

Nuovo percorso di aggiornamento professionale dedicato
al mondo della ceramica artistica.

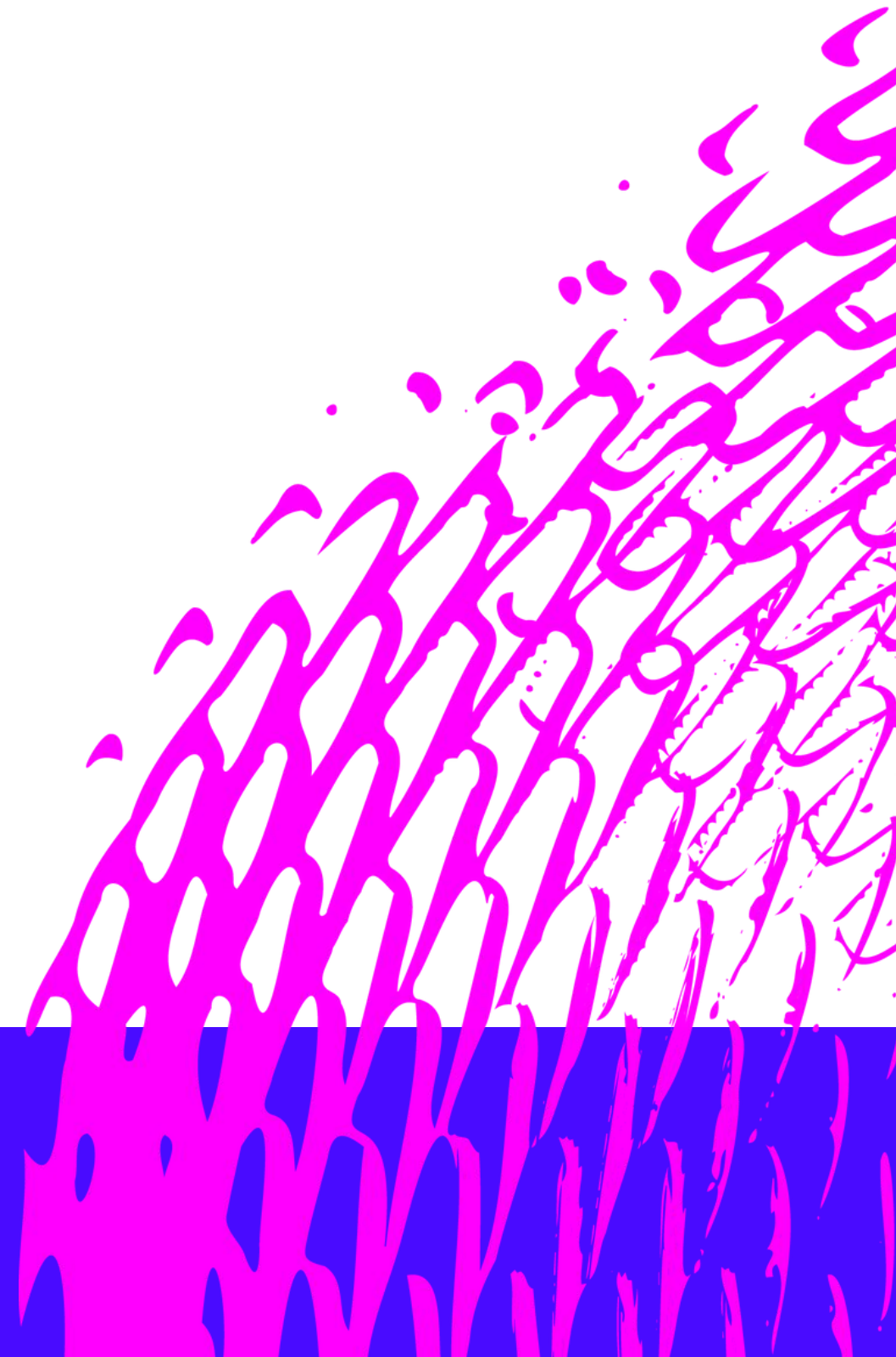


business e tecnologie
per imprese ceramiche

Spunti di stampa 3D per la ceramica

Di cosa parleremo

- Storia
- Processo
- Esempi dal mondo del design
e dell'arte
- Aziende / case studies
- Domande?

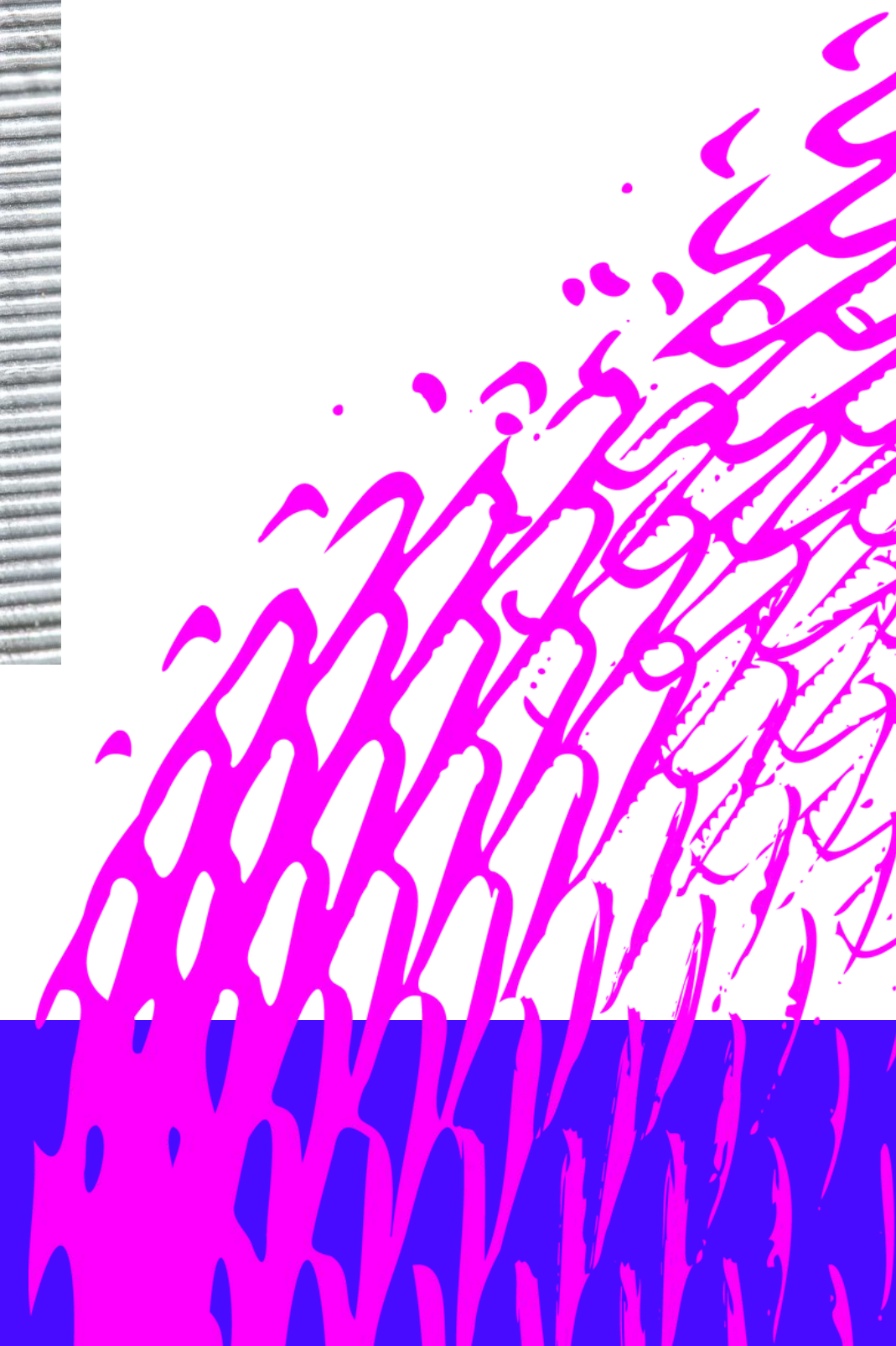
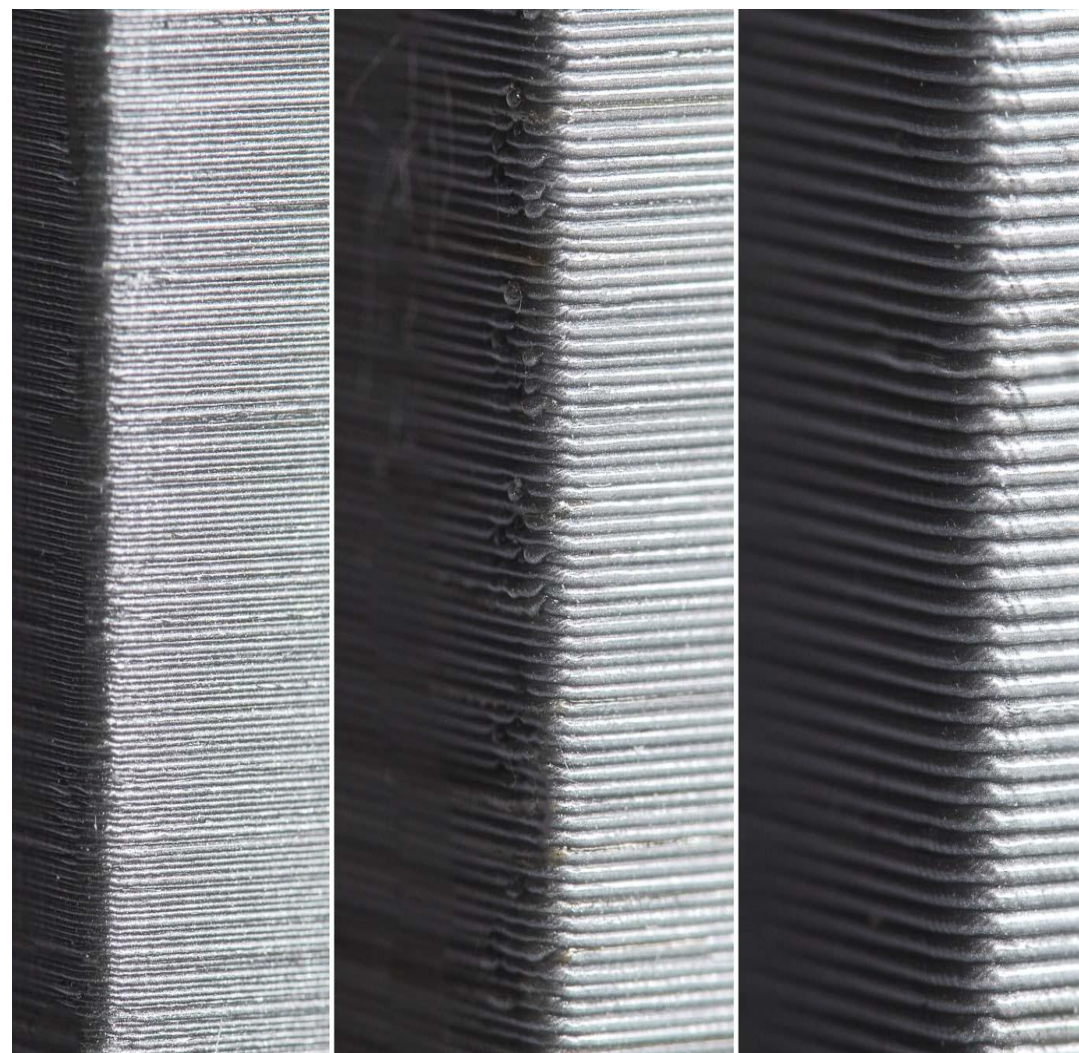


Storia

Definizione

Una stampante 3d è una macchina che consente di produrre un **oggetto solido** partendo da un modello digitale dell'oggetto medesimo.

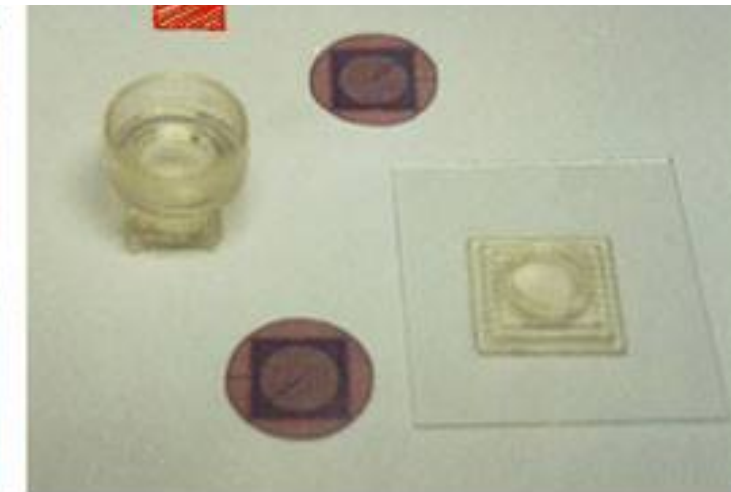
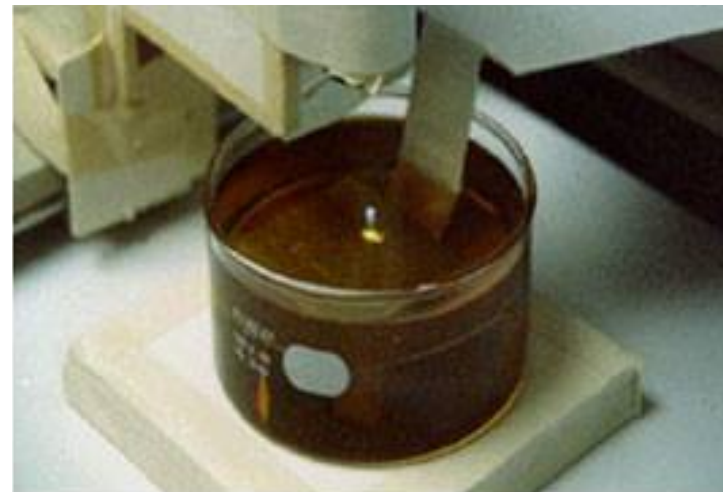
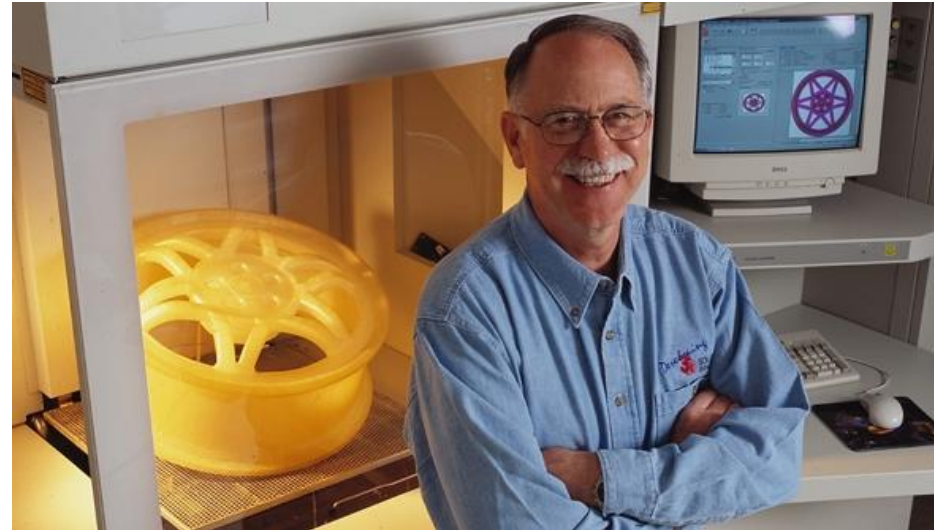
La stampa tridimensionale di un oggetto si ottiene tramite il processo di produzione additiva di materiale, ossia la **sovrapposizione dei diversi materiali in strati**.



