

The Robot That Sharing Built Bre Pettis @bre @makerbot



The Future

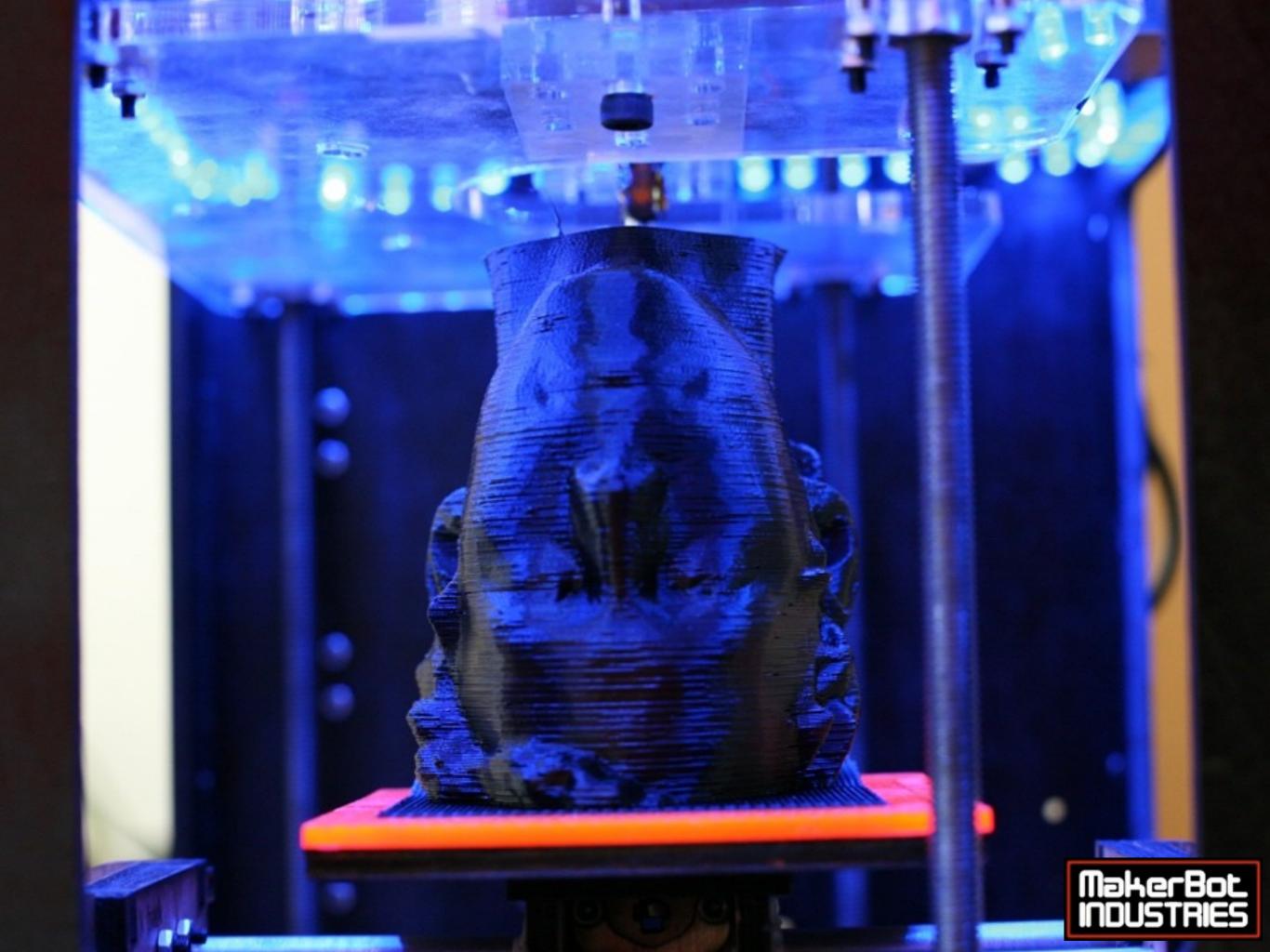




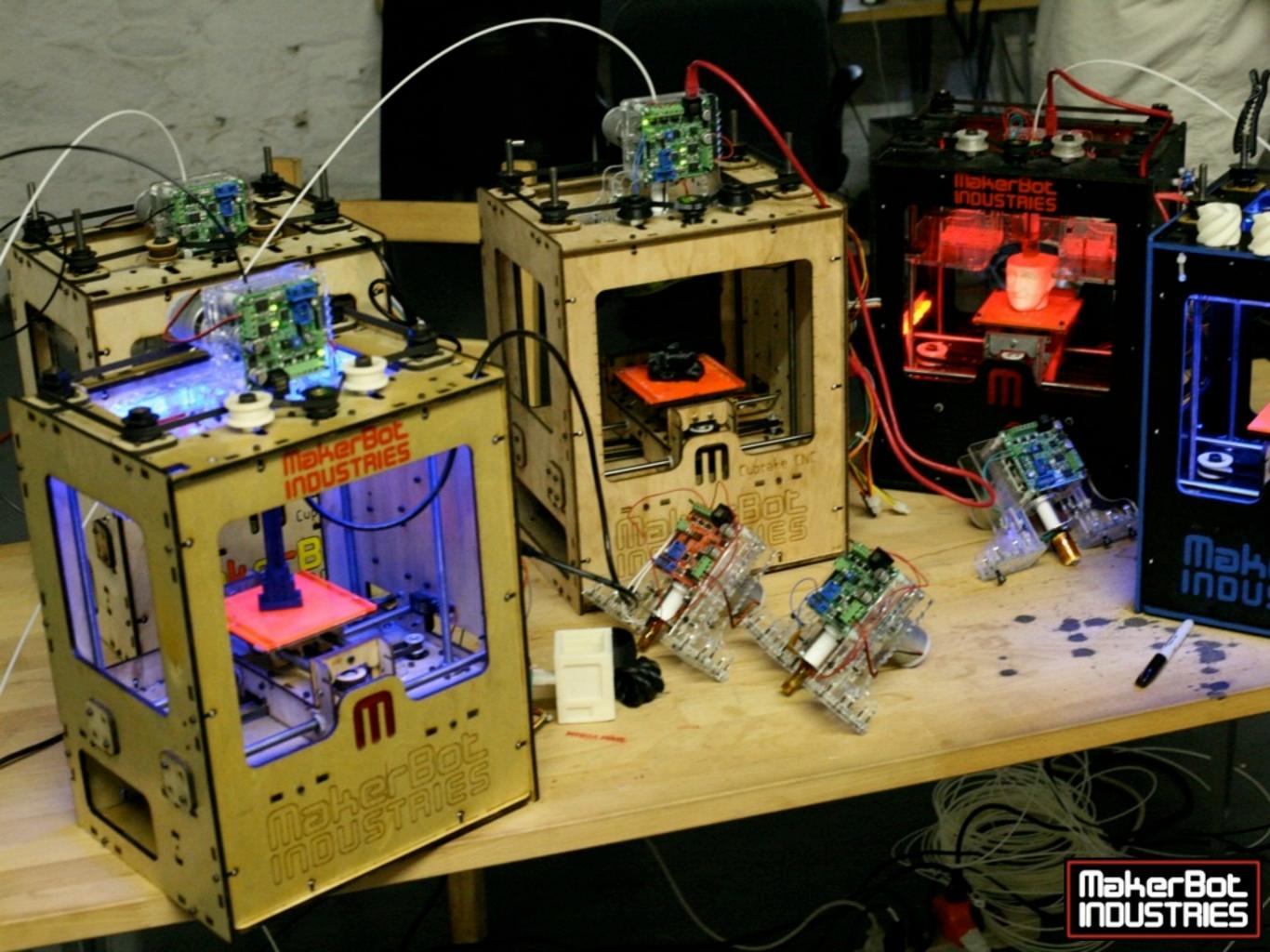


The Relicator!



