection Moulded Suitcase for Samsonite Group

Samsonite is the market leader in the luggage industry and focuses on innovation and design. It has been leading the way in the use of new materials in the industry for 110 years. BPO has been helping Samsonite product developers design new cases for many years. For the development of the new Magnum case, there was an intensive collaboration as well.



Magnum suitcase

Magnum is the newest and lightest injection moulded polypropylene case with a three-point closure. The shells are held together with three locks, which places high demands on the stiffness of the intermediate zones and the strength of the case as a whole. Before a suitcase is launched on the market, it is thoroughly tested in the Samsonite laboratory. BPO made computer simulations of some of the tests during the development of the new case.

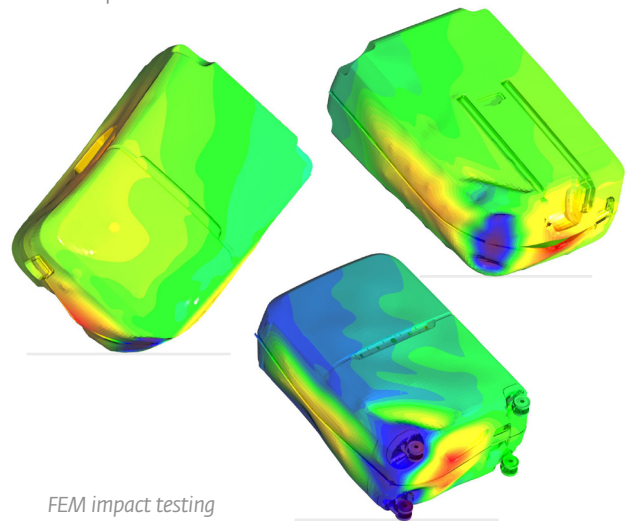
To get an idea of these tests, such as drop tests, look at:

www.samsonite.nl/madeineurope/#quality-tests.

The results of the simulations were used to make choices between different solution directions for the construction of the shells, locks and fastening of various components. They were also useful for maximising the quality of the case and of course minimising the use of

materials. The 75 cm version of the new suitcase weighs only 4.1kg.

The suitcase is available in different colours and materials, including a recycled version. In that situation, the suitcase is made of recycled household refuse: recycled yogurt containers for the shells and recycled PET bottles for the liner.



FEM impact testing

The case is injection moulded and assembled at Samsonite Europe in Oudenaarde (Belgium). More information can be found at: <https://www.samsonite.nl/magnum-eco/>



Magnum suitcase, details lock and handle mechanism

Goodbye 2021, Hello 2022!

The year is almost over and despite the challenging COVID-19 circumstances, 2021 has flown by. Hopefully the end of this situation is in sight and face-to-face meetings will become regular again next year.

2021 was an excellent year for BPO with many new products and projects. We wish all our relations all the best for 2022, not only in business but also in personal life with a lot of spending time with those dear to you and, above all, good health!



Happy Holidays and best wishes for 2022!