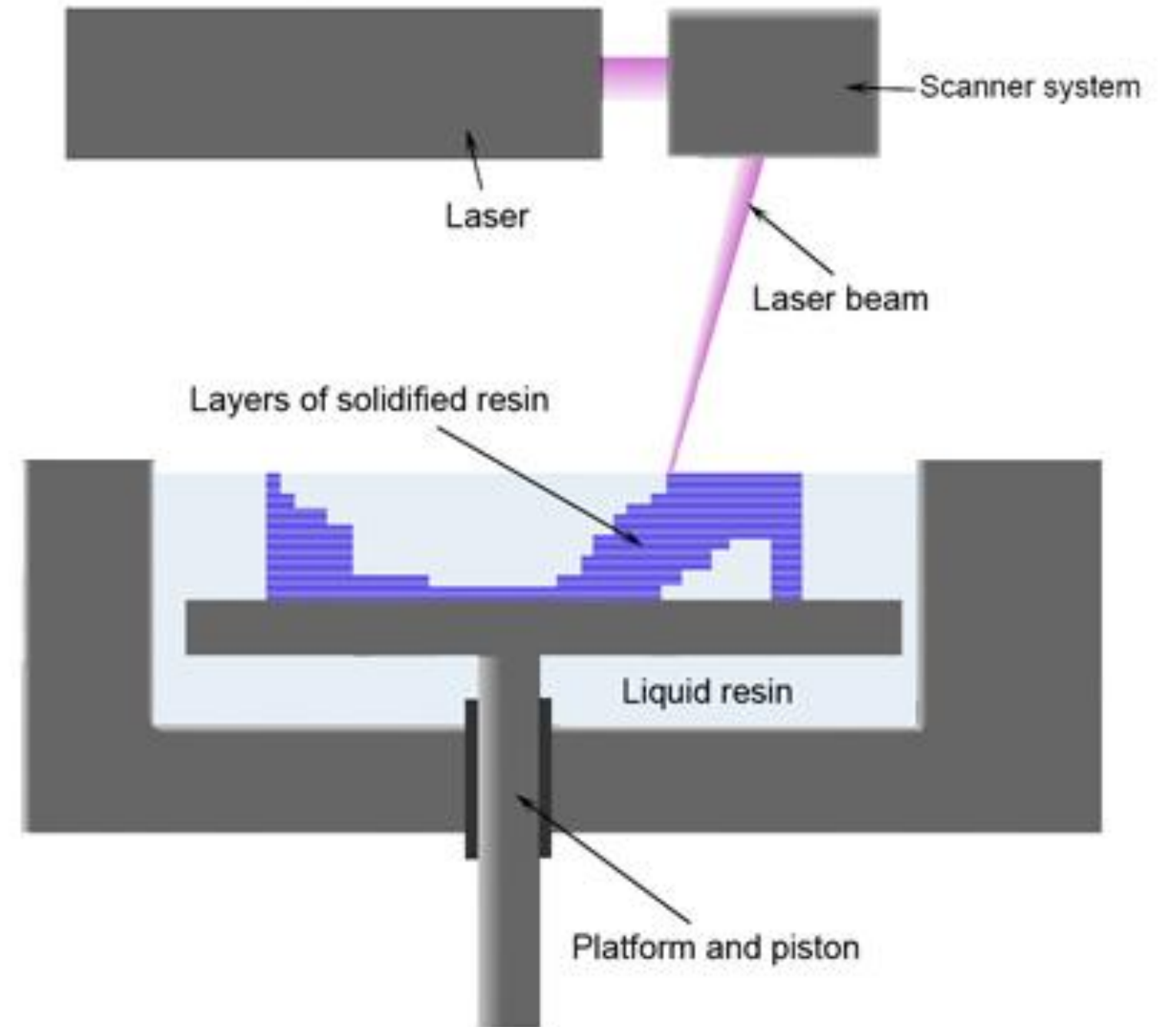
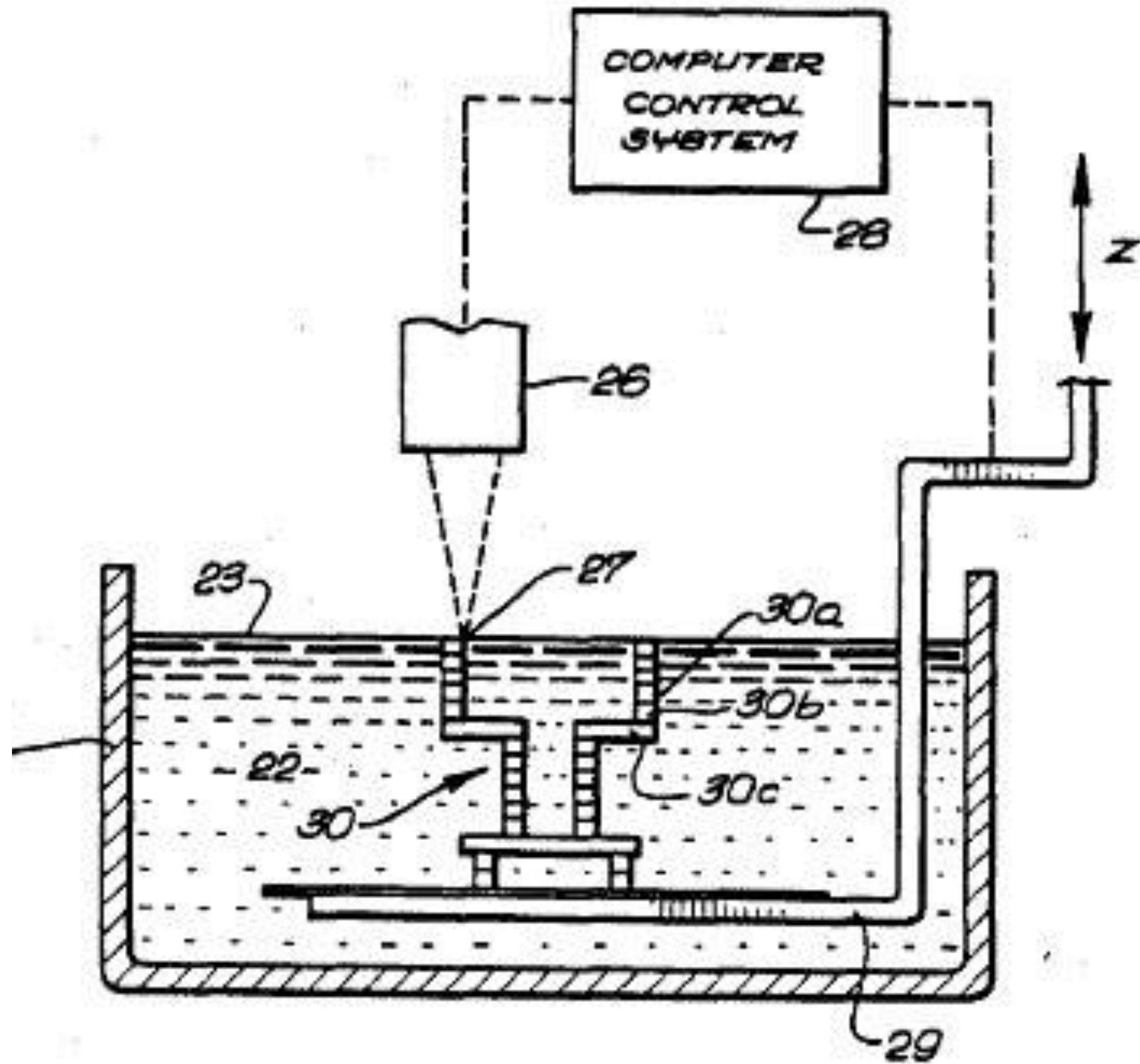
Storia

1983: Charles Hull è un ricercatore in un'azienda.

Lavorando con i raggi ultravioletti, trova delle resine che, illuminate da queste frequenze, passano dallo stato liquido a quello solido.



funzionamento



Fused Deposition Modeling

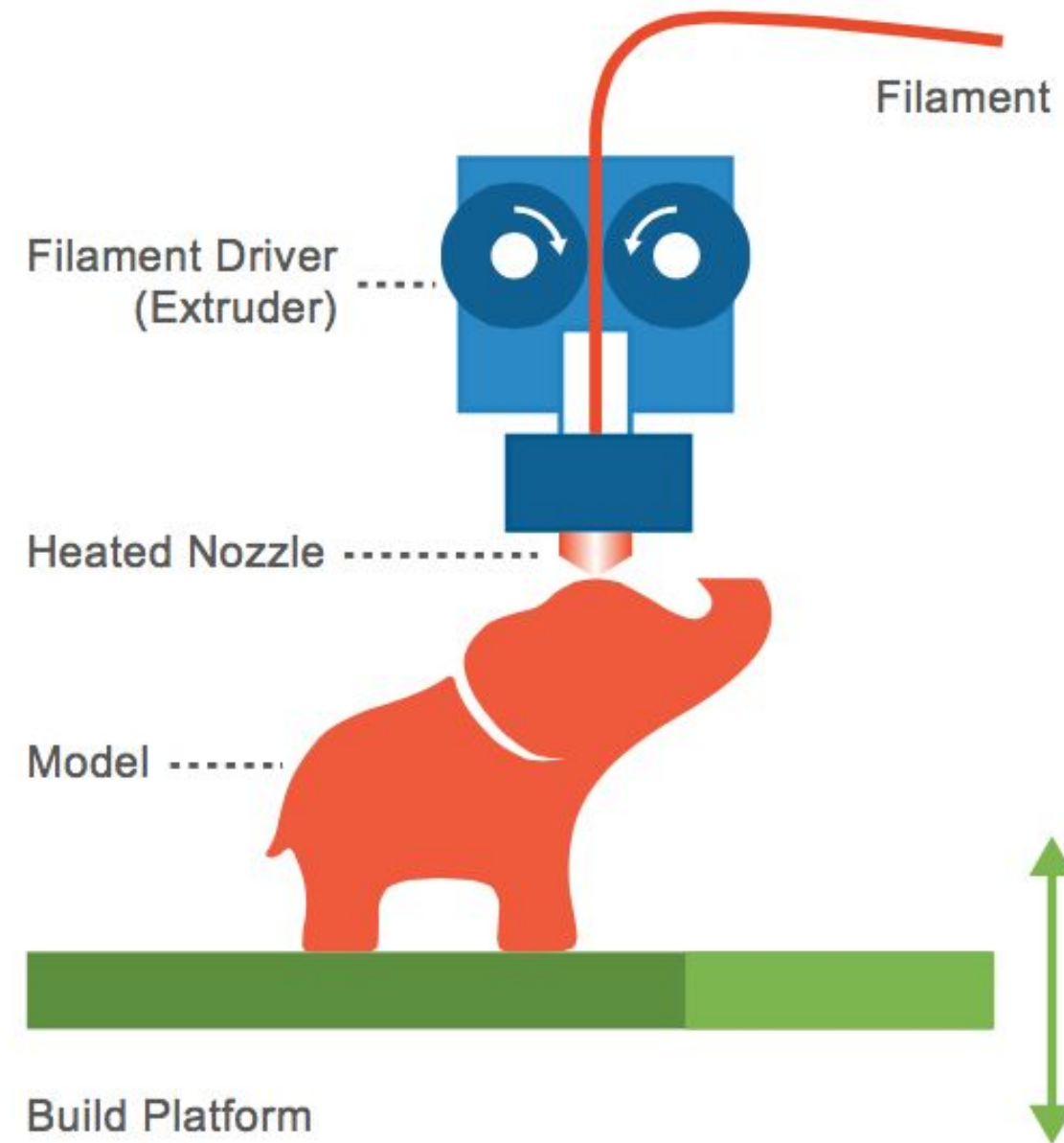
Nel 1989 Scott Crump inventa e brevetta la stampa **Fused Deposition Modeling** (FDM), la più usata al mondo nel settore desktop.

Nel 1992 assieme a sua moglie fonda la Stratasys, ancora oggi una delle aziende leader nella stampa 3D.



FDM

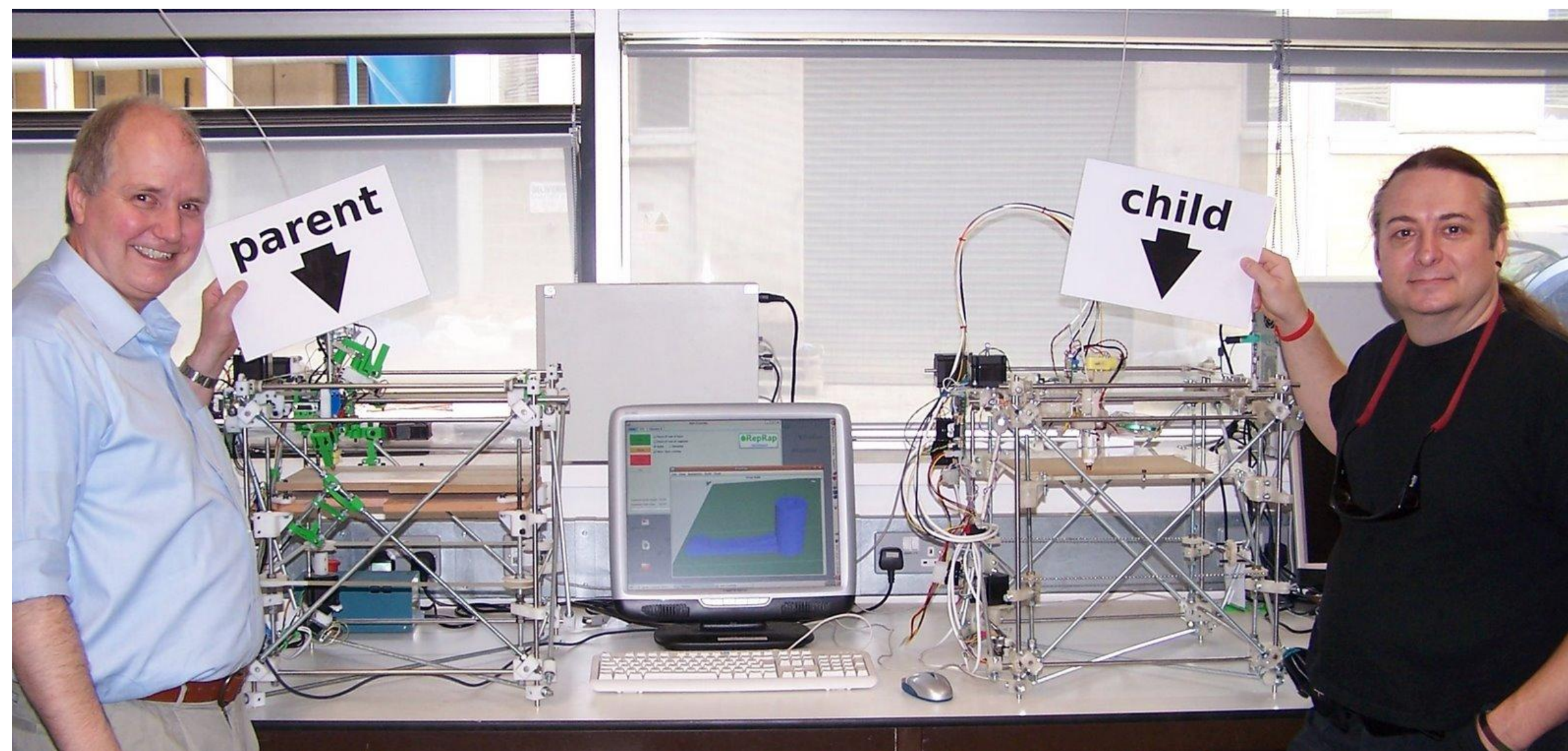
Schema di funzionamento



2006: Il progetto RepRap

Adrian Bowen, professore di ingegneria meccanica dell'università di Bath, pubblica su Internet il progetto della stampante 3D open source "Darwin".

L'idea è di realizzarla utilizzando comuni materiali da ferramenta e pezzi stampati in 3D: una stampante può realizzare i pezzi per realizzarne altre.



