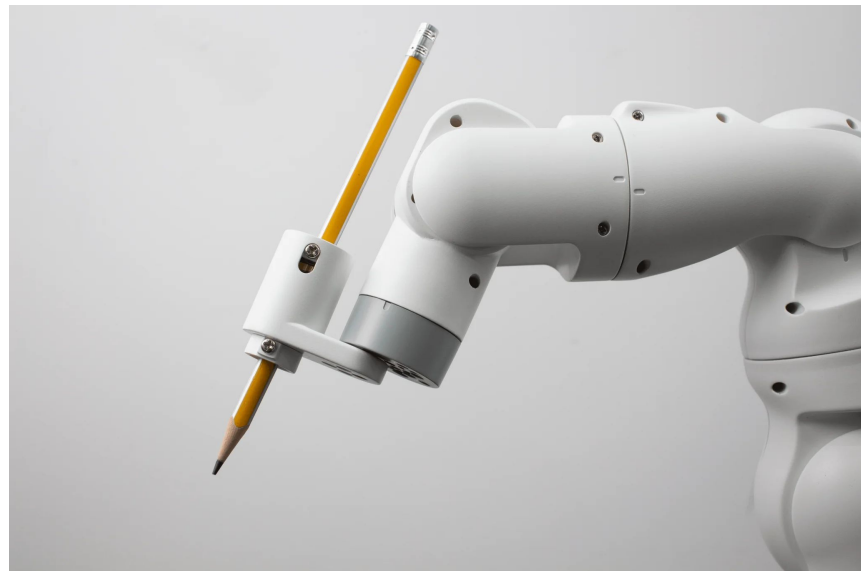
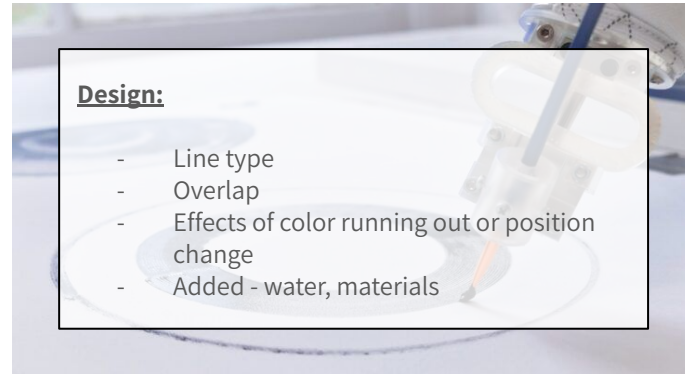
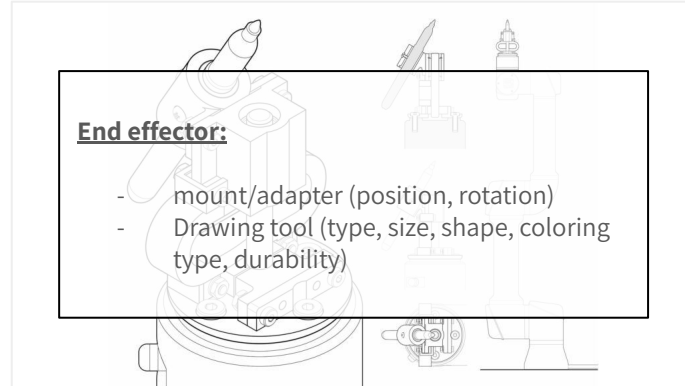
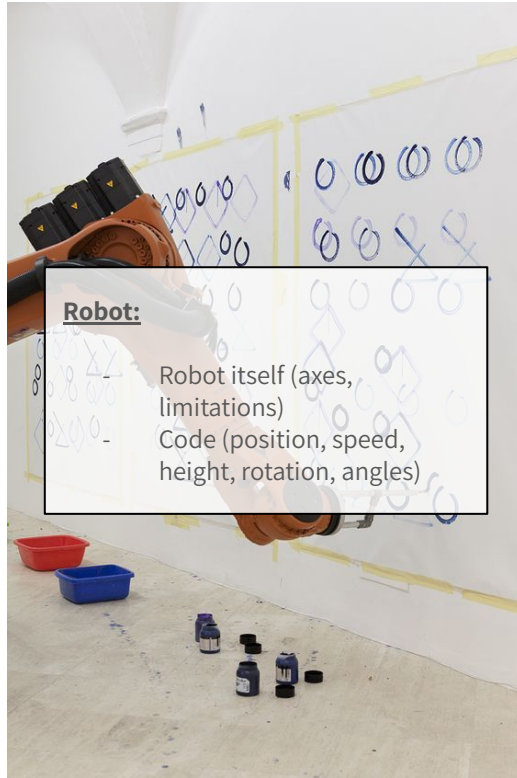




End_Effector



Stroke design control - through material, code and end effector.

