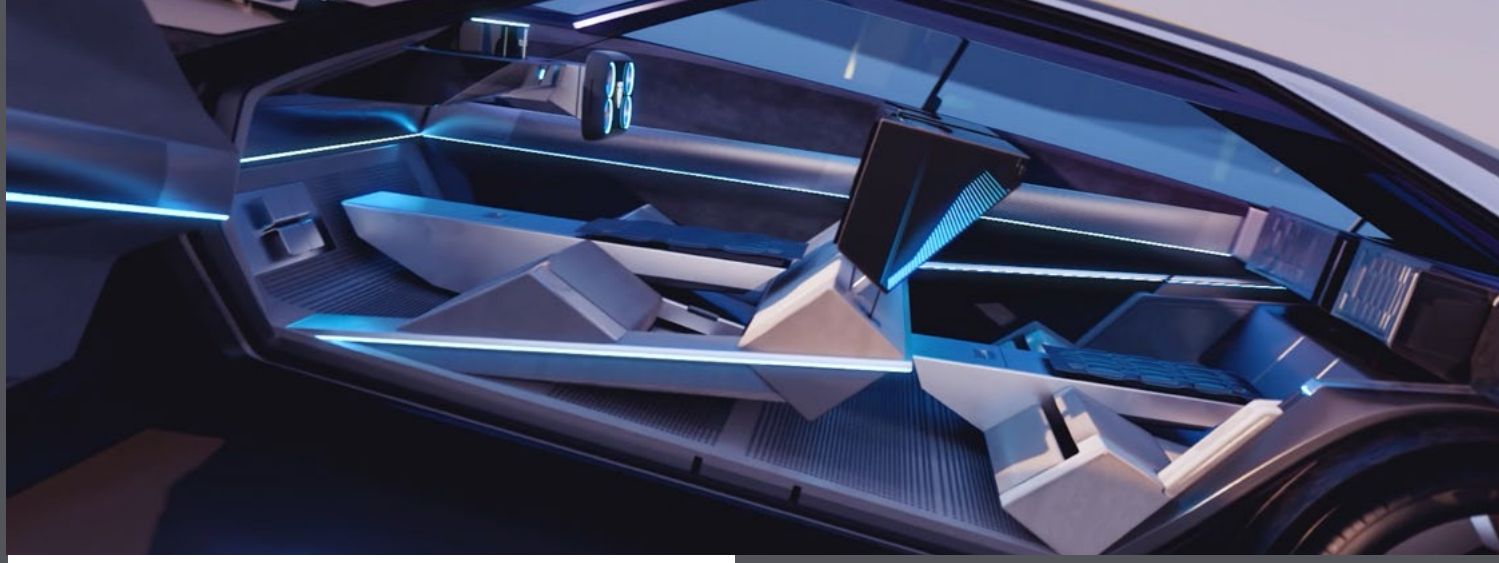

Peugeot Drives Car Interior Design Revolution with Stratasys 3DFashion™ Technology

Stratasys 3DFashion technology supports a new era for Peugeot's electric vehicles, with direct-to-textile 3D printing creating visually impactful interiors.