RepRap: Evoluzioni

Darwin, 2007

Mendel, 2009

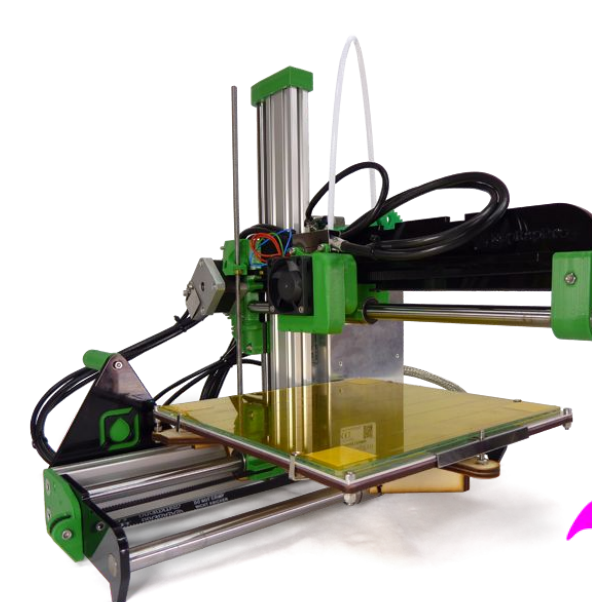
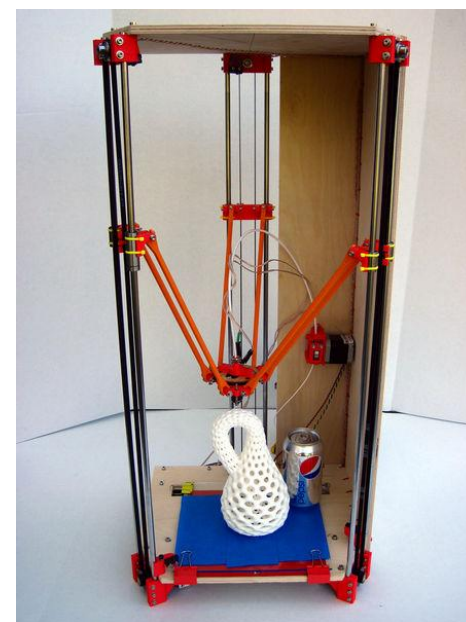
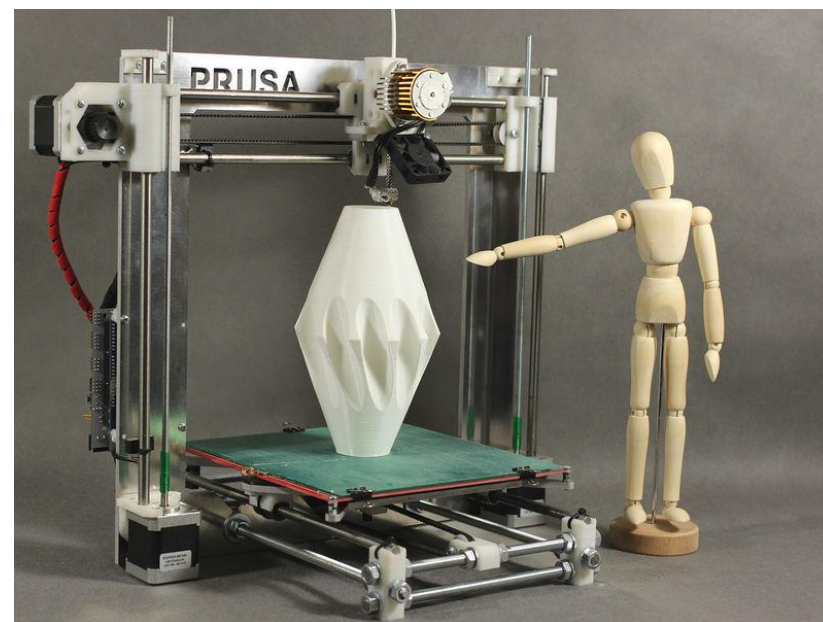
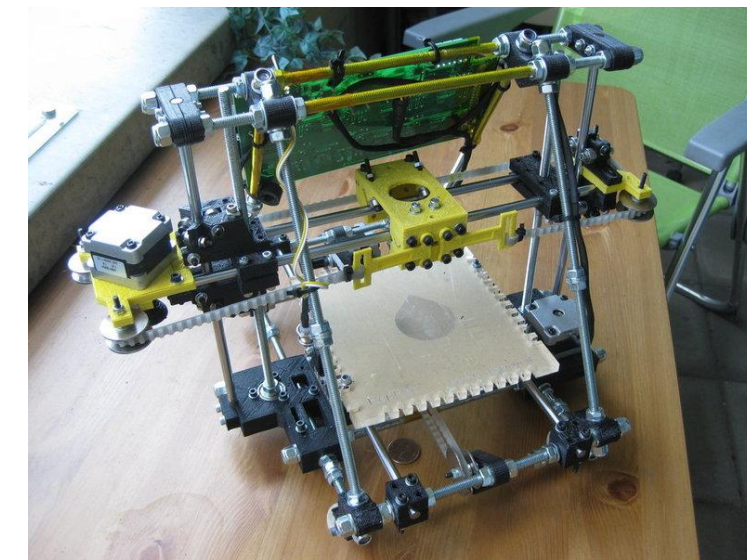
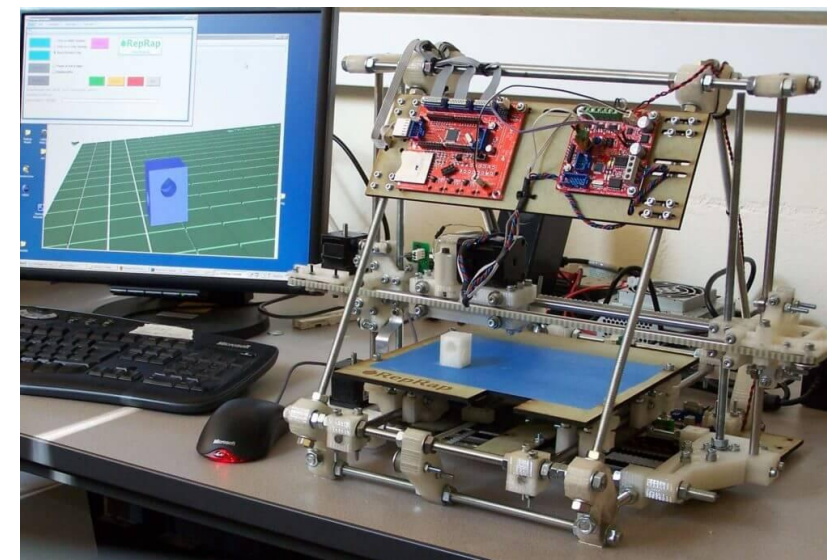
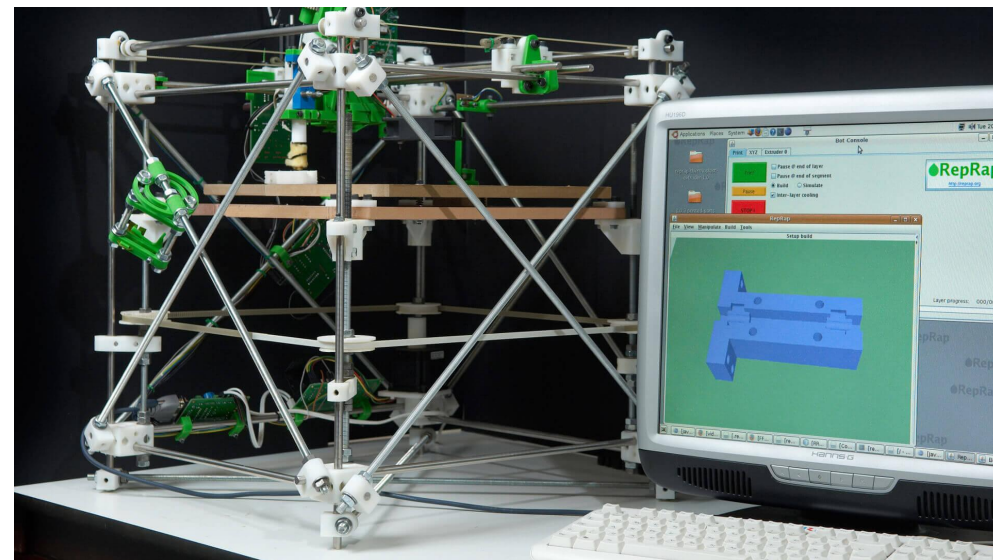
Huxley, 2010

Prusa Mendel, 2011

Rostock, 2012

Ormerod, 2014

...

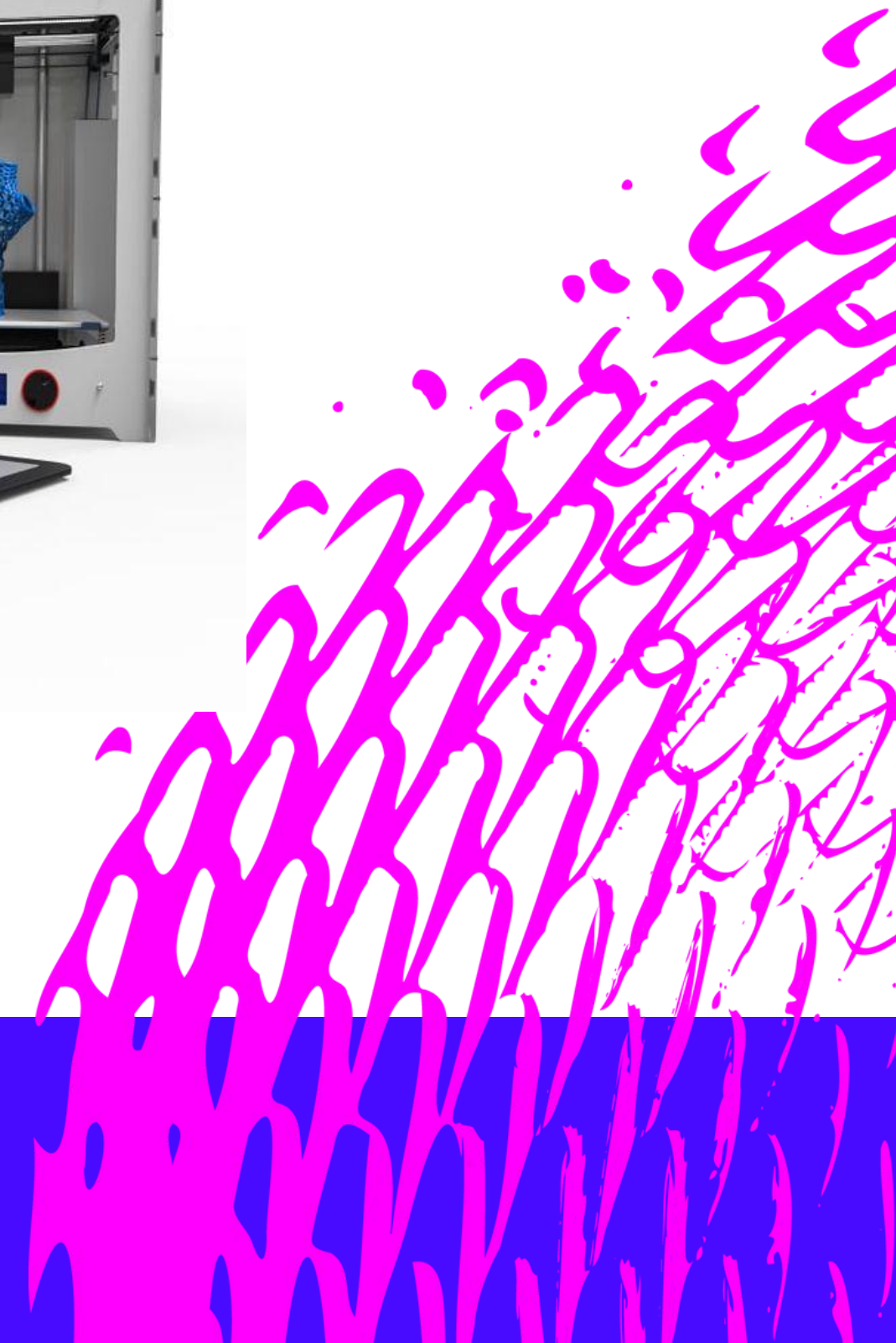
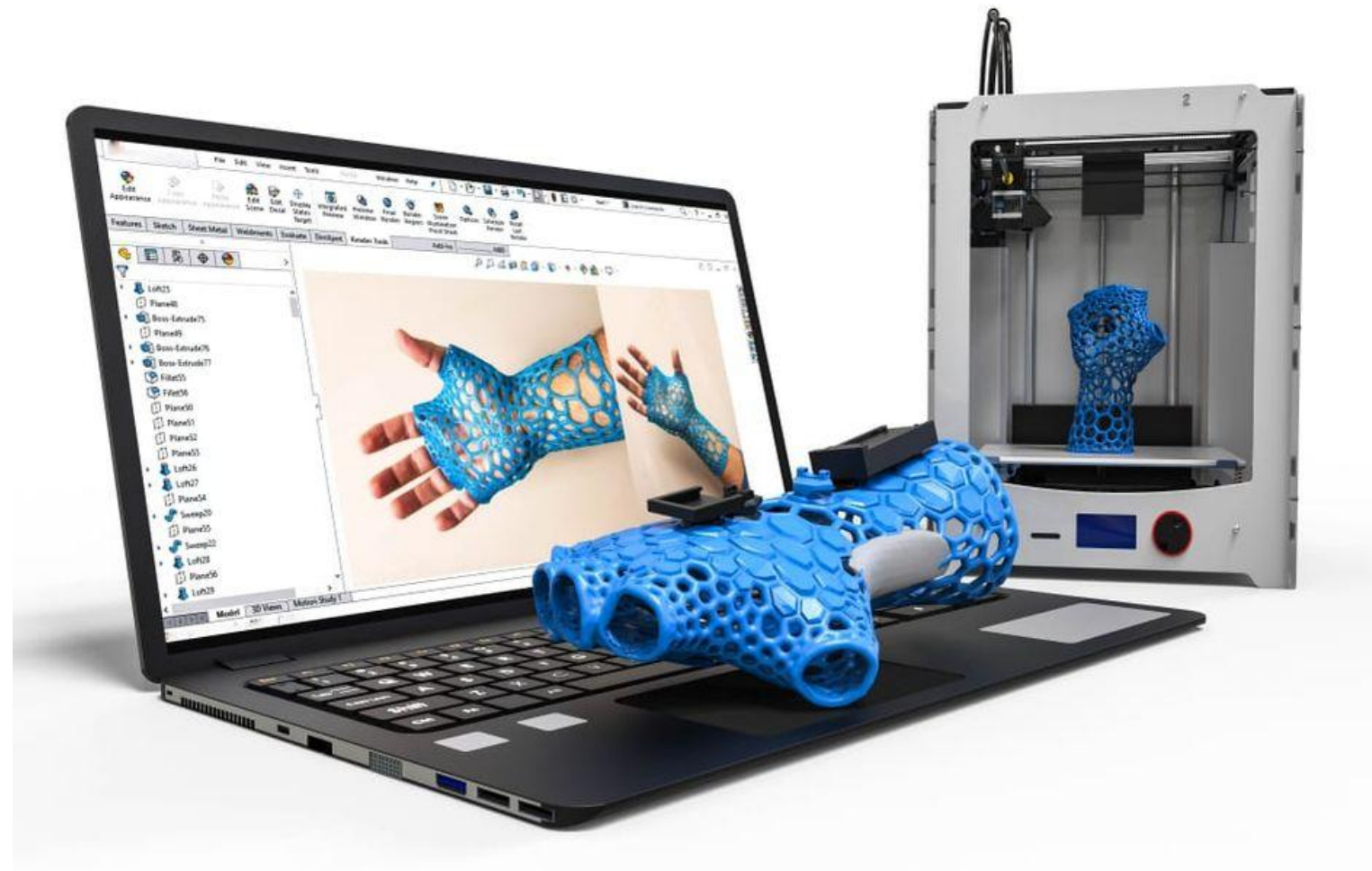


Processo

Cosa stampiamo?

Serve un modello 3D.
Strumenti e risorse: infiniti.