[Artist](#)

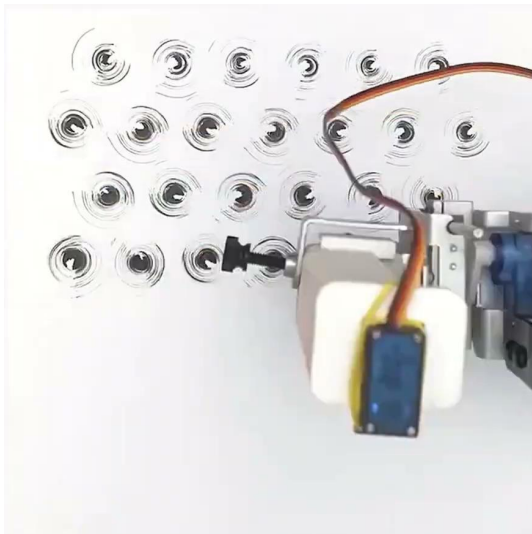


Tool: Brush

Cool Parameter: brush smears paint - unplanned?

[link](#)

[Artist](#)

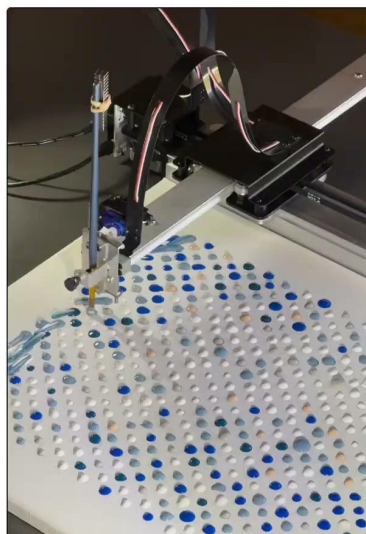


Tool: Brush

Cool Parameter: Rotation - Pattern

[link](#)

[Artist](#)

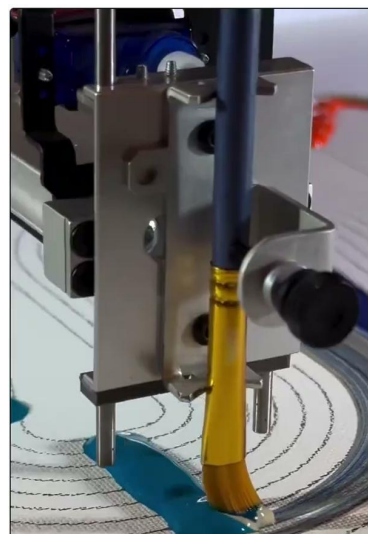


Tool: Brush

Cool Parameter: brush smears paint

[link](#)

[Artist](#)

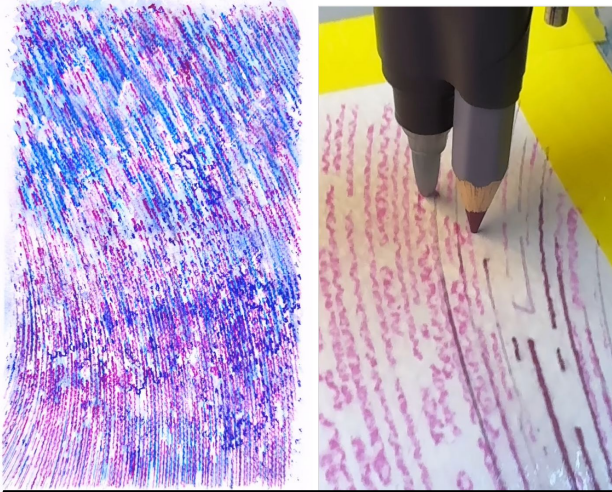


Tool: Brush

Cool Parameter: brush smears paint

[link](#)