stratasys

Case Study

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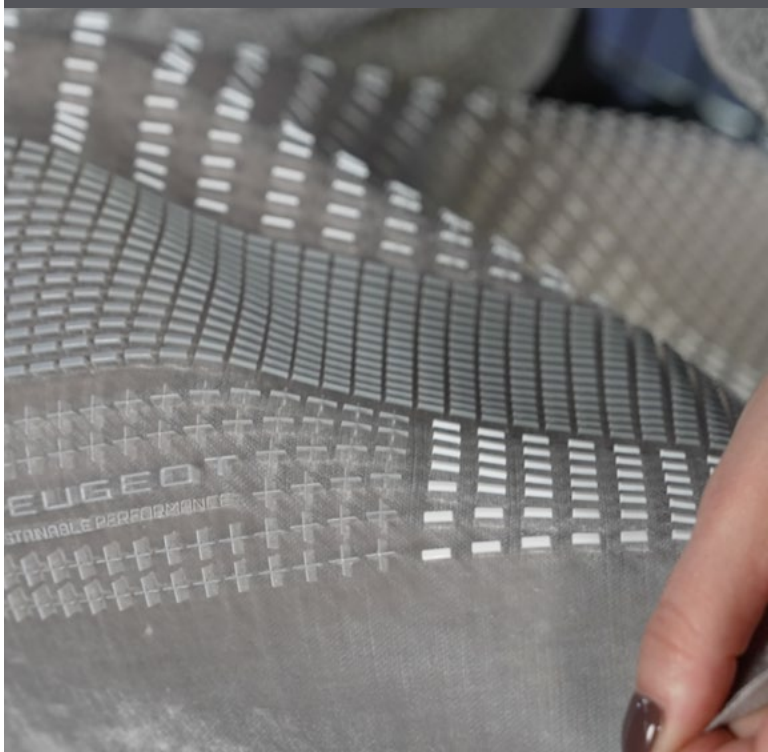
Often, there is a delta between what we imagine and what we can obtain, so it was quite magical to see our idea arrive precisely as envisaged and with a remarkable quality of execution.

Maud Rondot
CMF Designer, Advanced Design Team at Peugeot



The use of Stratasys' 3DFashion technology within the Inception Concept car enabled Peugeot to incorporate 3D-printed 'micro-architectures' into the velvet material.

Customer

The Advanced Design Team at global automotive manufacturer, Peugeot, is the department responsible for the future vision of the Peugeot brand.

Embodying its vision for future electric vehicles, the Inception Concept is the first design manifesto led by the company's brand design director, Matthias Hossann, and represents a major change for the marque.

Challenge

The interior of the new Inception Concept car is aligned with Peugeot's new design architecture for electric vehicles - featuring a minimalistic cockpit designed to support the car's overall objective of reinventing the driver experience.

"At Peugeot, we always like to combine function with aesthetics," said Maud Rondot, CMF Designer within the Advanced Design Team.

A fundamental theme of the Inception Concept was to capture the relationship between materials and light, which required the Peugeot Advanced Design team to use materials that would befit the car's specific look and embody the brand's vision for future electric vehicles.

To this end, the objective for the Inception Concept's seating area was to modernize the velvet material, and decompartmentalize the design by extending that material into a visually impactful floor mat.

However, with traditional methods of embellishment, it was not possible to achieve the height and thickness the team wanted for the interior's material, and a protective overlay on the floor area would diminish the impact of the seamless interior.

Solution

To support the Innovation Concept's move towards new architecture, new space and decompartmentalization, Peugeot worked with single material effects. This saw the team select a metallic shade for the velvet, which is designed both visually and symbolically to play with light and convey something more futuristic, before using the J850 TechStyle™ 3D printer to create the semi-transparent 'micro-architectures'.

According to Rondot, the floor area space would typically need to be treated with a protective overlay, but with Stratasys's direct-to-textile 3D printing, the Innovation Concept now delivers a unique coalescence of functionality, texture and aesthetics that would not have been achievable with other technologies.

"Although we have access to relatively flat designs with current embellishment methods, it is not possible to build thickness and height," explained Rondot.

With Stratasys's exclusive 3DFashion technology, the team could create immersive seats covered with a velvet made from 100% recycled polyester that extends onto the floor, and incorporates stunning 3D patterns.