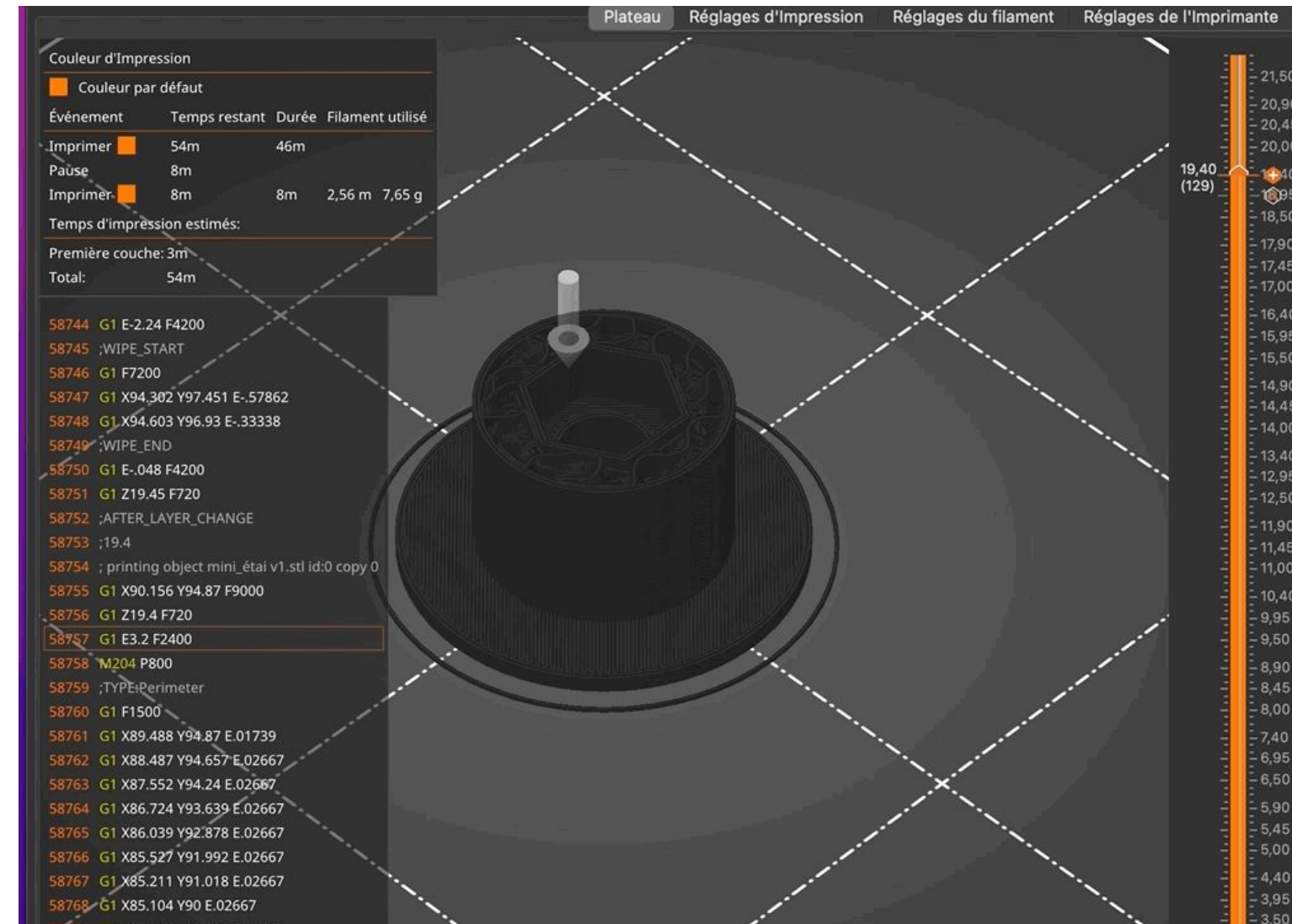
- Modellatori professionali
- Modellatori freeware
- Modellatori open source
- Scanner 3D
- Piattaforme web



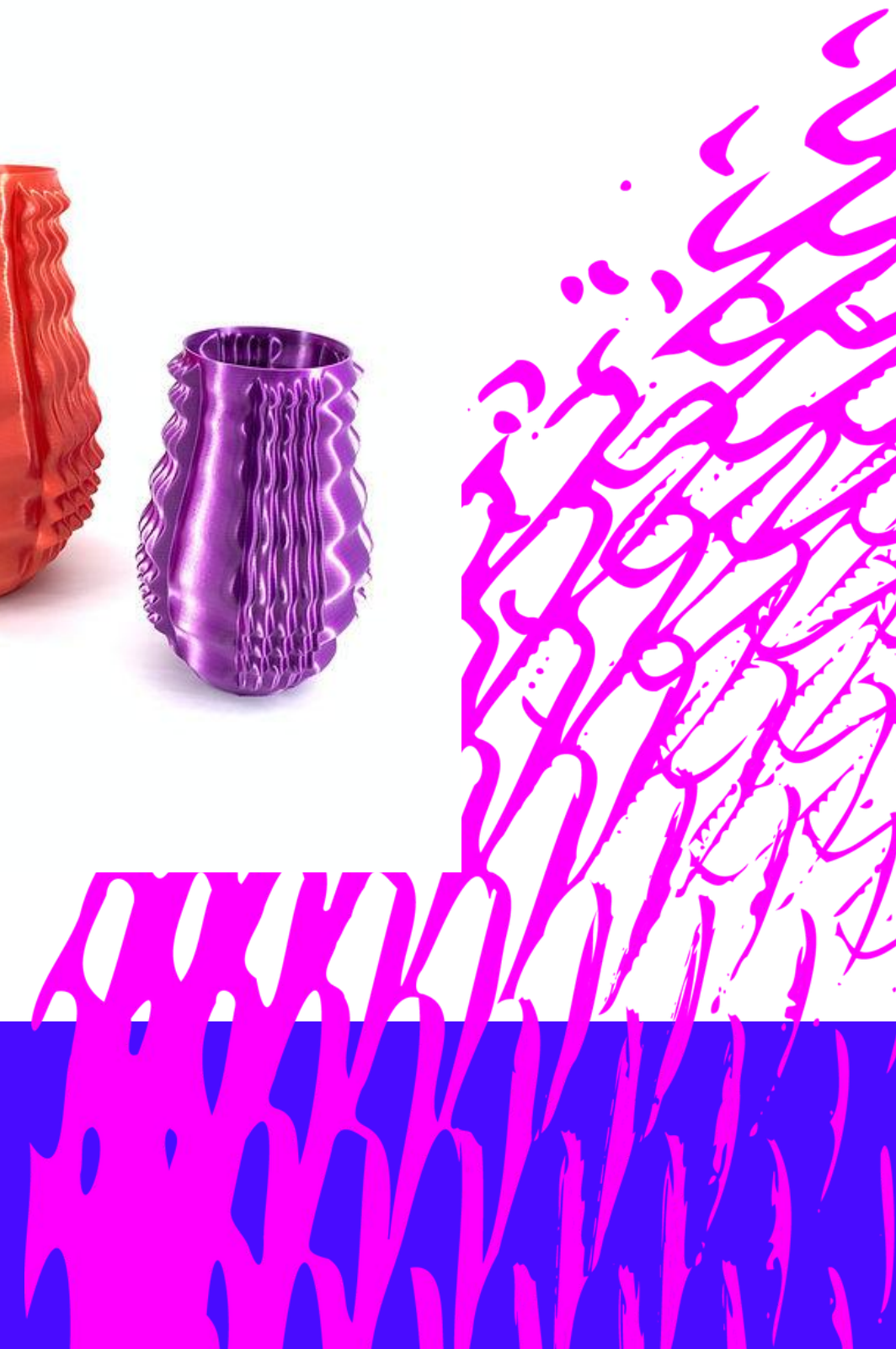
Slicing

Conversione del file in istruzioni comprensibili dalla macchina.

Qui comincia la differenziazione per tipo di tecnologia e risultato desiderato.



Stampa 3D



Esempi dal mondo del design e dell'arte

Unfold

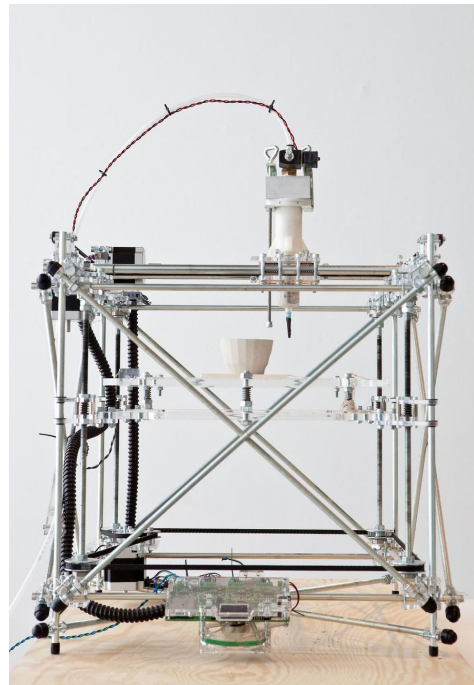
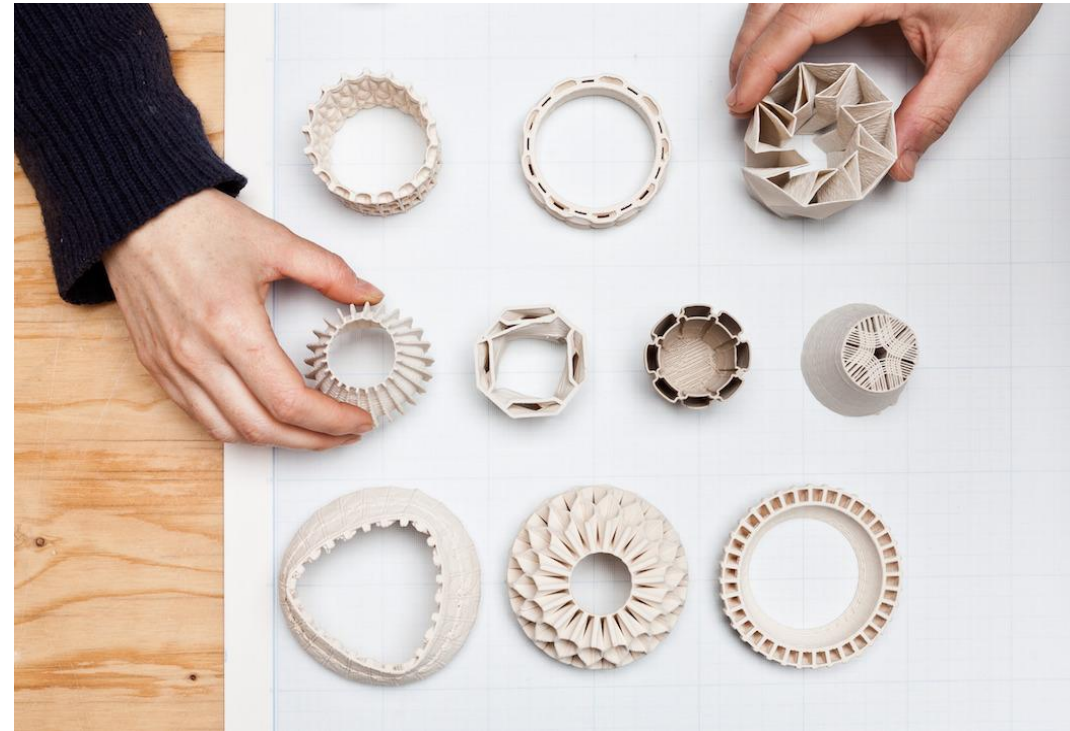
Claire Warnier
Dries Verbruggen