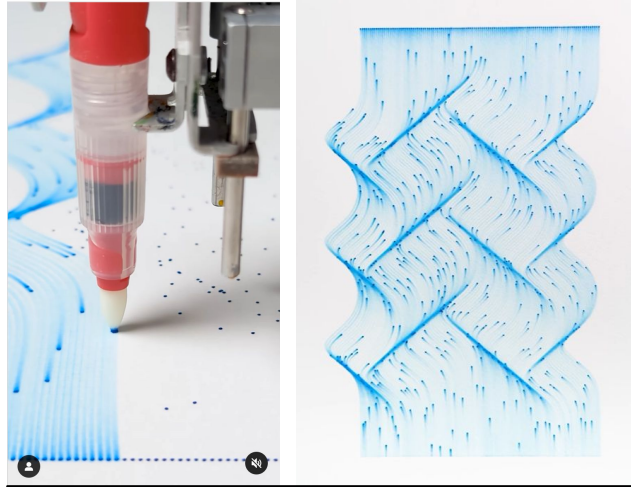
[Artist](#)



Tool: watercolor pencils and waterpen/waterbrush
Cool Parameter: Smear

[link](#)

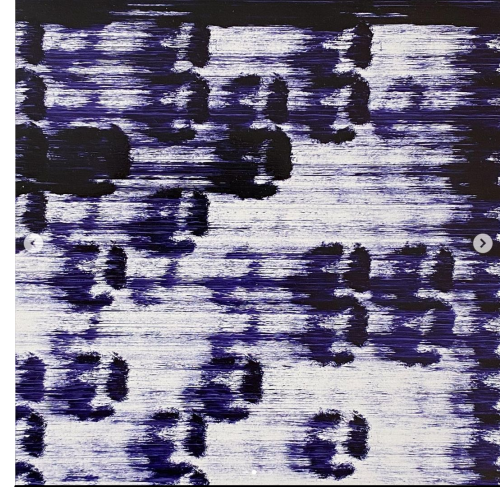
[Artist](#)



Tool: Pens and waterpen/waterbrush
Cool Parameter: Smear

[link](#)

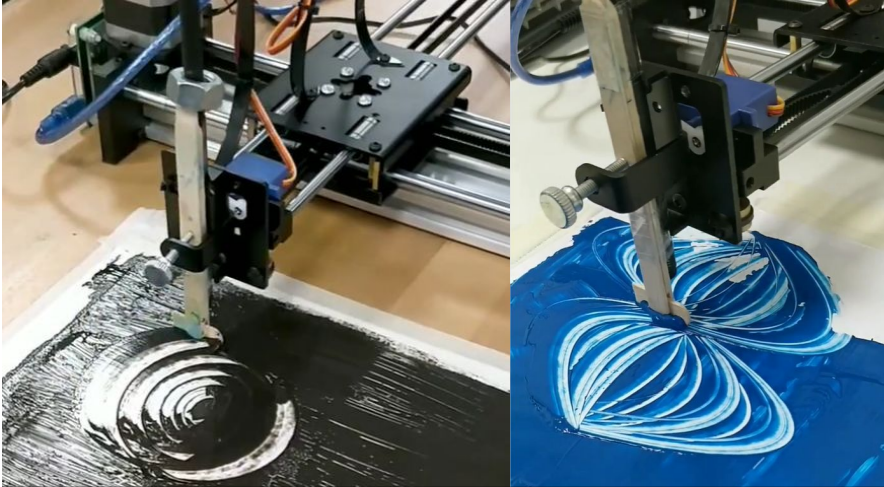
[Artist](#)



Tool: Brush?
Cool Parameter: Smear

[link](#)

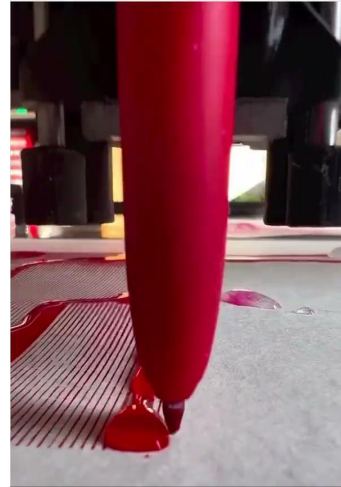
[Artist](#)



Tool: color and smear tool
Cool Parameter: Smear

[link](#)

[Artist](#)



Tool: water and pen
Cool Parameter: Smear

[link](#)

