

3D Printing from Waste Pellet Extruder 3D



mahor·xyz

Filosofy

Nature takes advantage

of everything

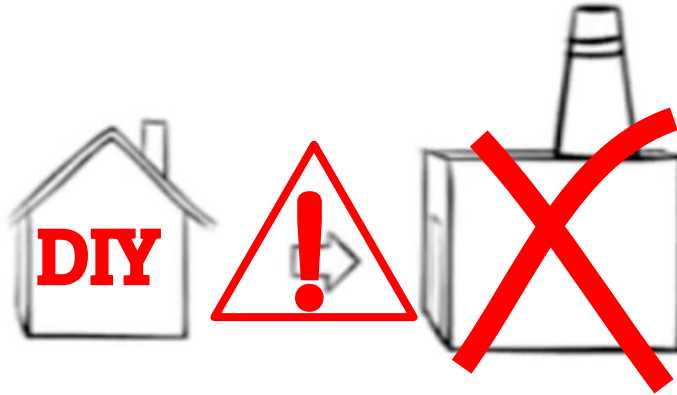


History of things

<https://www.youtube.com/watch?v=9GorqroiggM>



Do It Yourself



Cradle to cradle

William McDonough & Michael Braungart



https://www.youtube.com/watch?v=EyiweCa_0yU

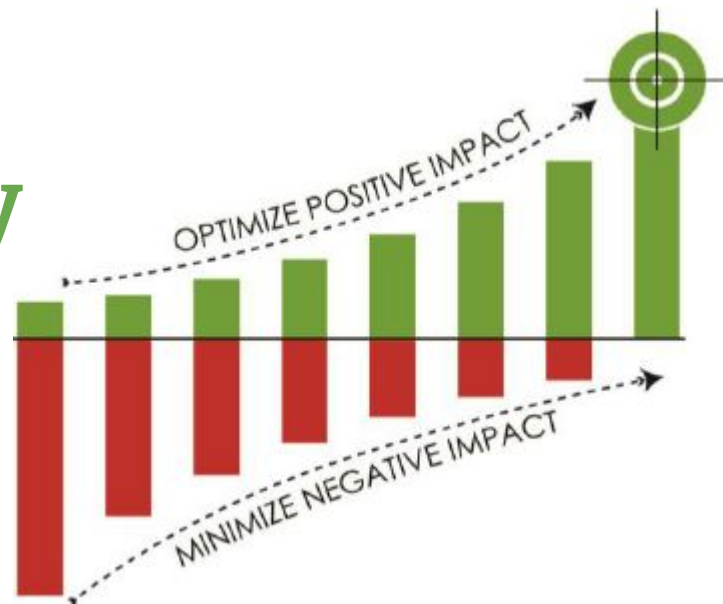
Cradle to cradle

William McDonough & Michael Braungart

Effectively

vs

Efficiently



Not less bad
100% good
waste = *food*

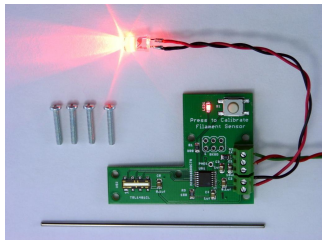
Reduce
Reuse
Recycle



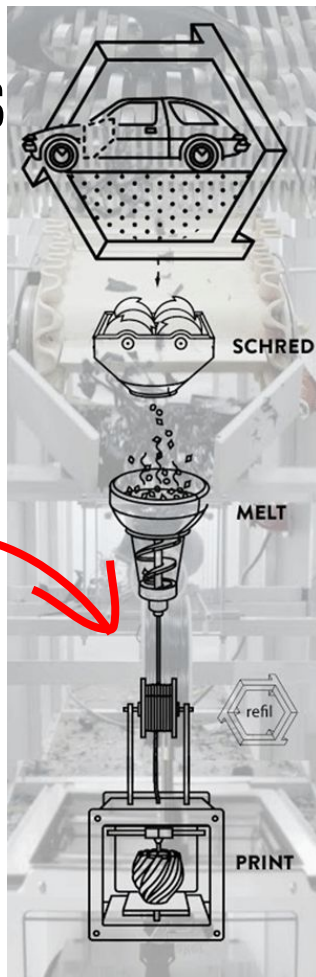
PROJECTS

Filament process

CONTINUITY?