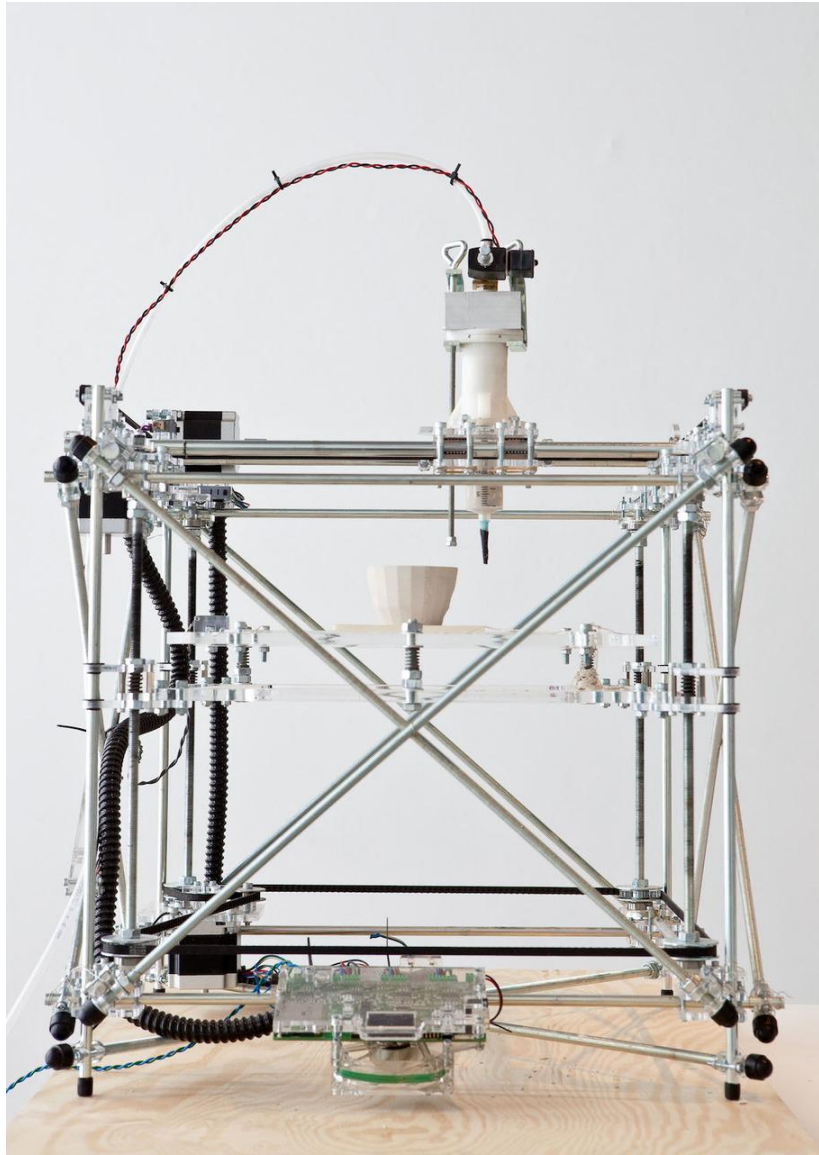
unfold.be



Ceramic 3D printing

2009



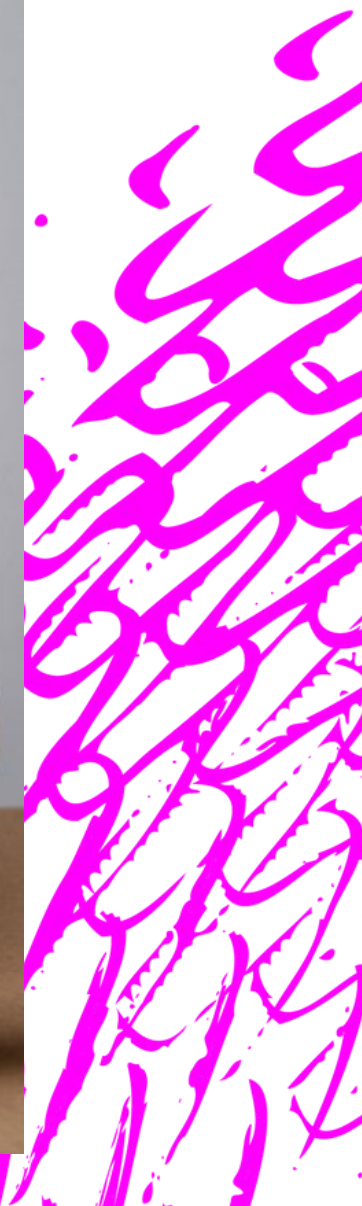


Stratigraphic Porcelain

2012



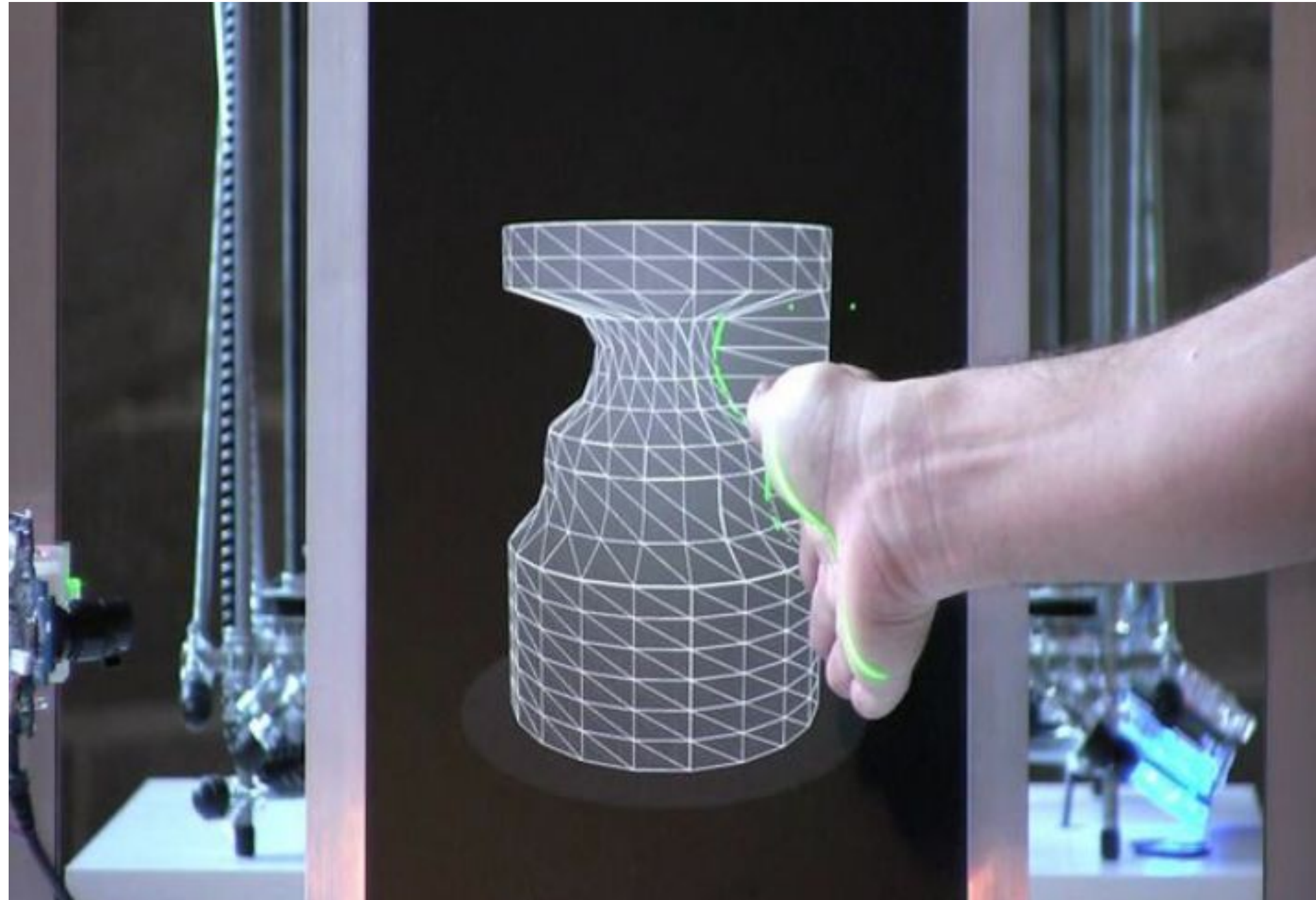
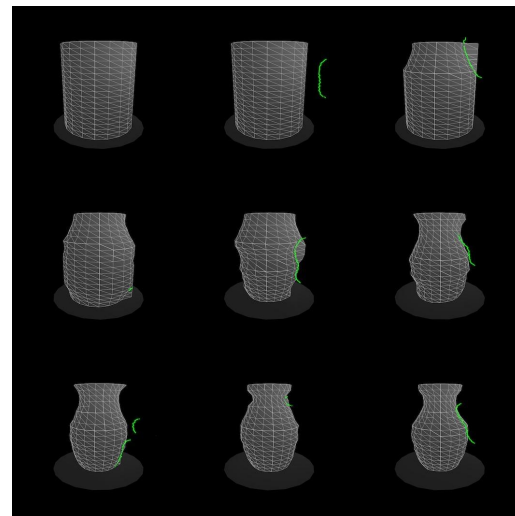
Teapot



L'Artisan Electronique

2011

vimeo.com/25195019



The Transaction Project

blown glass in printed ceramics -
2014



The Transaction Project



Jonathan Keep

Inghilterra

keep-art.co.uk



La macchina è solo lo strumento

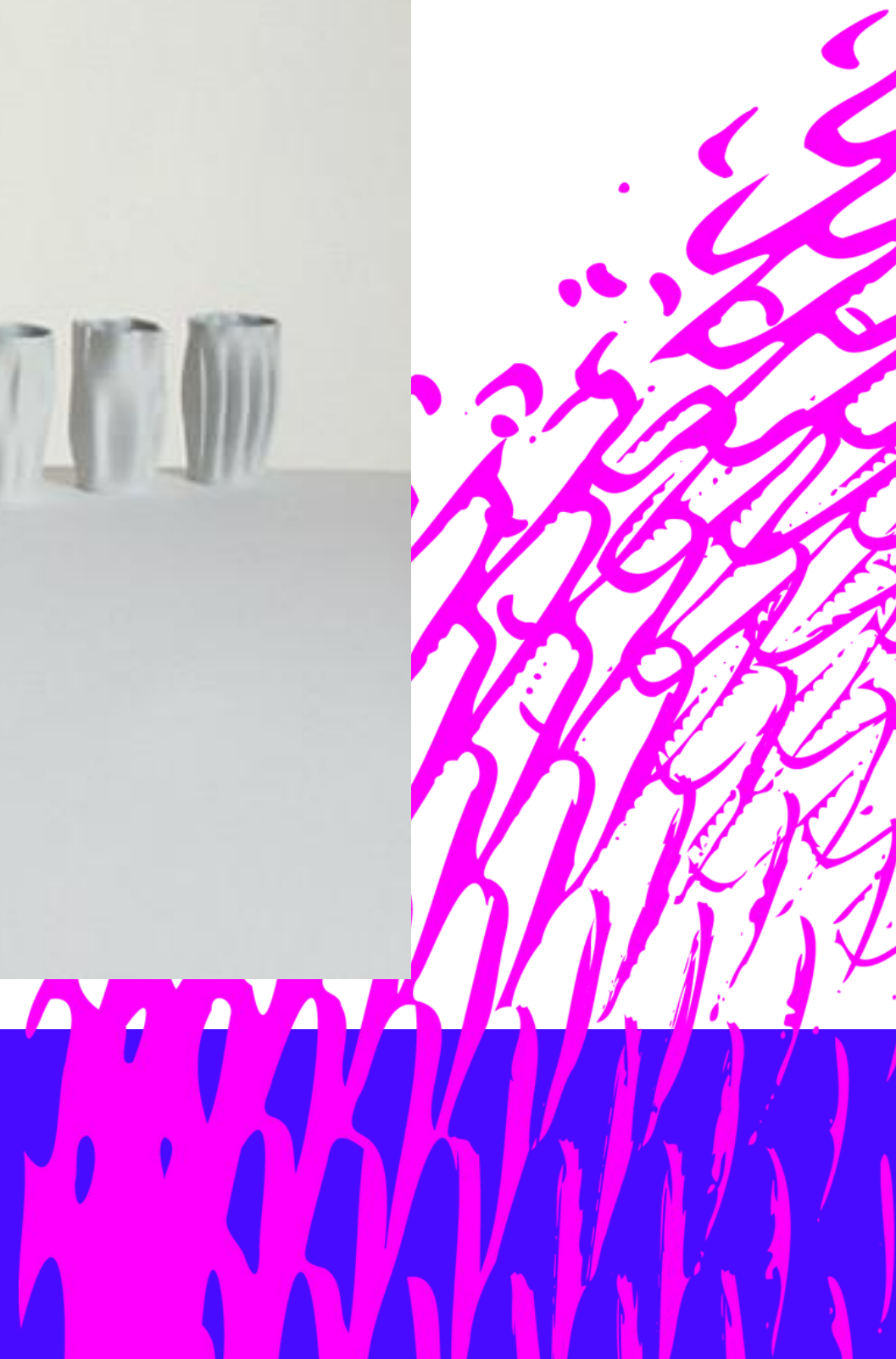
Serie iceberg



Random growth



Morph



Shaping the future



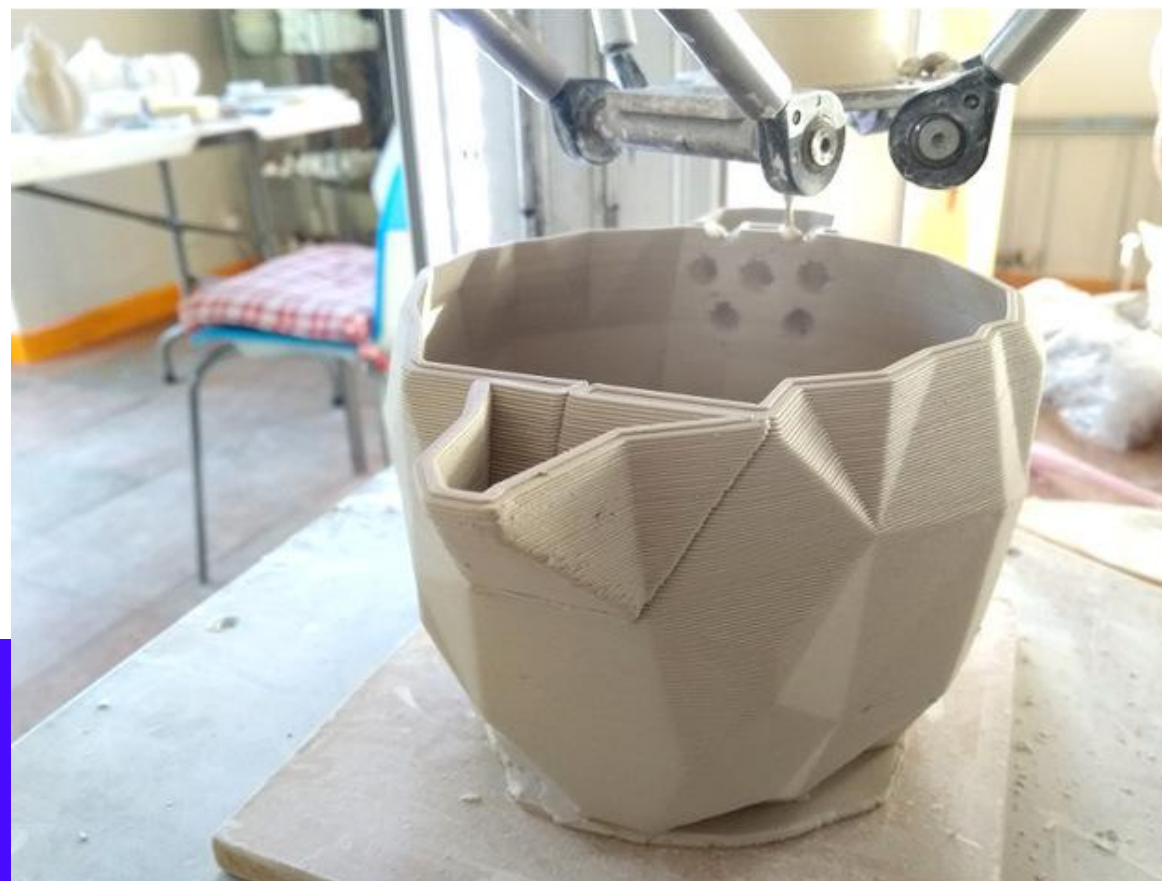
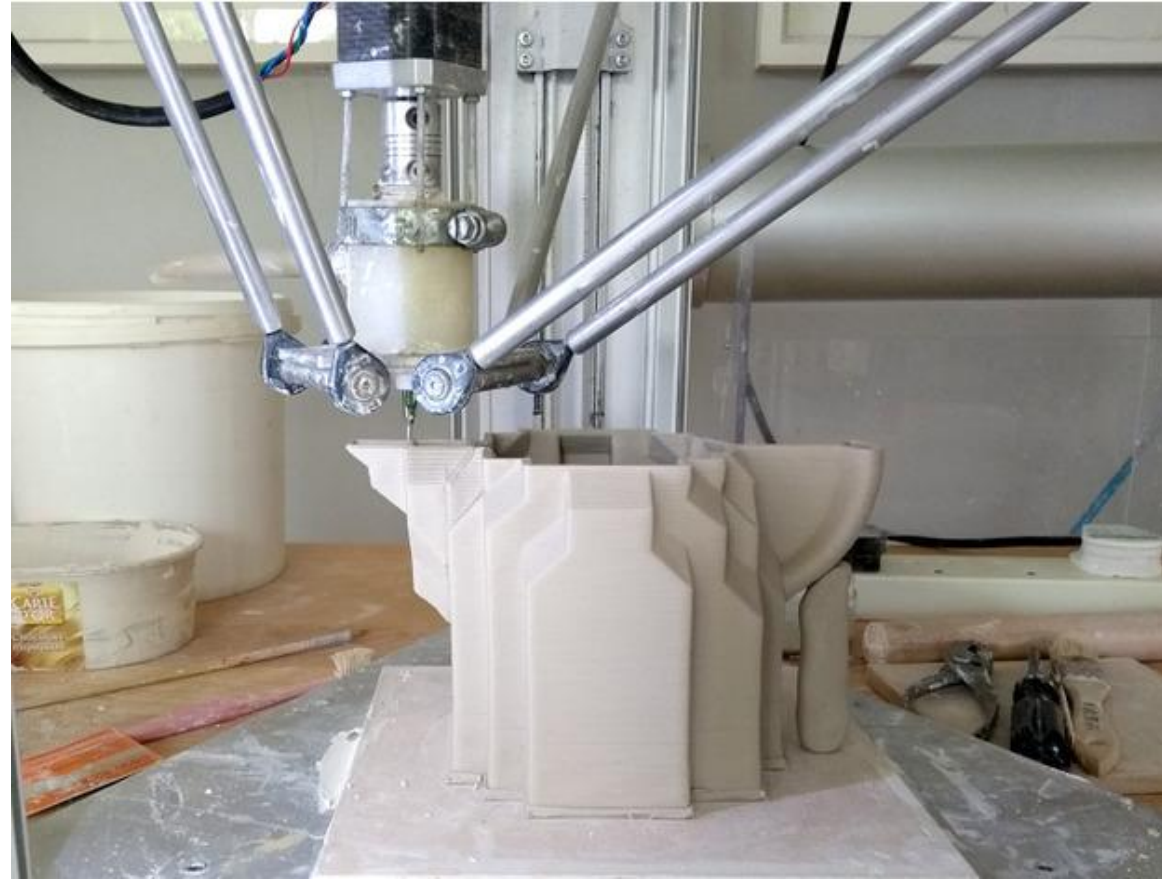
Seeds