[Artist](#)

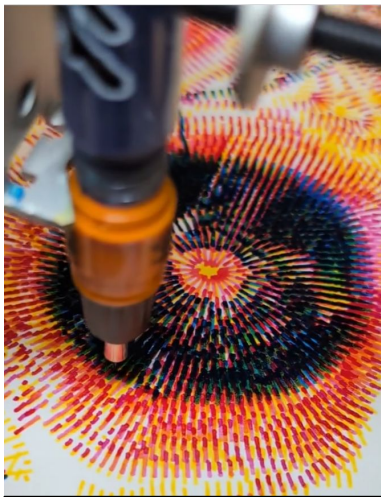


Tool: Charcoal powder and
smudger
Cool Parameter: Smear

[link](#)

Smears / Streaks / Doubles

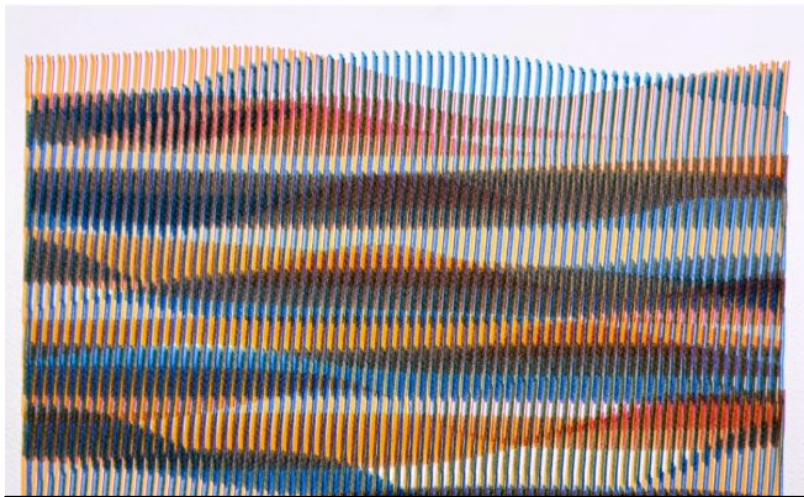
[Artist](#)



Tool: Pens
Cool Parameter: Color overlay, linewidth

[link](#)

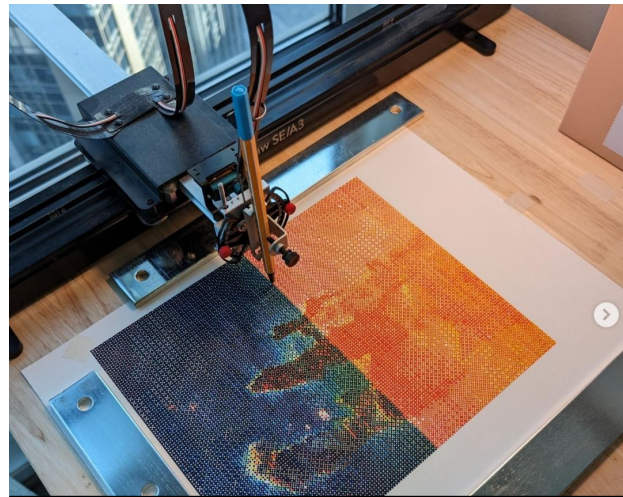
[Artist](#)



Tool: Pens
Cool Parameter: Color overlay, linewidth

[link](#)

[Artist](#)

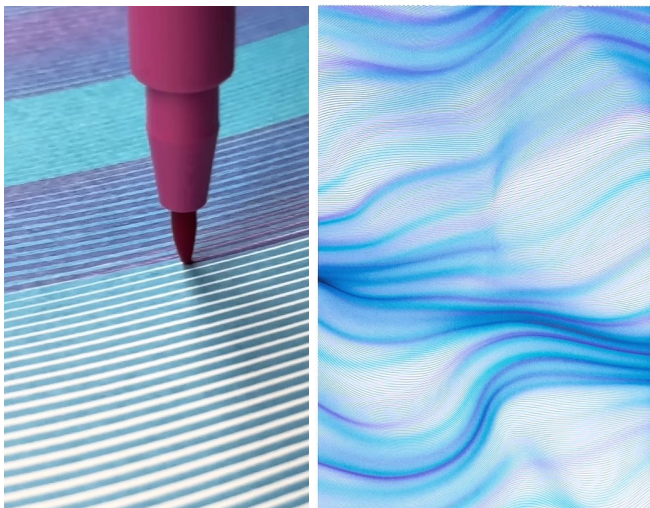


Tool: Pens
Cool Parameter: Color overlay, linewidth

[link](#)