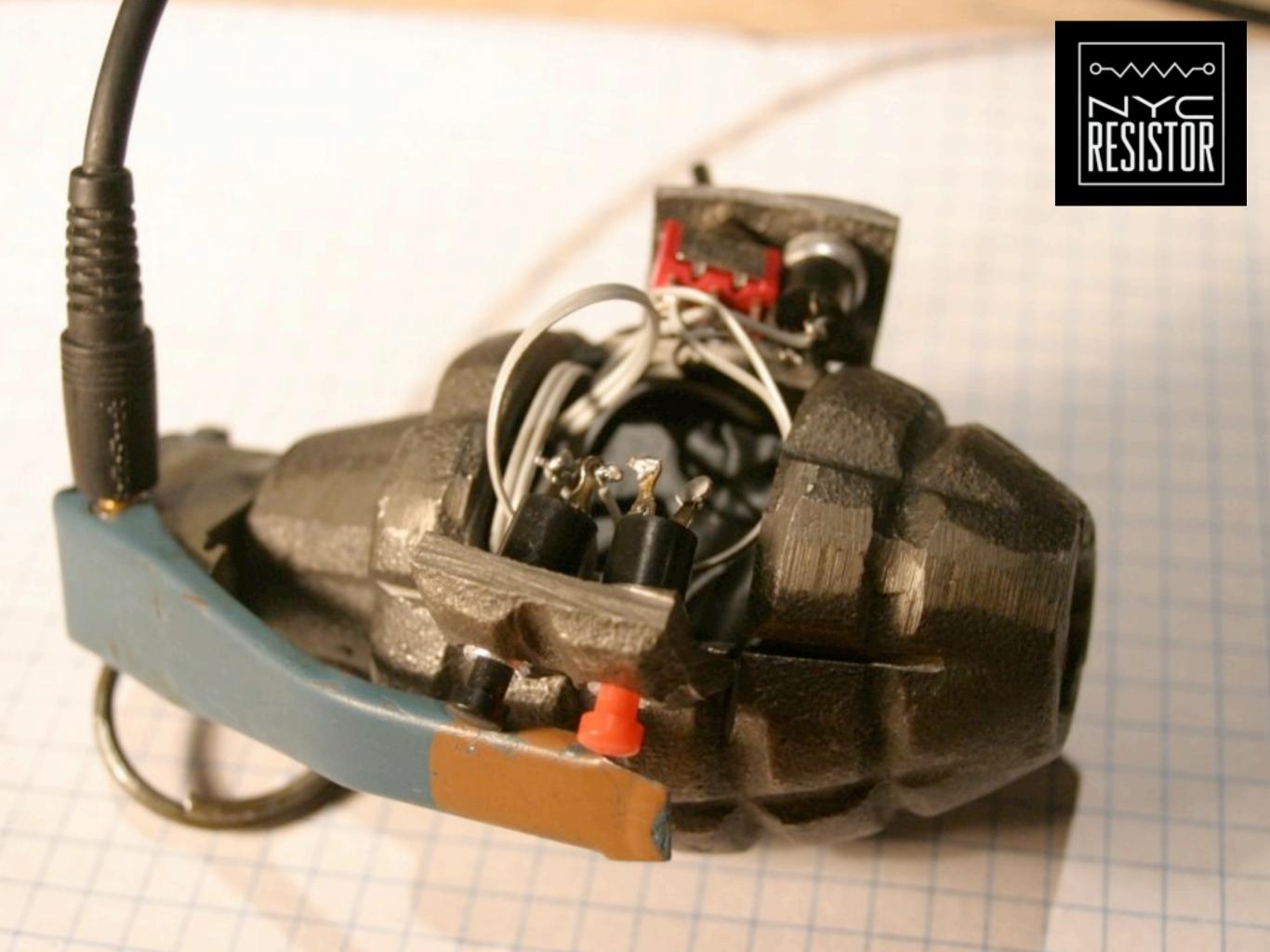






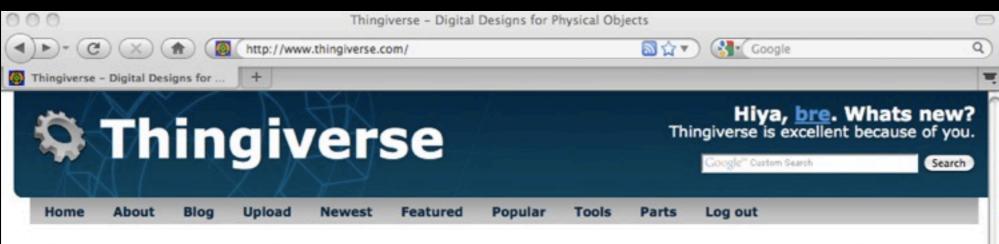






A UNIVERSE OF THINGS!





Welcome to the Thingiverse.

This is a place to share digital designs that can be made into real, physical objects. Let's create a better universe, together!

Newest Things



Pink-Ribbon-Earrings By: guru 2 hours ago



Groove Mount #3 By: tbuser 16 hours ago

view more



Yoshimoto Cube By: 2ROBOTGUY 1 day ago

makerbot

3D

makeentry reprap useful openscad toy experiment lasercut model

Popular Tags

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Popular Tools

3D Printer Knife Laser Cutter Screwdriver Saw Soldering Iron Hex Keys Wire Cutters Scissors Files

> Thingiverse Blog Recent Posts Thingiverse Prep Work

Download Things (Just like videos, music, and books)



Featured Things



Castle Coaster By: WRIGHT1 2 days ago



Cap for Nikon lenses By: madebydan 2 days ago

view more



By: tastybento 2 days ago

Object Credit: Zach Smith

Object Credit: Will Langford

Yashica-D Yashica-D

By Will Langford

Object Credit: Mark Weller



Object Credit: Dominic Muren

Derivative Credit: Nate True

Object Credit: Owen Collins

Object Credit: Eberhard Rensch

Design Credit:Wizard23



Collaboration between R3becca, Nate True and MakerBlock

Replacement parts!