filament width sensor



-COLD

+HOT

-COLD

+HOT

-COLD

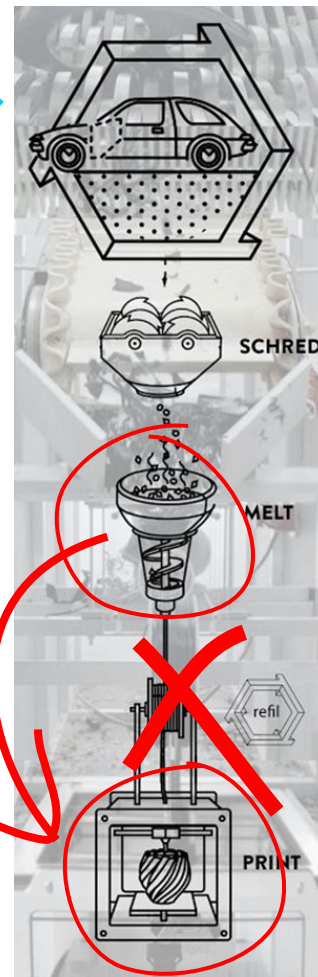
Simplify

-COLD

+HOT

-COLD

DOUBLE
LIFECYCLE

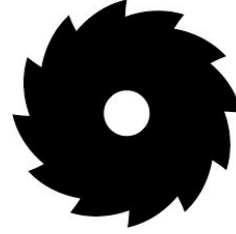


USELESS PLASTIC

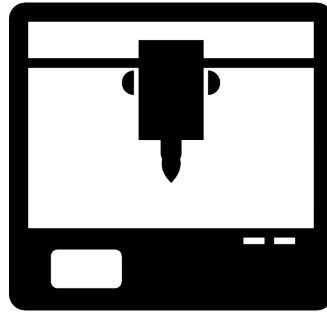
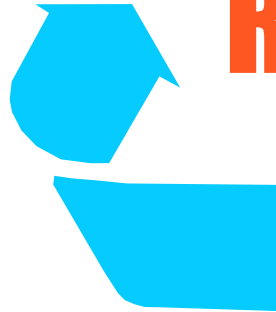