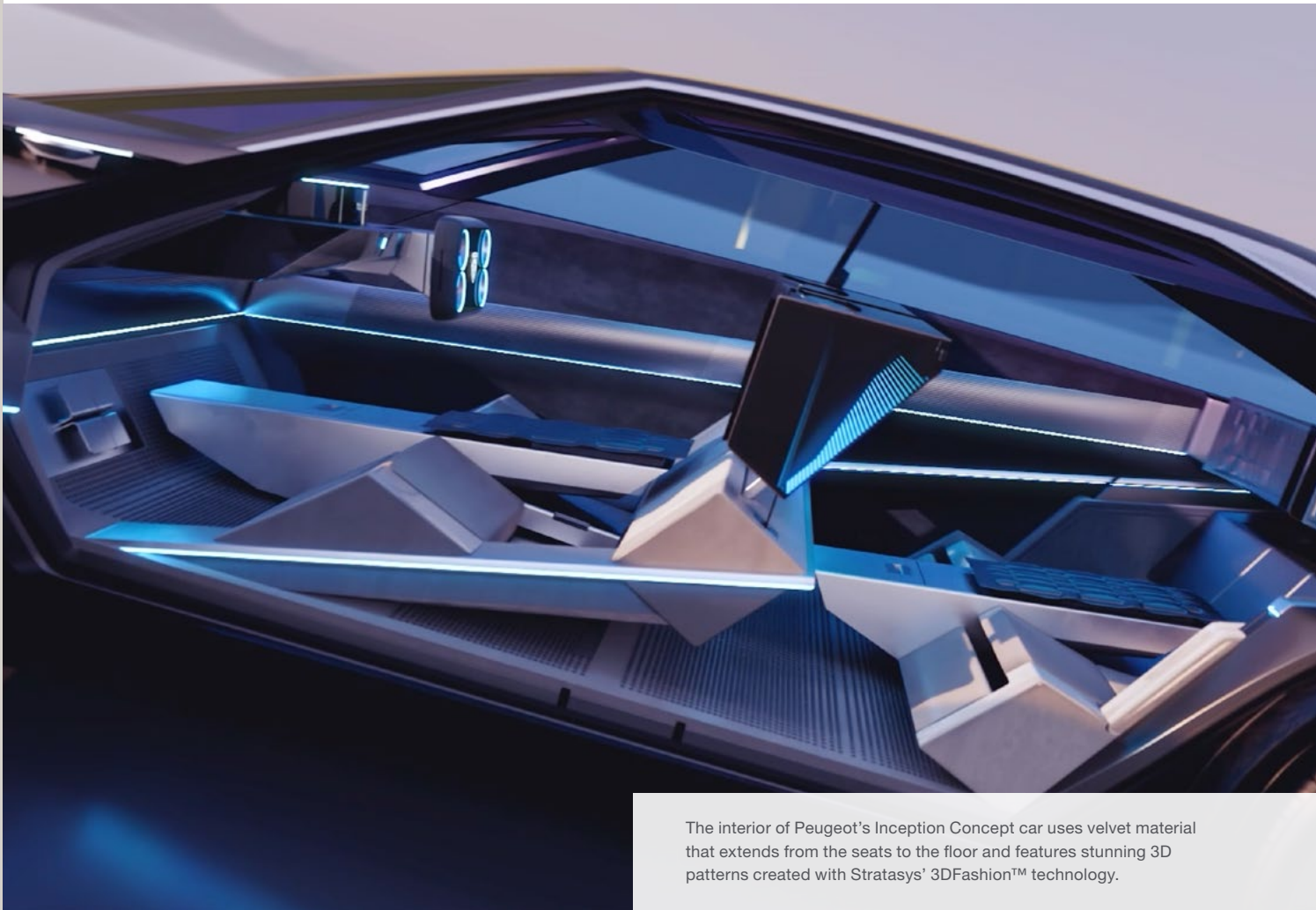
Impact

By integrating Stratasys' innovative 3DFashion technology into the interior of its Inception Concept, Peugeot has achieved a level of resolution that would not have been possible with traditional embellishment methods.