Design Credit: wizard23

Object Credit: Cathal Garvey



Object Credit: dmatsumoto

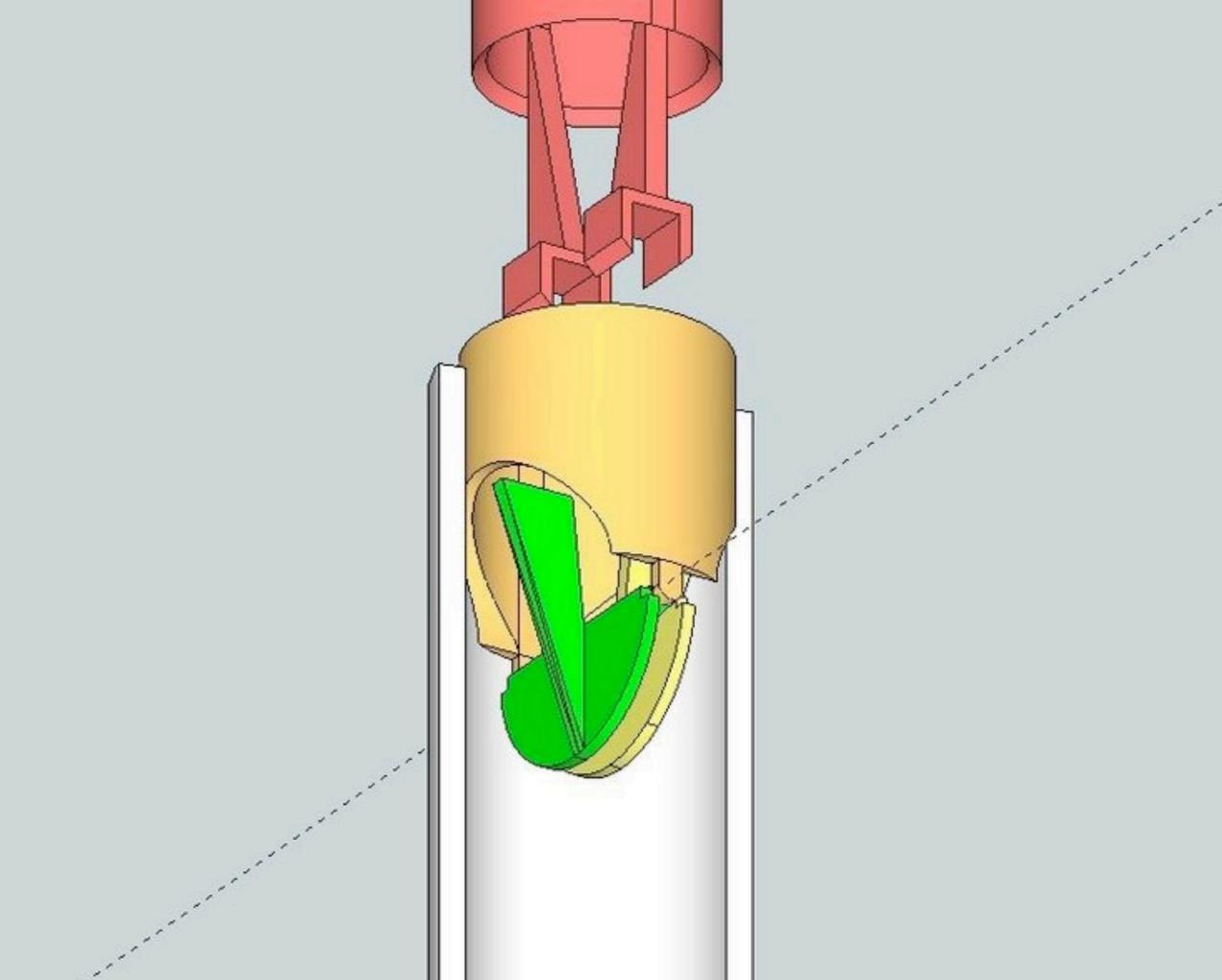
Object Credit: Junior Tan

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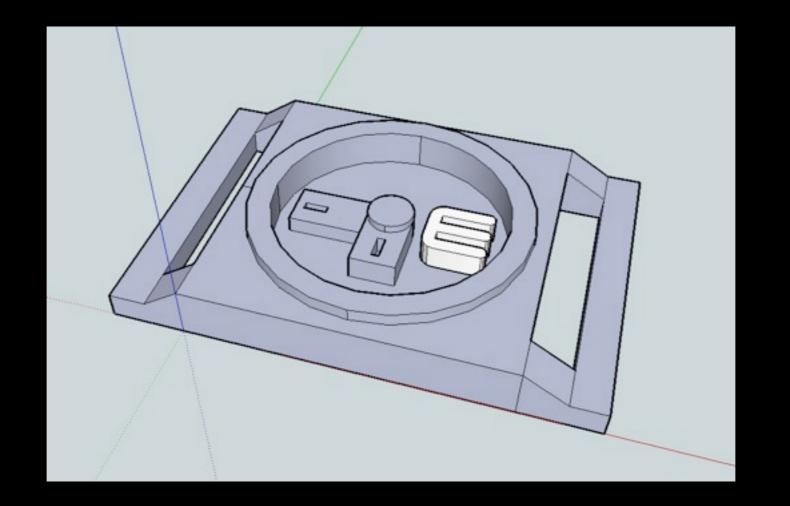
Object Credit: bpijls