3D
100%

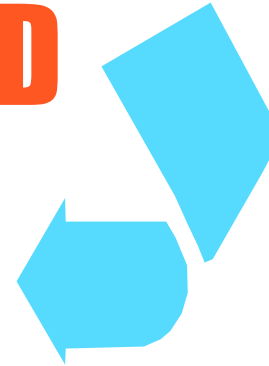
RECYCLED



Shredder



3D Printer

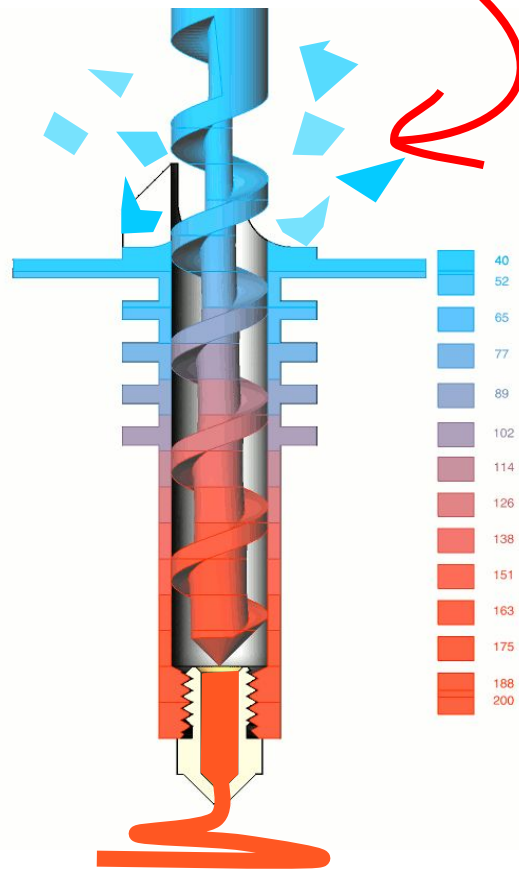


USELESS PLASTICS

Spin screw



*High
compression*



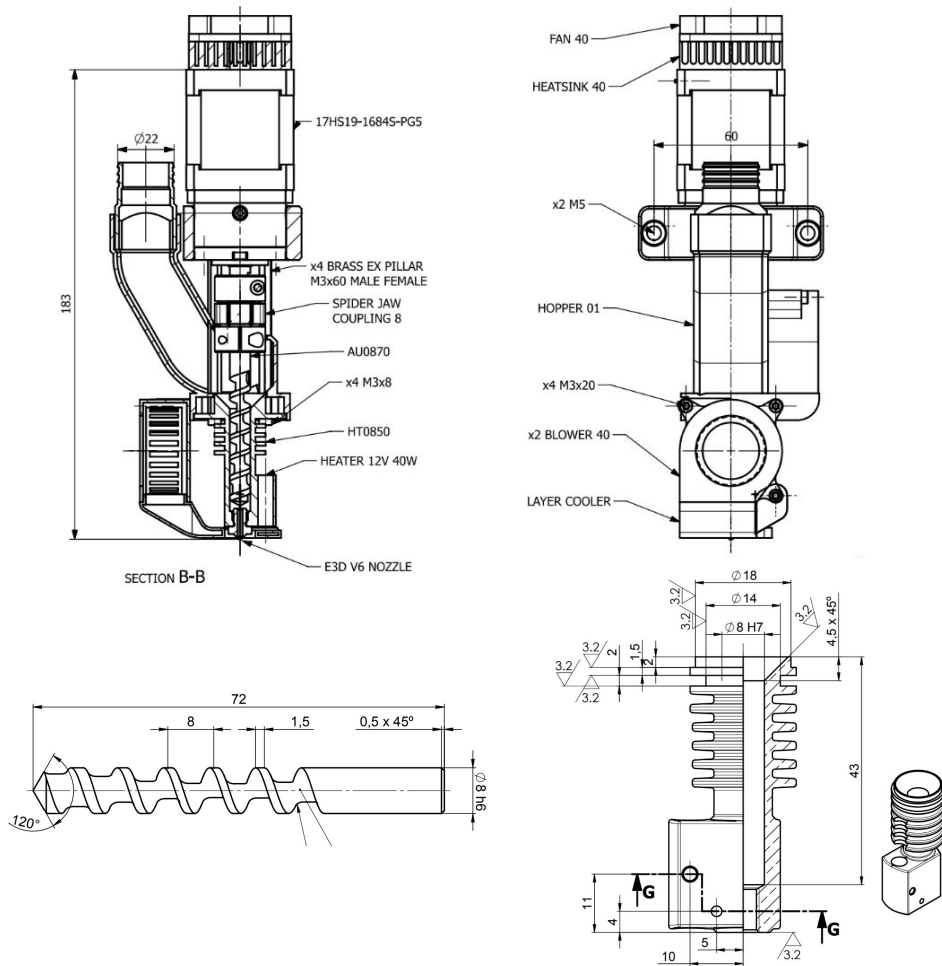
Glass transition
(T_g)

Melt
(T_m)