Multiple layers - colors and line width

Artist

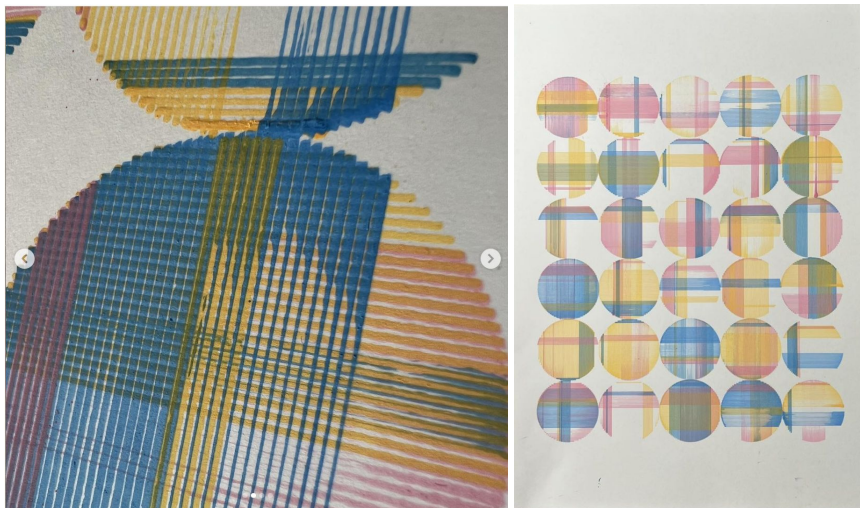


Tool: Pens

Cool Parameter: Color overlay, lineweight

[link](#)

Artist



Tool: Acrylic Pens

Cool Parameter: Color overlay, lineweight

[link](#)

Artist

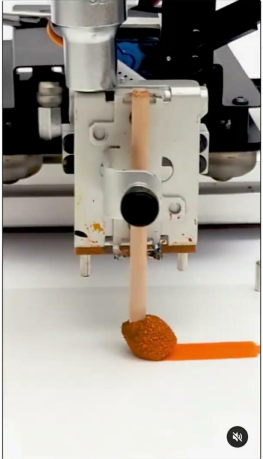


Tool: liquid acrylic,
posca pens, ink
Cool Parameter: overlay

[link](#)

Multiple layers - colors and line width

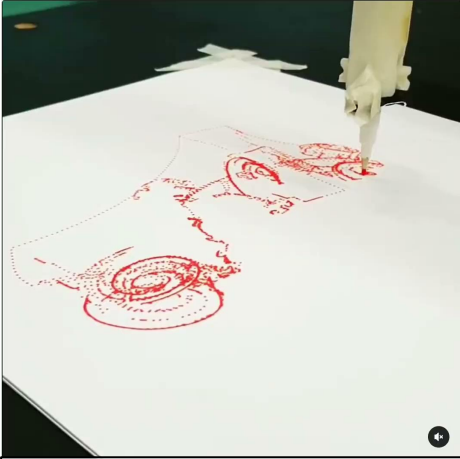
[Artist](#)



Tool: sponge
Cool Parameter:
stop patterns

[link](#)

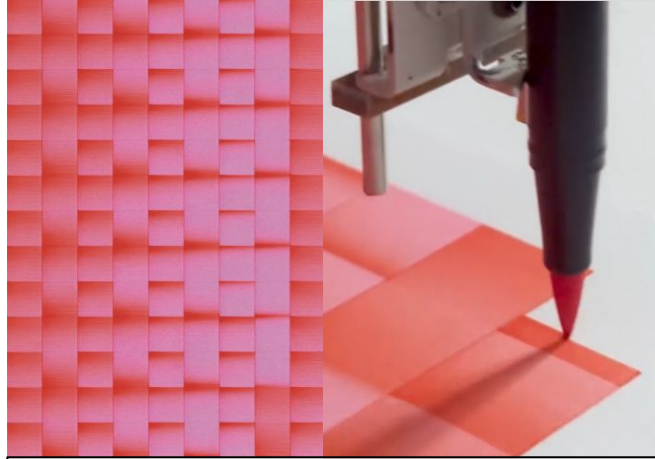
[Artist](#)