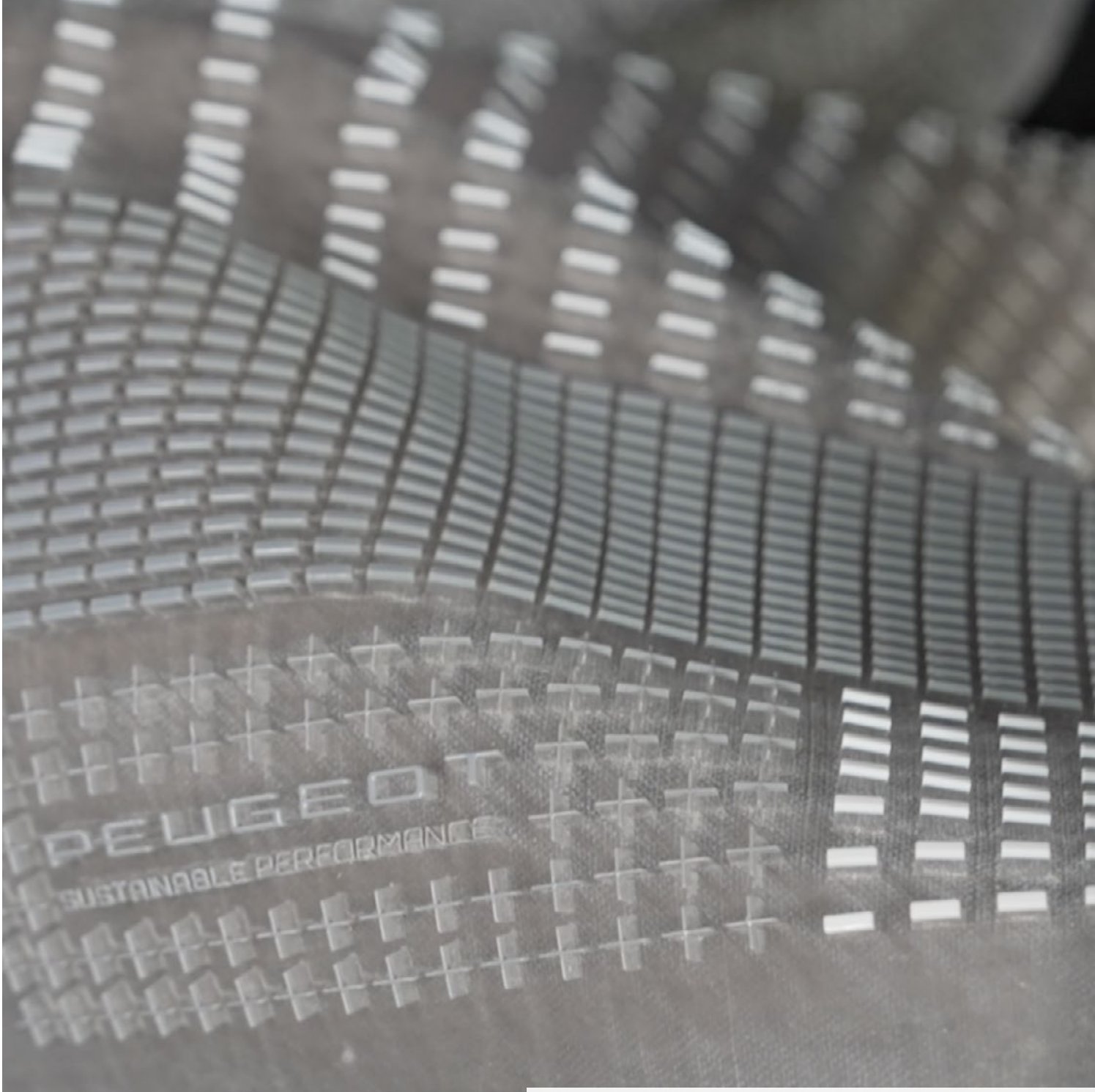
The benefits to the team were clear. The durability and efficiency of 3D printing was critical to the production of the Innovation Concept - and 3D printing gave the Peugeot team the ability to easily modify and reprint the files. With no need for molds, 3D printing technology is revolutionary for industrialization.

"Often, there is a delta between what we imagine and what we can obtain, so it was quite magical to see our idea arrive precisely as envisaged and with a remarkable quality of execution." - Maud Rondot, CMF Designer, Advanced Design Team at Peugeot

Click here to watch the video of Peugeot CMF designer Maud Rondot talking about the project.



The interior of Peugeot's Inception Concept car uses velvet material that extends from the seats to the floor and features stunning 3D patterns created with Stratasys' 3DFashion™ technology.



Peugeot turned to Stratasys to meet its need to 3D-print directly onto flexible velvet material

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