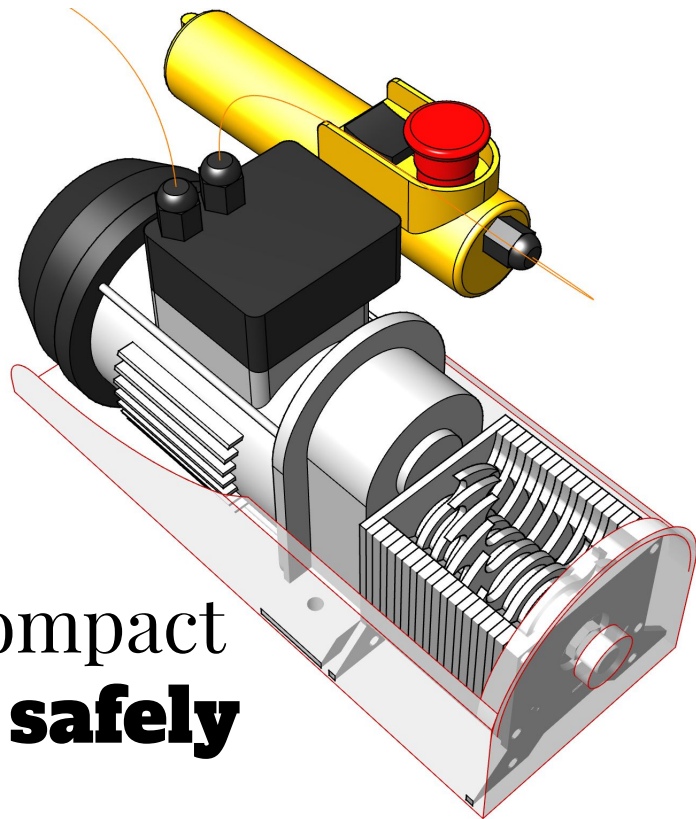
DIRECT 3D PRINTING

ht 8

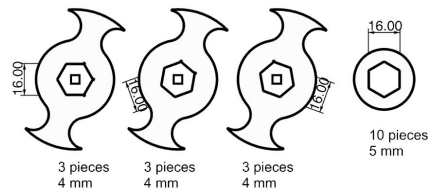
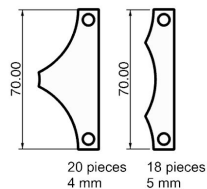
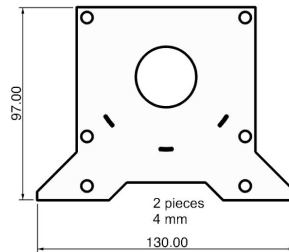
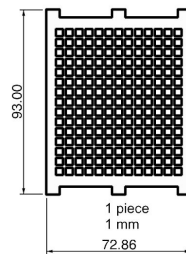
light &
powerful