Object Credit: jmillerid

Object Credit: Adam Elkins

If you can't download it, you have to design itl

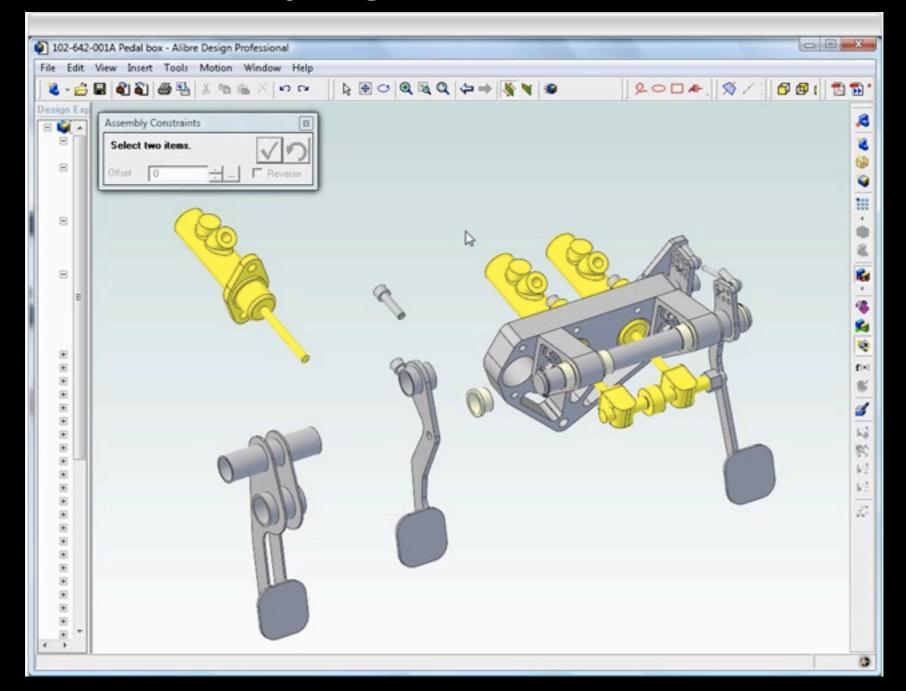




Free and/or Open Source Modelling software! OpenSCAD, Sketchup, Blender, Art of illusion, and more.