Tool: Pens
Cool Parameter: Dots

[link](#)

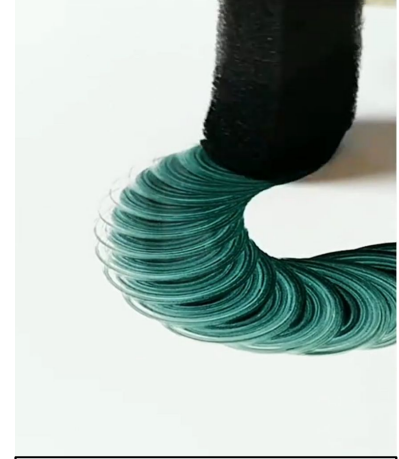
[Artist](#)



Tool: ink pen
Cool Parameter: the pen is soaked into ink at different time to get the gradient from red (the color of the ink) to pink (the color of the pen)

[link](#)

[Artist](#)



Tool: Sponge
Cool Parameter: Rotation
Pattern

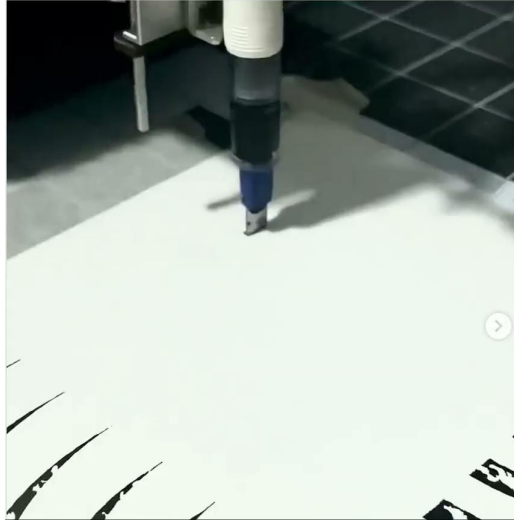
[link](#)

[Artist](#)



Tool: Pilot Parallel Pen
Cool Parameter: no rotation - various line weight

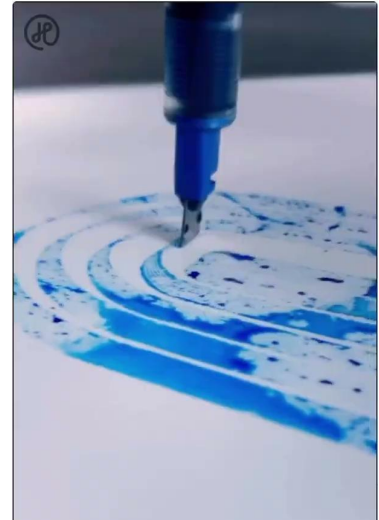
[link](#)



Tool: Pilot Parallel Pen
Cool Parameter: no rotation - various line weight

[link](#)

[Artist](#)



Tool: Pilot Parallel Pen
Cool Parameter: no rotation - various line weight

[link](#)

Stroke design control - Pilot Parallel Pen: Varying Line Width With Just One Pen



Tool: Ballon
Cool Parameter: Texture pattern

[link](#)

[Artist](#)



Tool: Engraver
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: Pottery Tool
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: Water dispenser
Cool Parameter: Tool and material

[link](#)

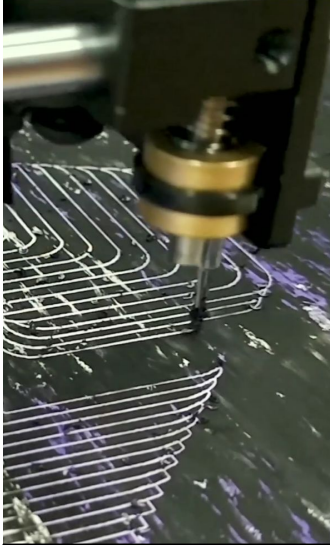
[Artist](#)



Tool: Scratch art - scraper tool
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: Scratch art - scraper tool
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: water marbling tool
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: water marbling tool
Cool Parameter: Tool and material

[link](#)

[Artist](#)



Tool: Pottery Tool?
Cool Parameter: Tool and material

[link](#)

[Artist](#)