The shredder

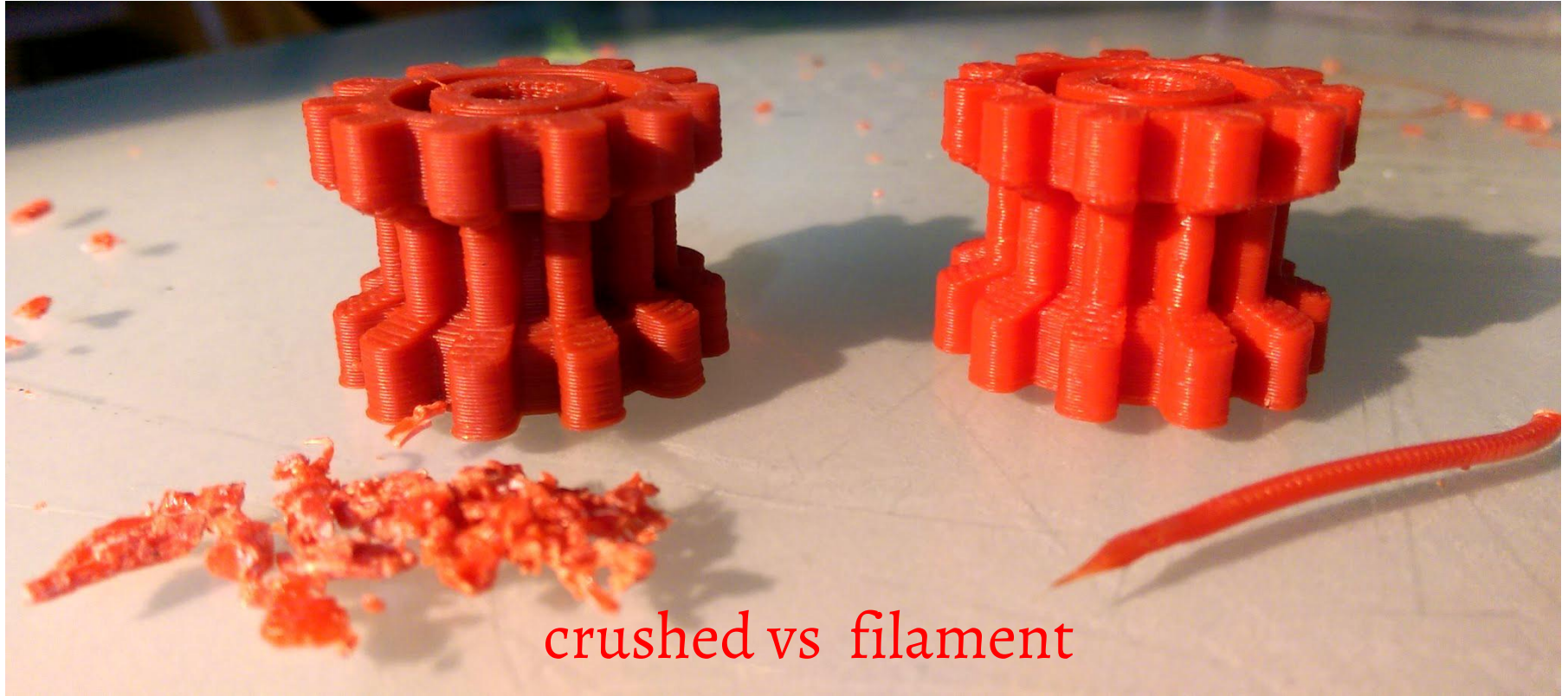


compact
& **safely**



all pieces in stainless steel AISI 304

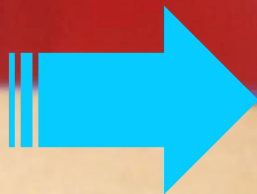
Testing



Testing



water bottle

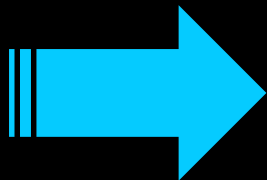


3D printed thing

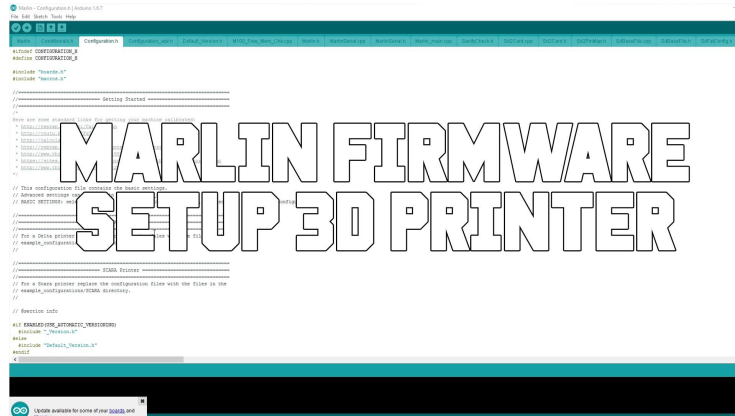
PET bottle cutter



Direct 3D printer



WHAT'S NEXT?



Pressure sensor upgrade
automatic flow rate

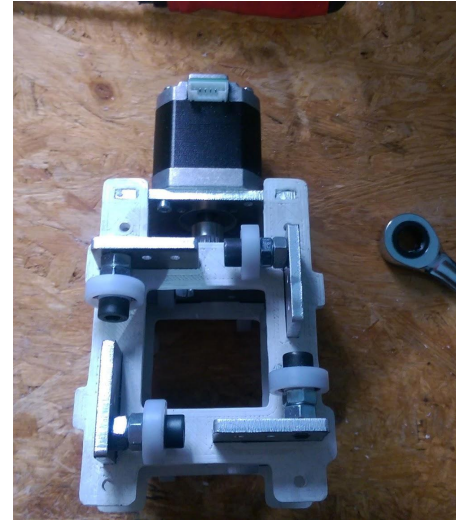
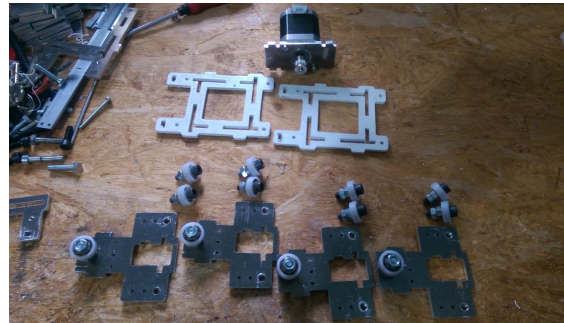