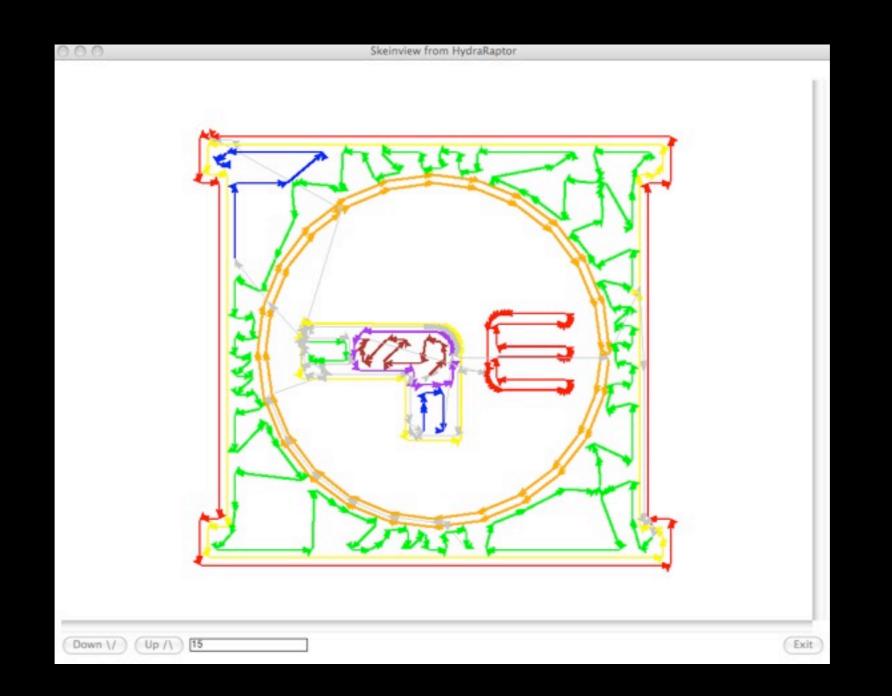


Some programs are not free



Alibre, AutoCAD, Inventor, Solidworks





Once you have the design you slice it with skeinforge



000	Control Panel		ReplicatorG – 0003
Jog Controls			File Edit GCode Machine Tools Help
Y+	Z+	Jog Size 10mm 🛟 X Position	Image: Second state Image: Second state dodecohedron_scaled_again_export
X- Zero	X+ Z-	0.0 Y Position	G1 X-10.78 Y13.03 Z0.26 F1440.0 G1 X-10.67 Y12.91 Z0.26 F1440.0 G1 X-10.67 Y-11.22 Z0.26 F1440.0 G1 X-10.55 Y-11.34 Z0.26 F1440.0
Y-		Z Position	G1 X-9.43 Y-11.34 Z0.26 F1440.0 G1 X-9.32 Y-11.22 Z0.26 F1440.0 G1 X-9.32 Y12.91 Z0.26 F1440.0 G1 X-9.2 Y13.03 Z0.26 F1440.0 G1 X-8.08 Y13.03 Z0.26 F1440.0
XY Feedrate (mm/min.) 480			61 X-7.97 Y12.91 Z0.26 F1440.0
