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joris laarman lab 3D prints aluminum chair demonstrating cellular level design

joris laarman lab 3D prints aluminum chair demonstrating cellular level design image courtesy of friedman benda gallery

3D printing has been around for quite a while but is rapidly developing due to less expensive printers, increasing building volumes and many new printable durable materials. they are developing into a production tool for actual products rather than prototypes. joris laarman lab introduced a piece of furniture as an example of the manufacturing potential through a 3D printed an 'aluminum gradient chair'. first displayed at friedman benda gallery in new york city as part of the

[&]quot;Joris Laarman Lab 3D Prints Aluminum Chair demonstrating Cellular Level Design." *Designboom*, March 29, 2016.

studio's 'bits and crafts' may 2014 exhibition, the chair was one of three in a series researching microstructures for furniture.

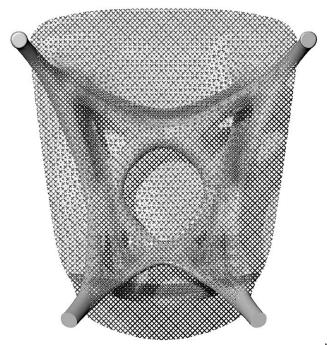


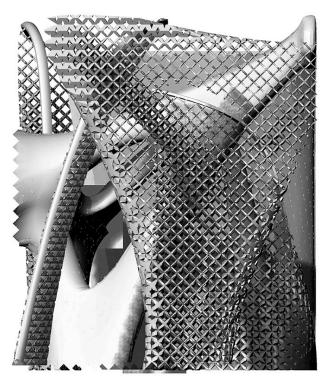
the team looked at engineering a chair at a cellular level allowing very intricate esthetics to become more useful and elaborates on the use of aluminum in furniture design in the digital age. directly laser sintered in aluminum, joris laarman lab created a lightweight structure like foam that was engineered on a cellular level to address specific functional needs for different areas of the object using generative design tools and new material research. the solid cells in the design create structural strength and rigidity while the more open cells create material reduction and lightness, all within one single printing technique.

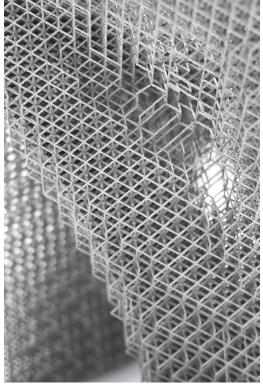


"Joris Laarman Lab 3D Prints Aluminum Chair demonstrating Cellular Level Design." *Designboom*, March 29, 2016.

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images courtesy of joris laarman lab

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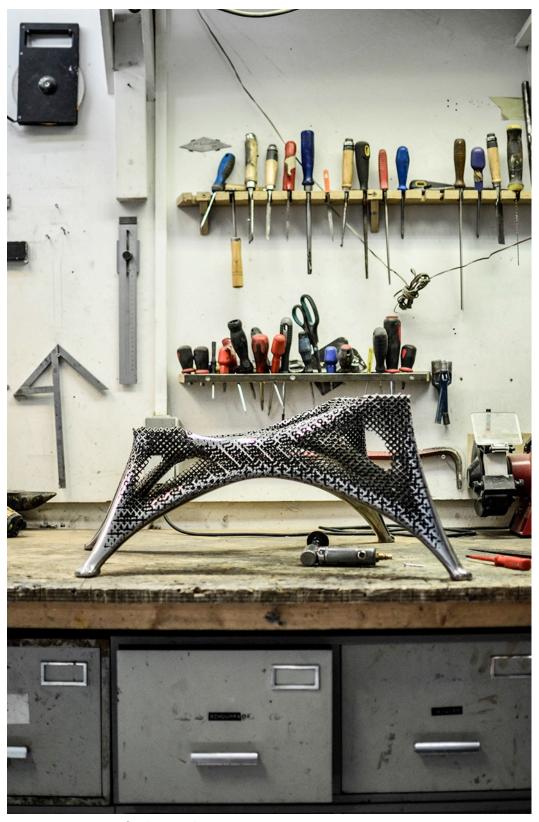


image courtesy of adriaan de groot

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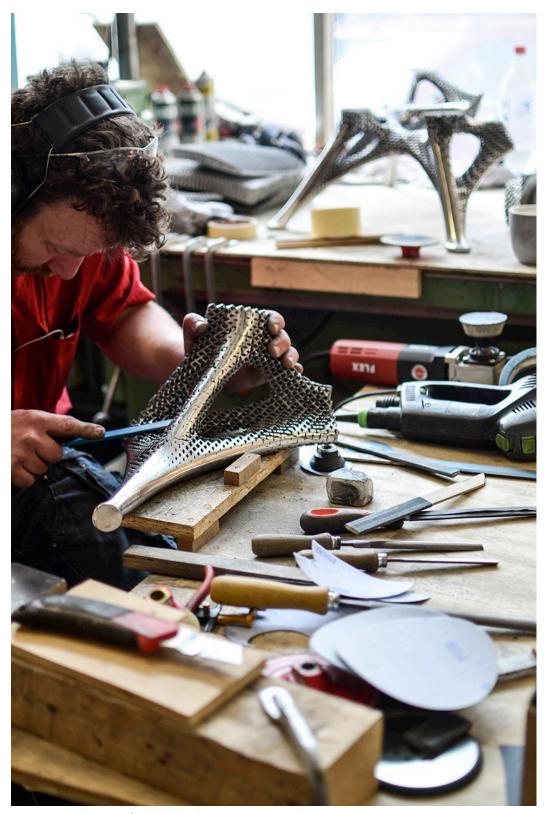


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image courtesy of koen tackx

the 'aluminum gradient chair is part of the permanent collection of the national gallery of victoria, melbourne australia and vitra design museum, weil am rhein, germany.