<http://robotshop.com/letsmakerobots/recycling-bin-with-rapid-prototyper>

Big format



40x40 aluminium
profile

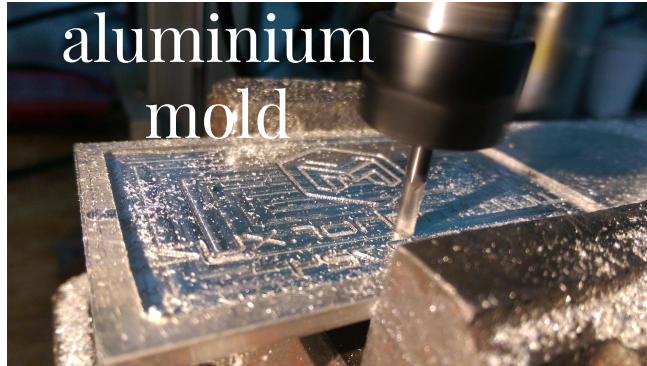


Hybrid replication

3D printing
& **milling**



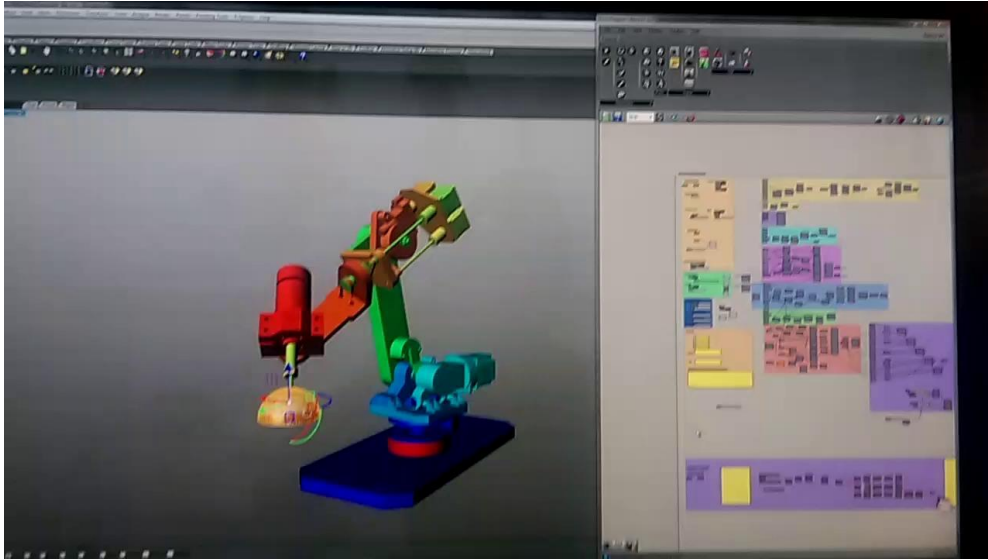
Molding



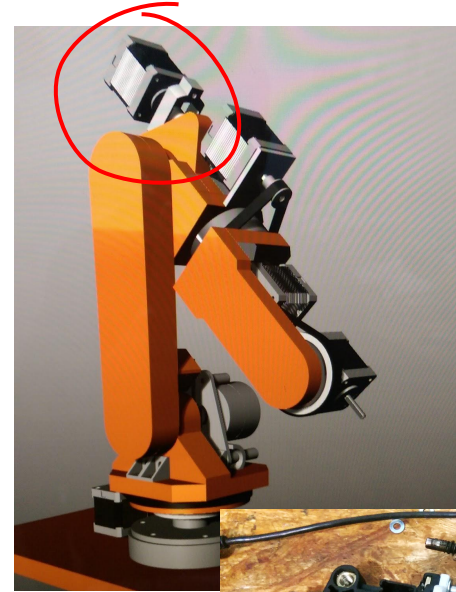
Recycled plastics



6 AXIS BOT



recycled car window
winder



stepper