Teapots

2018

thingiverse.com/thing:3029784



Olivier van Herpt

oliviervanherpt.com



x COS

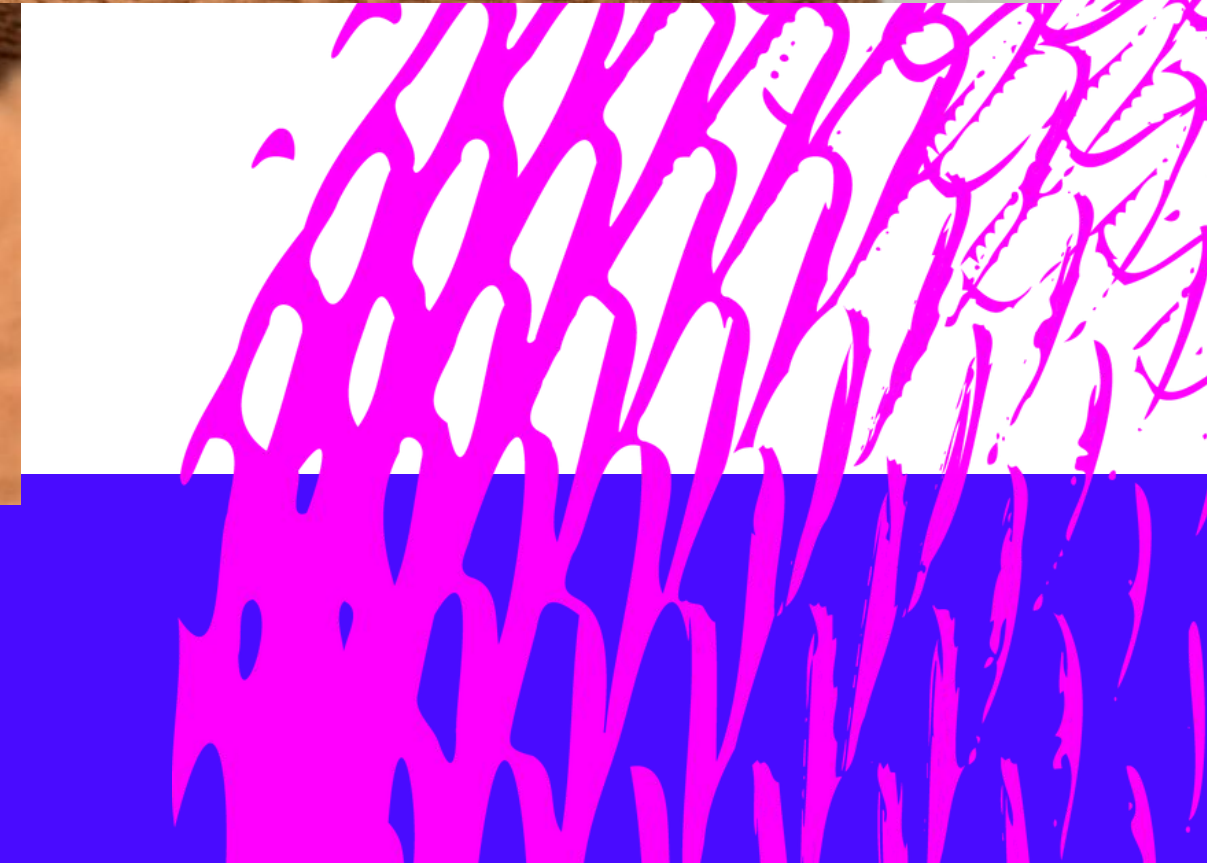
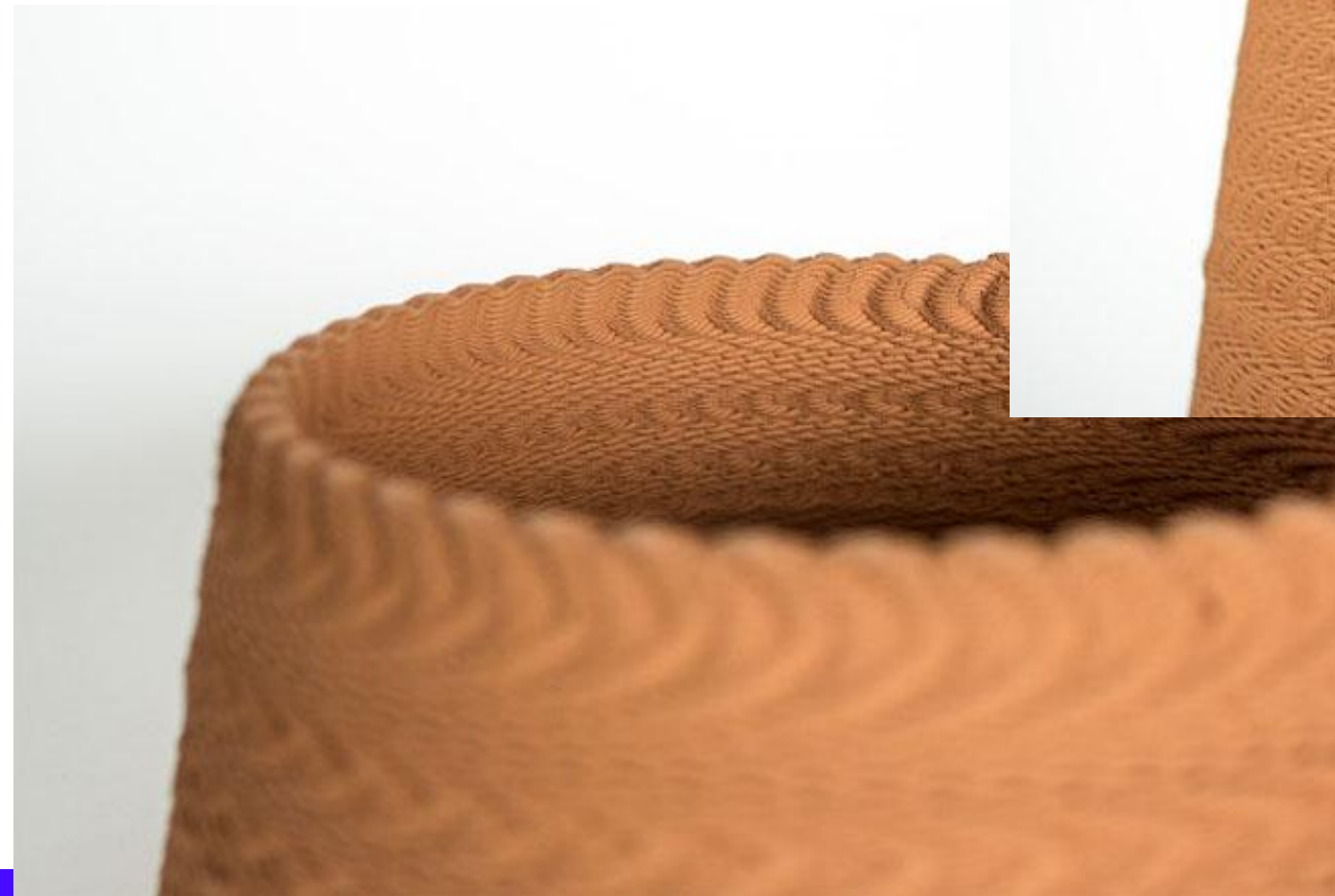
2017