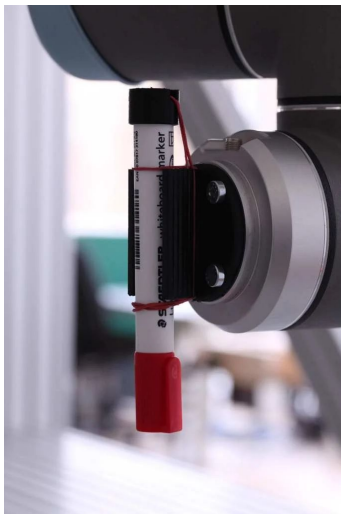
Tool: Pottery Tool?
Cool Parameter: Tool and material

[link](#)

Links



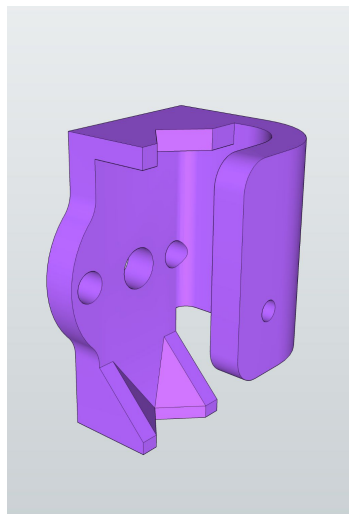
<https://www.printables.com/model/15322-baxter-robot-elastic-pen-holder>



<https://www.thingiverse.com/thing:4687207>



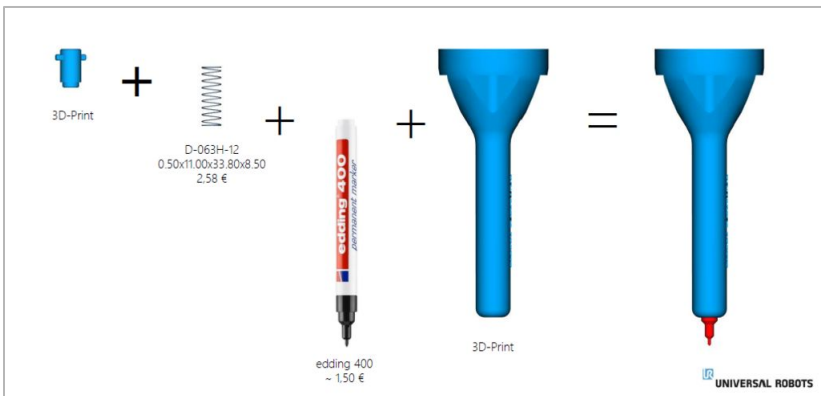
<https://www.thingiverse.com/thing:2892251>



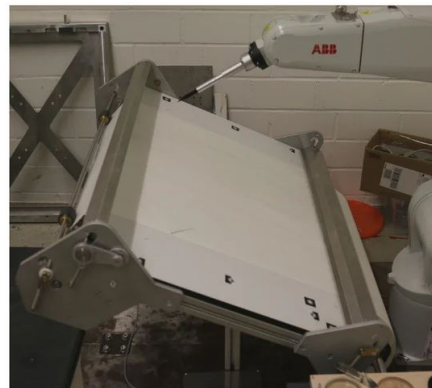
<https://cults3d.com/en/3d-model/tool/robust-pen-holder-for-drawing-robot>



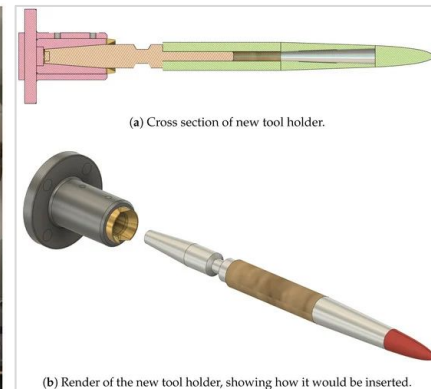
<https://cults3d.com/en/3d-model/gadget/fanuc-lr-mate-pencil-holder>



<https://www.thingiverse.com/thing:6381324>



<https://www.mdpi.com/2076-3417/10/10/3396>





<https://www.flong.com/blog/2010/robotic-graffiti-tagger/>



<https://vimeo.com/75215314>



<https://www.dailymail.co.uk/sciencetech/article-2211227/The-Picasso-robots-ibis-Hotel-creates-artificial-arm-draws-sleep-patterns-toss-turn.html>