Z Feedrate (mm/min.)			G1 X-7.97 Y-11.22 Z0.26 F1440.0 G1 X-7.85 Y-11.34 Z0.26 F1440.0 G1 X-6.73 Y-11.34 Z0.26 F1440.0 G1 X-6.62 Y-11.22 Z0.26 F1440.0
Pinch Wheel Extruder v1.1			G1 X-6.62 Y12.91 Z0.26 F1440.0
Motor Speed (PWM)			C1 V 6 E V13 03 70 26 E1440 0
Motor Control O reverse O stop O forward		stop) forward	
Target Temperature (C)220Current Temperature (C)0.0			Loading machine: 3-Axis Simulator Loading driver: NullDriver Creating panel for Pinch Wheel Extruder v1.1
Cooling Fan	🗌 enable	N	
In ReplicatorG, I like to test all the			
directions	andheat th	ne nozzle up	

ReplicatorG





Print it!







Cathal Garvey had a mouse problem.





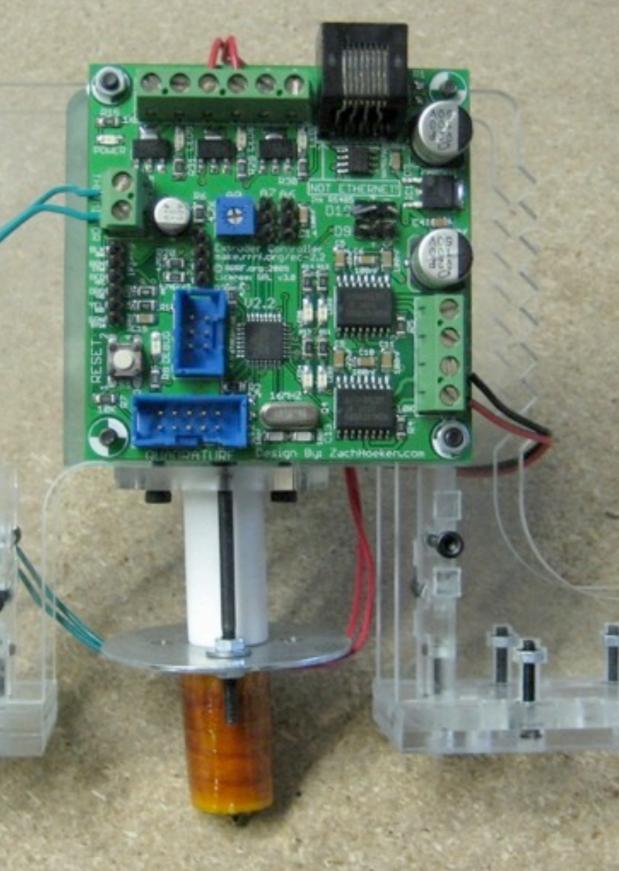
He crowdsourced eleven solutions



With open source manufacturing tools, when one person solves a problem they solve it for everyone in their community.