Solid vibration

2015

vimeo.com/142682057



Front design

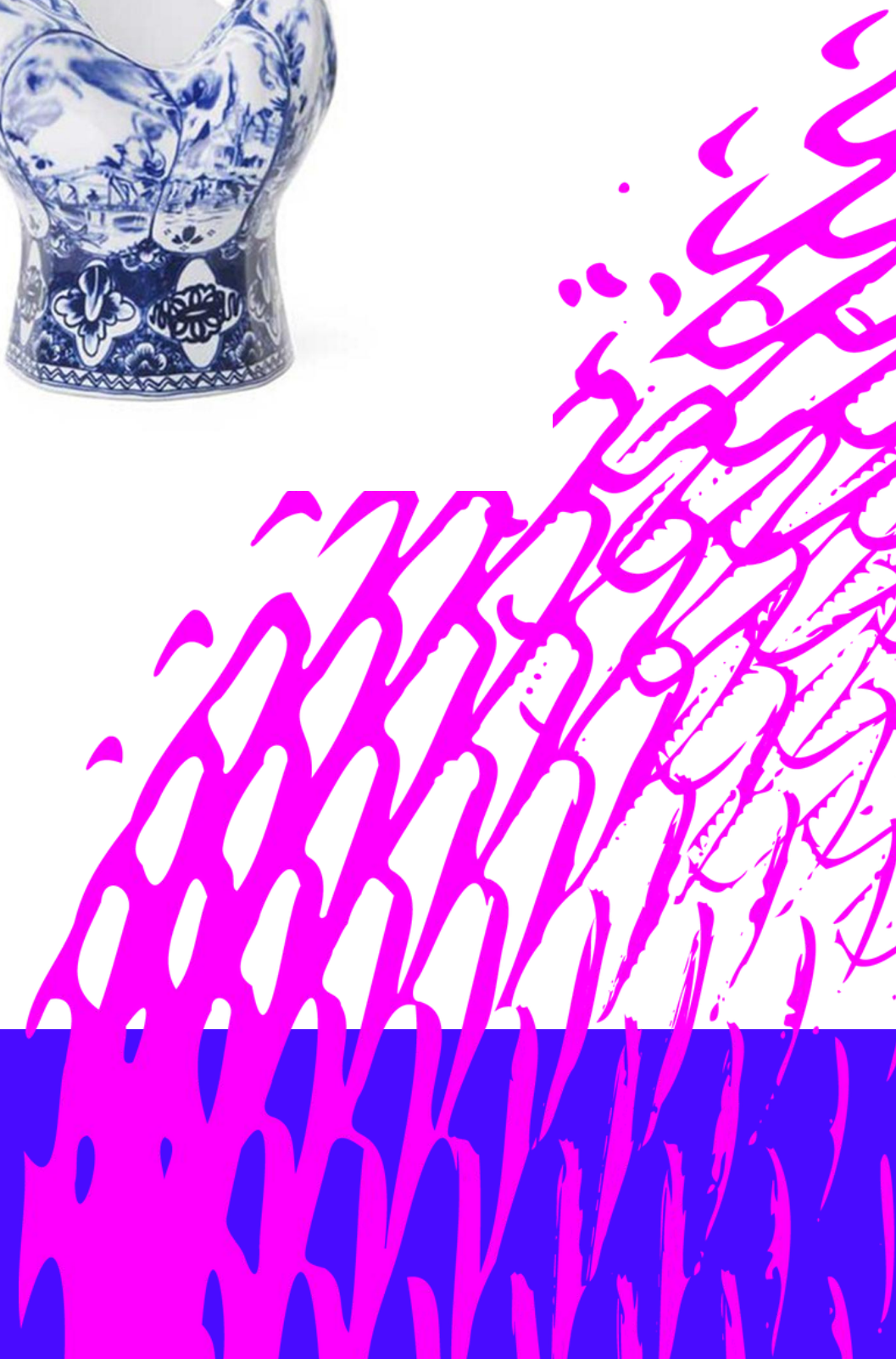
Sofia Lagerkvist
Anna Lindgren

frontdesign.se



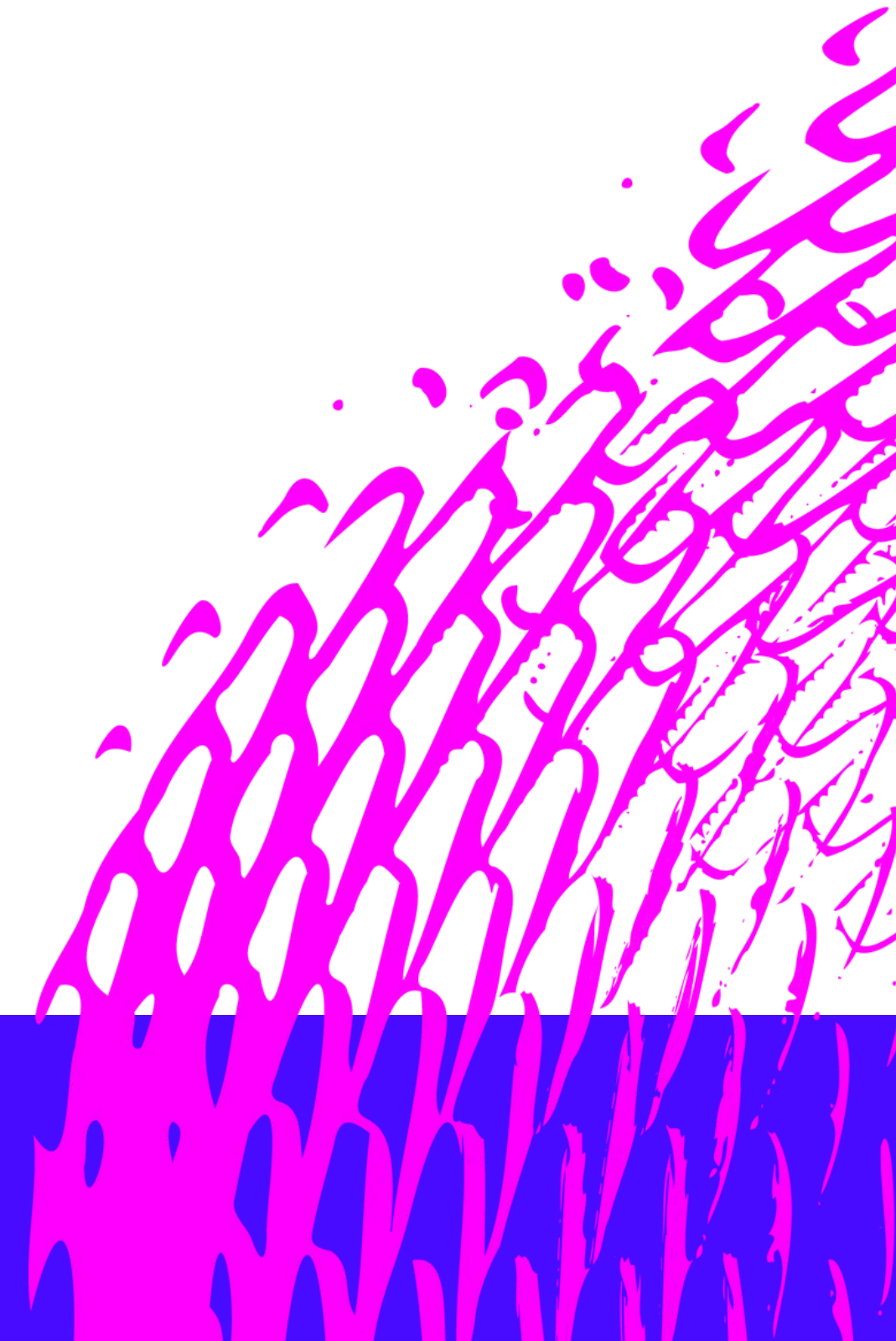
Blow Away Vase

2017



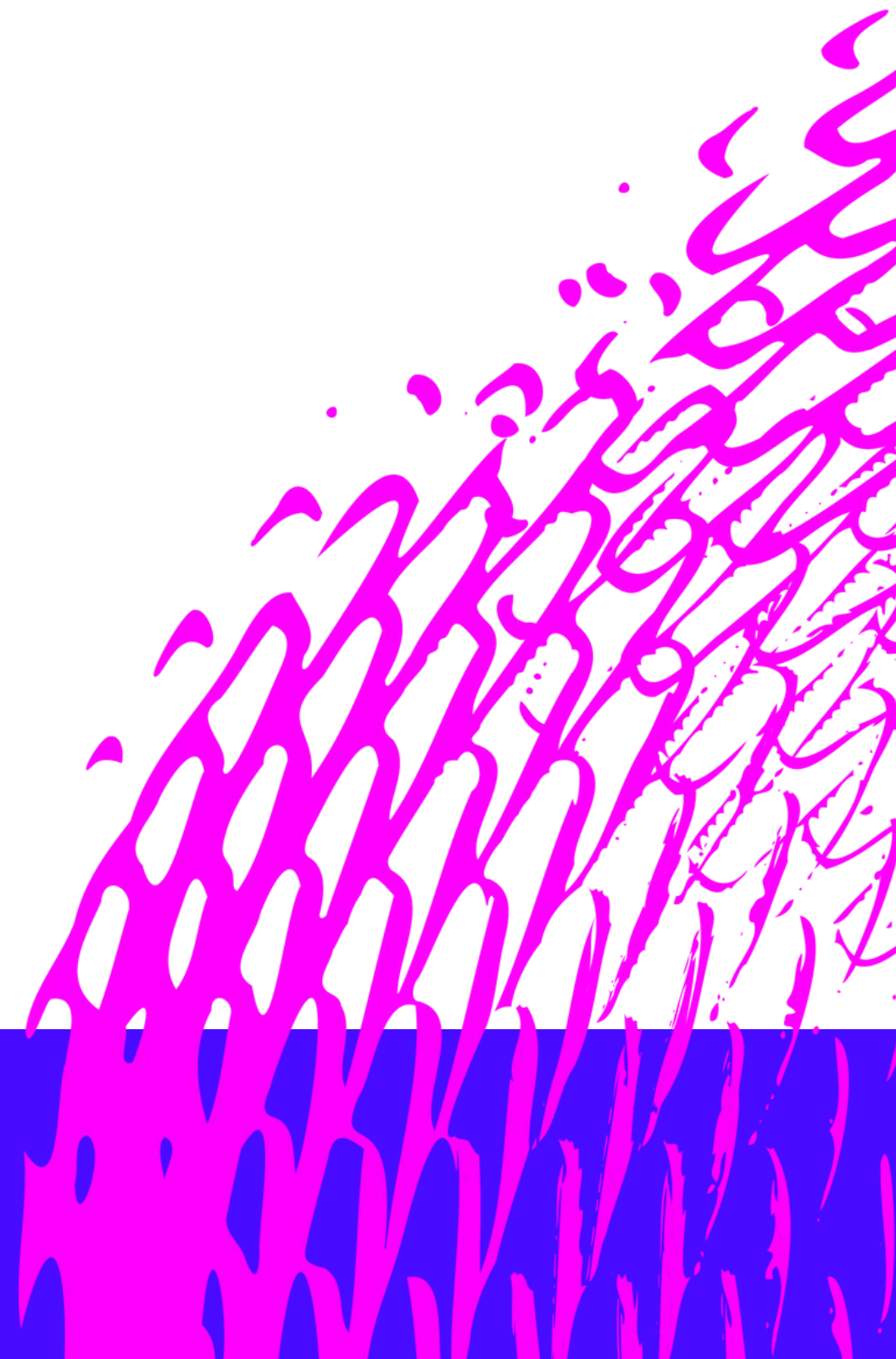
Aldo Rontini

FabLab Faenza e Manifatture Sottosasso



Virginia San Fratello

USA



Emerging Objects

Future Archeologies,
Virginia San Fratello - 2022



Emerging Objects

Co-Botic Vessels

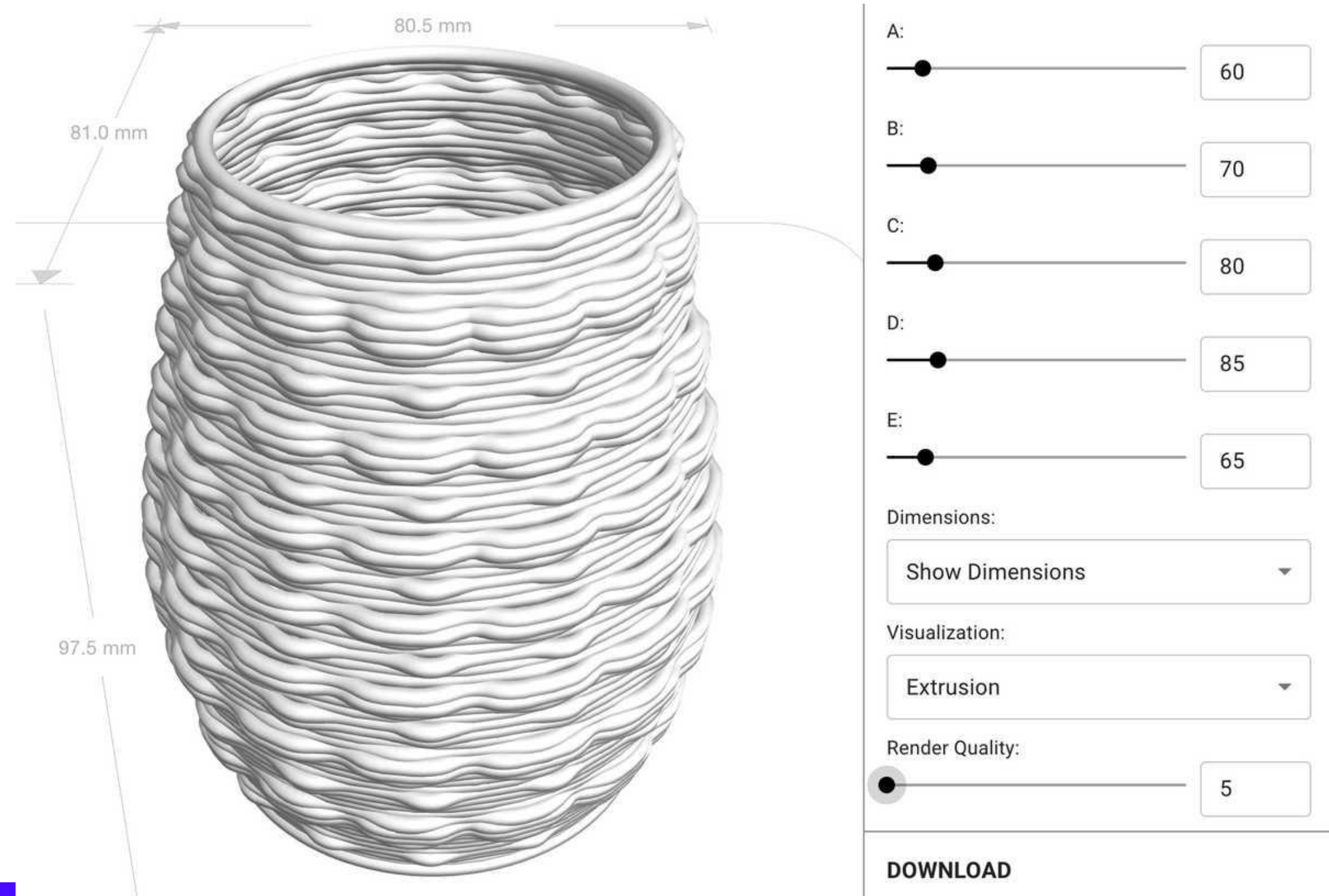
Virginia San Fratello, Keisha
Herrera 2022



Emerging Objects

Potterware

www.potterware.com



Andrea Salvatori

Ikebana Rock'n'Roll



Piotr Waśniowski

[instagram.com/piotr_wasniowski/](https://www.instagram.com/piotr_wasniowski/)



piotr_wasniowski

Segui

Messaggio



901 post

31.300 follower

3.002 seguiti

Piotr Waśniowski

Artista

I live in Kraków, Poland.

I use Gaia Multitool Polish clay 3d printer with cheap de-airing clay extruder:

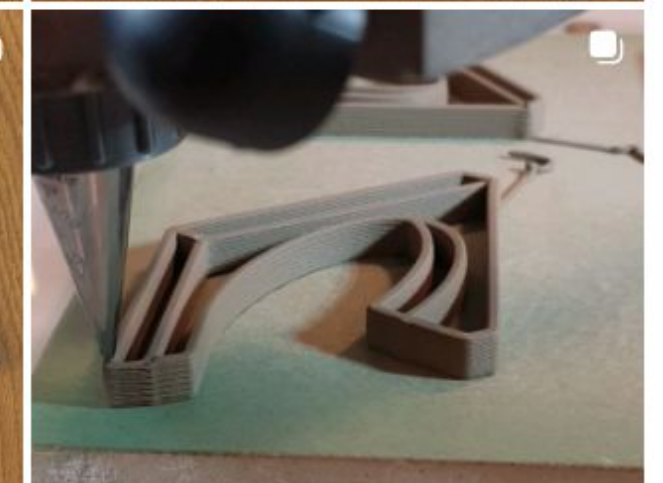
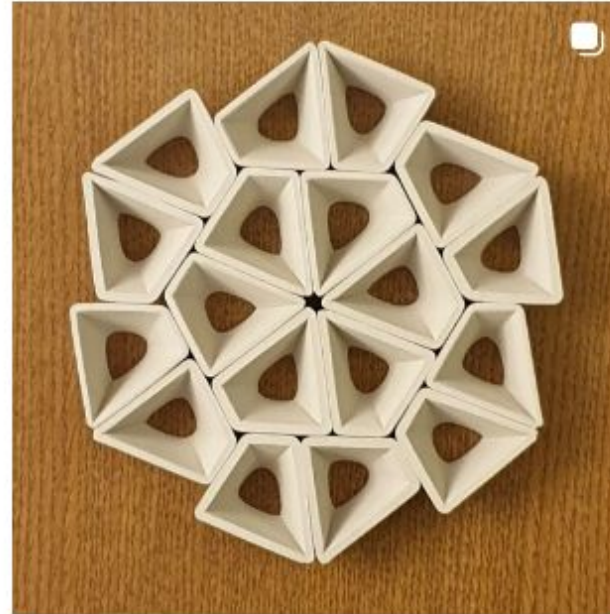
<https://www.thingiverse.com/thing:4805607>

www.youtube.com/user/surtep0

POST

REELS

POST IN CUI TI HANNO TAGGATO



Nervous system

Jessica Rosenkrantz
Jesse Louis-Rosenberg

n-e-r-v-o-u-s.com

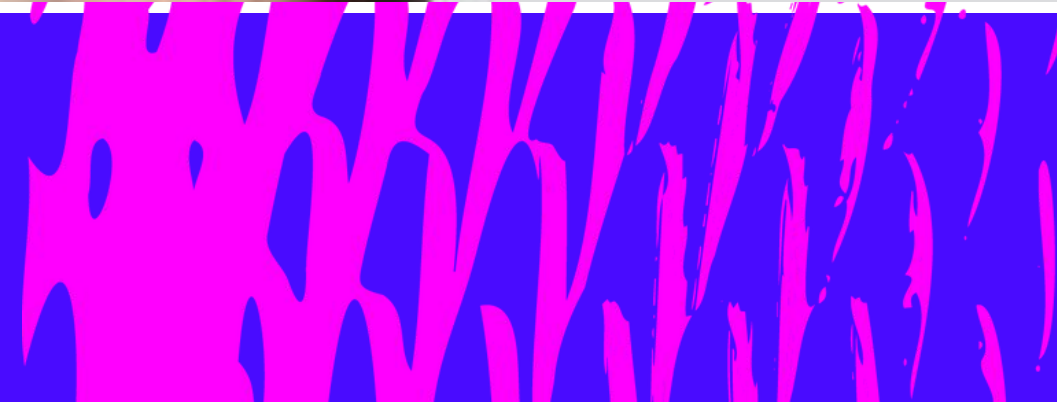


Coral Cup

Nervous System - 2018

n-e-r-v-o-u-s.com/blog/?p=8222









0284



1110566_339



0487



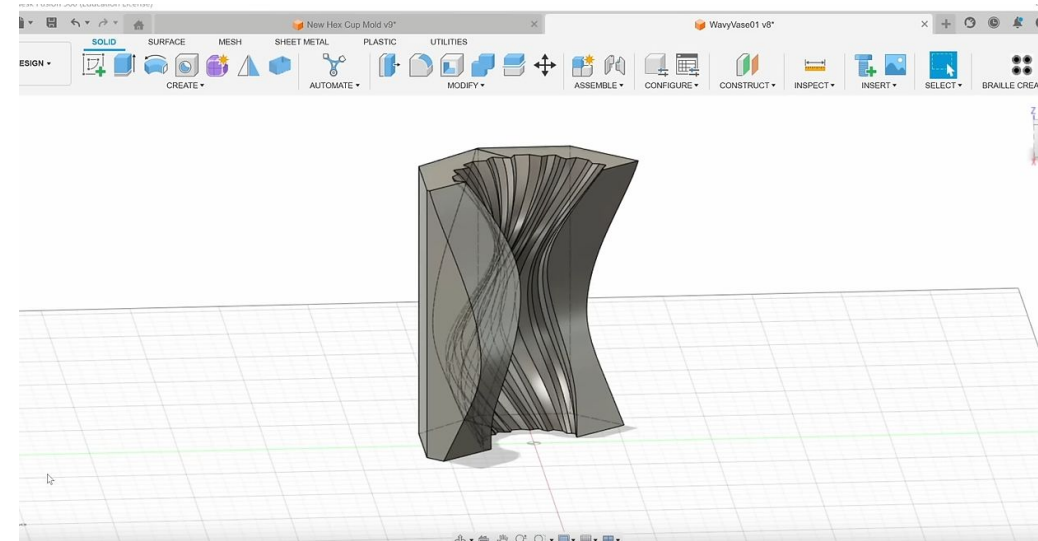
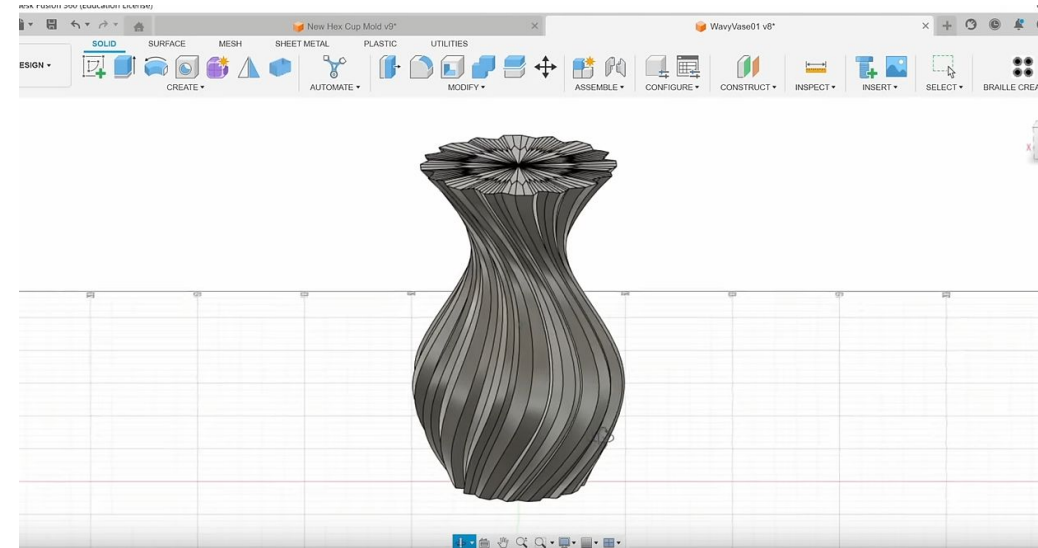






katz creates

katzcreates.com



Aziende / case studies

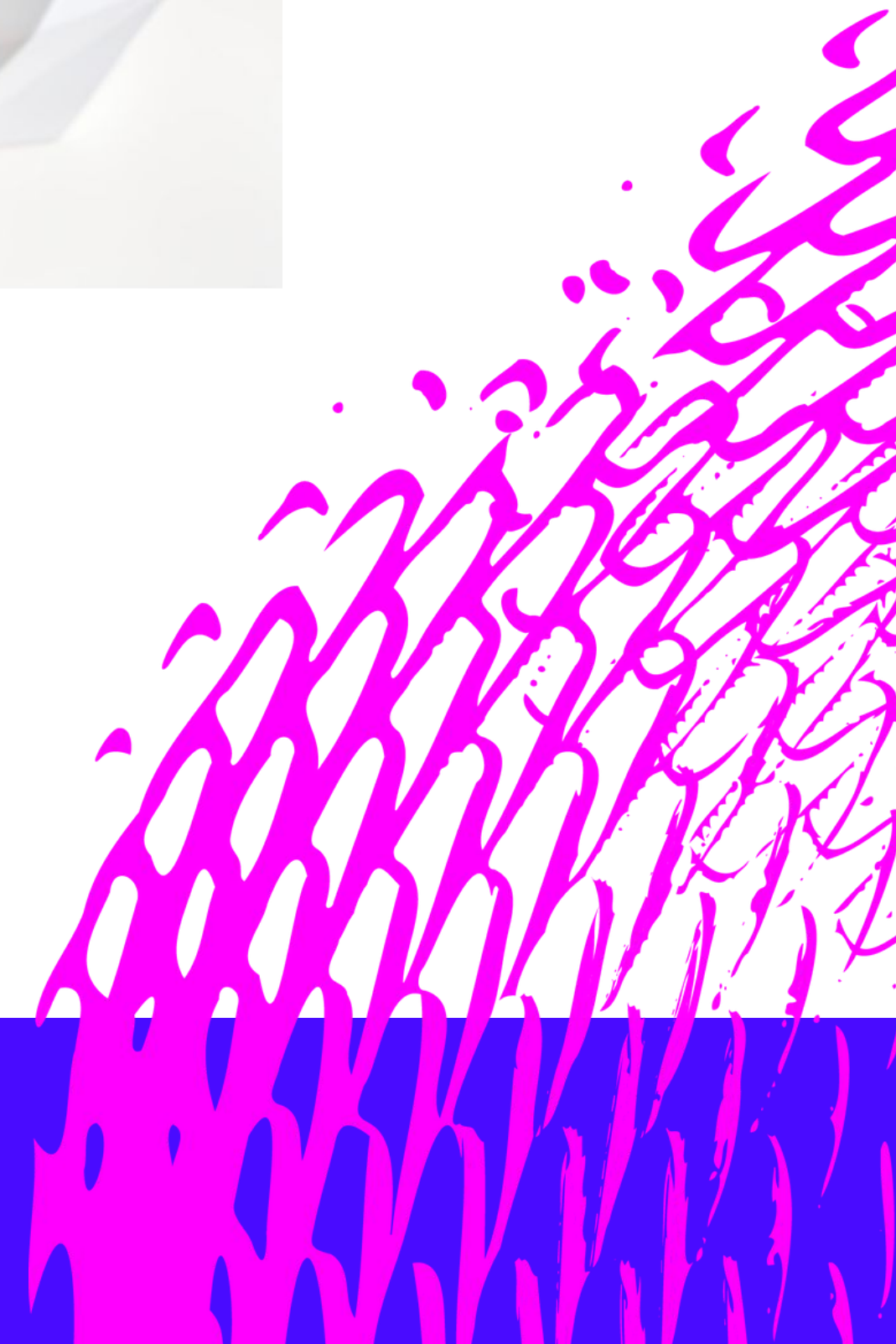
Terra & Forme

Mirko e Deborah Garavini

Faenza (RA)

terraeforme.it

Realizzazione modelli e stampi,
produzioni personalizzate in serie,
servizi di smaltatura e cottura



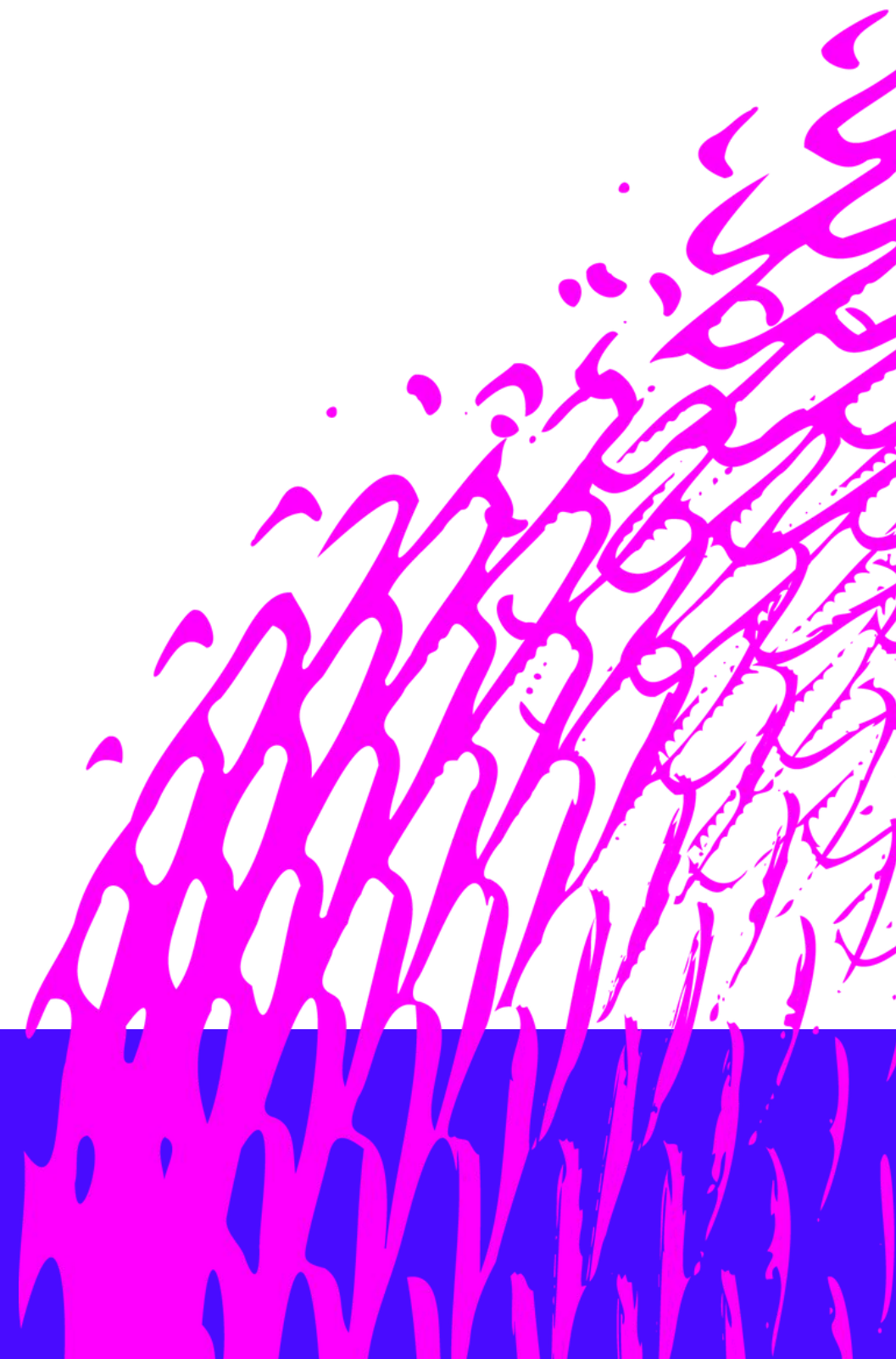
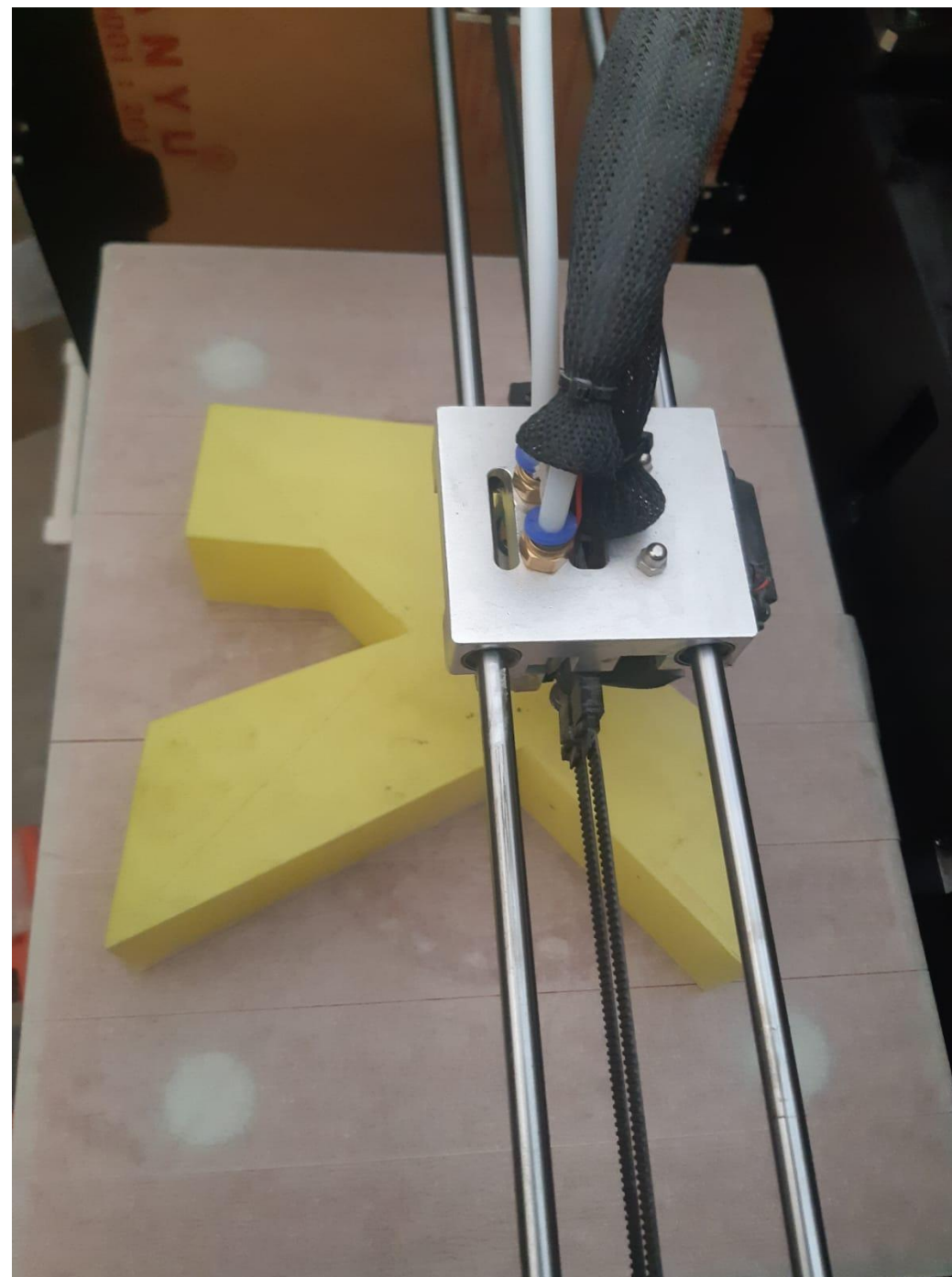
Creazione modelli e stampi con stampa 3D

Dall'idea, al modello 3D allo stampo alla
produzione.

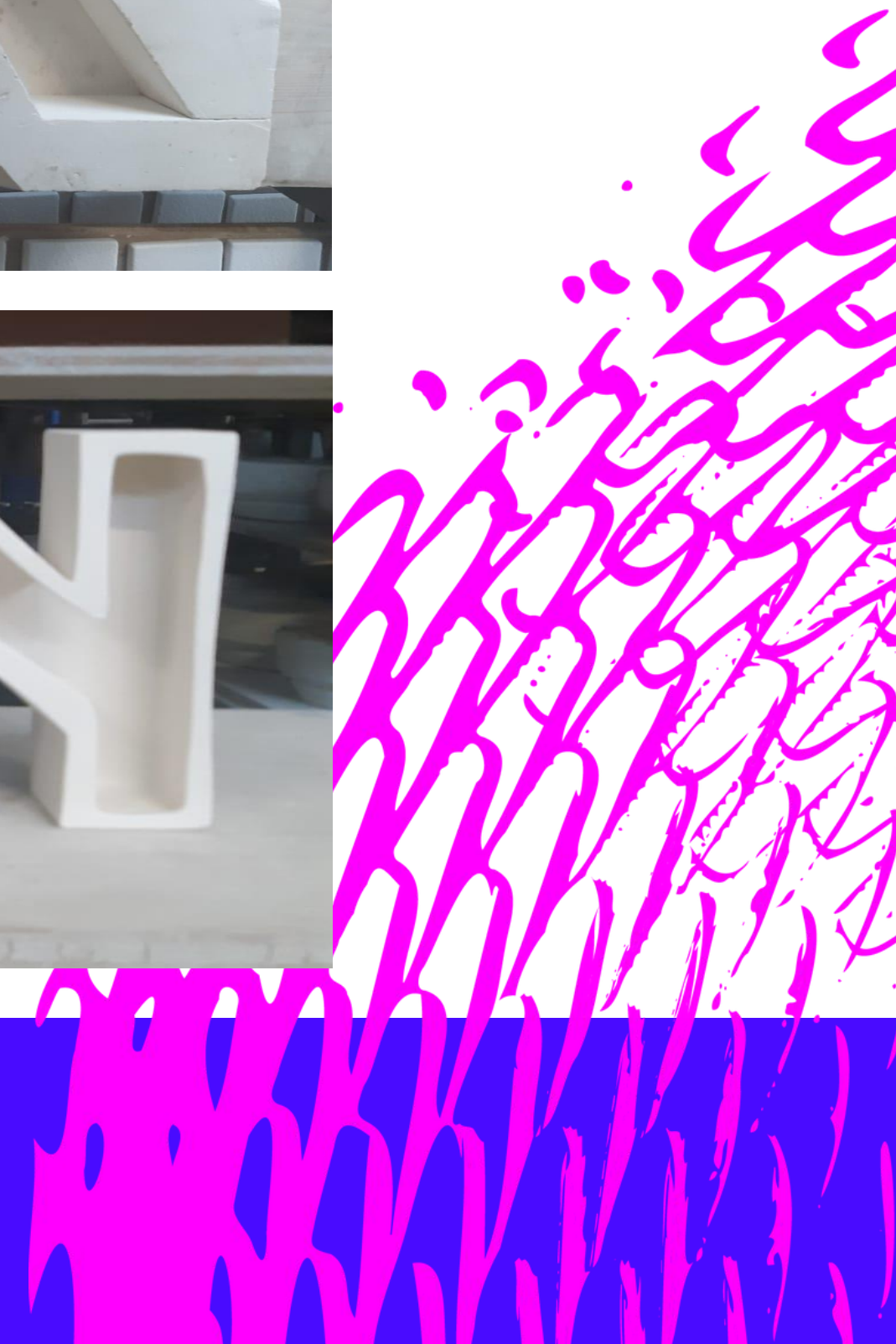


Stampa del modello

in plastica



Stampo e colaggio



Terra e forme x Marcella Renna

marcellarennna.com





Ceramiche Sognanti

Scopri di più



Tutti i prodotti

Profumatori per ambiente

Vasi grandi

Vasi piccoli

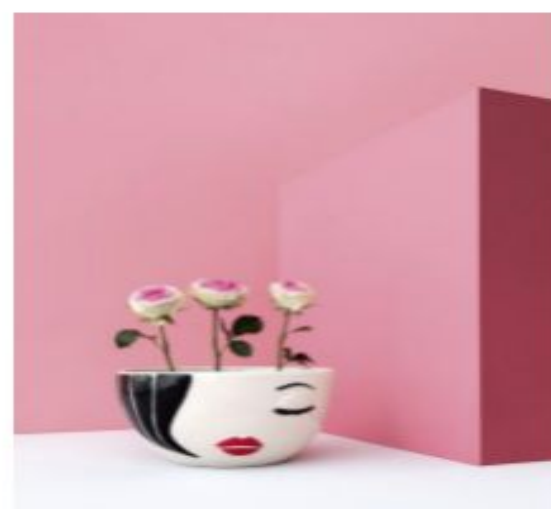
Soprammobili Moderni

Flash sale



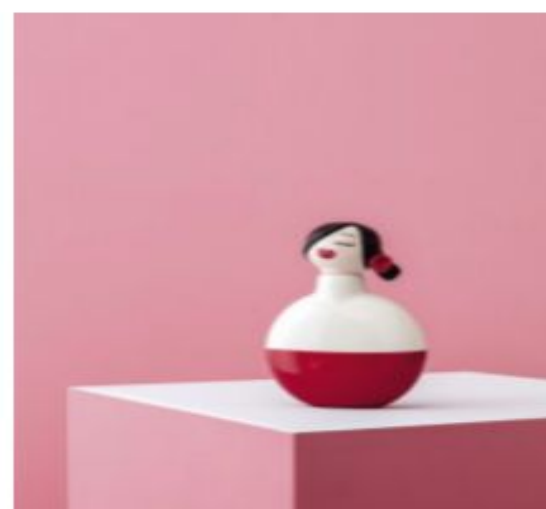
MINA vaso per fiori a forma di testa turchese

€ 50,00



AZZURRA vaso moderno con viso, capelli neri e labbra rosse

€ 70,00



MELANIA bottiglia soprammobile rosso bianco

€ 90,00



MINA profumatore per ambienti a forma di donna

€ 120,00



MINA diffusore ambiente a forma di donna

€ 120,00

Stampa 3D e Foggiatura a colaggio

presso Terra e Forme



Finitura, smaltatura



Domande?



**CERAMIC
FUTURES**

business e tecnologie
per imprese ceramiche