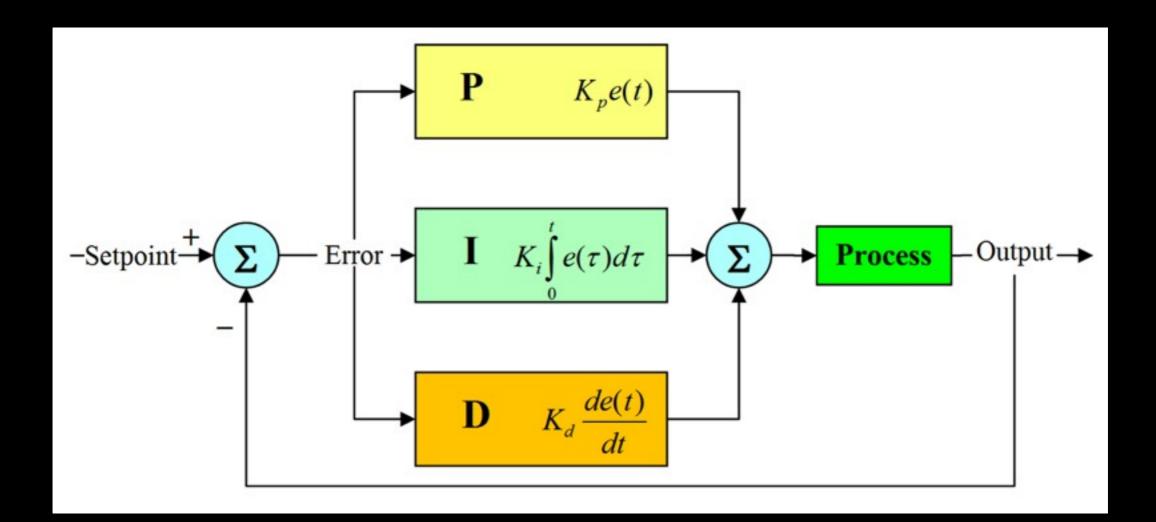


MakerBot MK4 Plastruder





proportional–integral–derivative controller (PID controller) is a generic control loop feedback mechanism (controller) widely used in industrial control systems. A PID controller attempts to correct the error between a measured process variable and a desired setpoint by calculating and then instigating a corrective action that can adjust the process accordingly and rapidly, to keep the error minimal.



Improvement Credit:Tim Myrtle



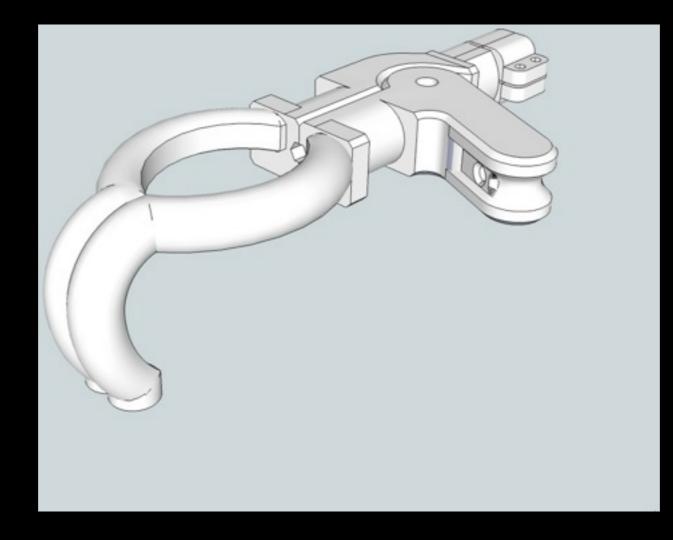
Some things to think about: Abundance, and Sharing <u>Customization VS Mass Manufacturing</u>

Personalized VS Branded



Beginning.





Frontiers: organs, investment casting, syringe-ables and all sorts of THINGS (The nearly possible is tangible)

Trautman Hook - Open Prosthetics Project Object Credit: spedzero



MakerBot Basics

Cheap and accessible (\$950)
Culture of sharing
Frontier of possibilities.





You're invited to push the frontier of personal manufacturing!

@MakerBot - @Thingiverse - @Bre

