



Yellowcake - A UK beetleweight combat robot



TheMan-TheMystery-TheMatt

[VIEW IN BROWSER](#)

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Summary

A (not fully printed) horizontal spinner combat robot for the UK beetleweight class (1.5kg).

[Hobby & Makers](#) > [RC & Robotics](#)

Tags: [combatrobot](#) [battlebot](#) [beetleweight](#)

Desc:

A 1.5kg beetleweight horizontal spinner combat robot.

Anything in the TPU folder should be printed in TPU and the PLA folder could be done with any standard filament (I'm using PLA+) Parts like the cradle are just because of the UK rules as you need a cradle and a sharp edge guard so you might not need these.

All files are .STEPS and most contain multiple parts, just open then and in the slicer right click and split to objects, or at least thats how to do it in PrusaSlicer.

And finally the cradle only has two parts in the STEP file, you need to just mirror that back piece so you end up with two corners and one front.

Hardware needed:

8 x M4 30mm standoffs

16 x M4x12mm flanged button head screws (standard button heads should also work okay)

4 x M4x30mm flanged button head screws (standard button heads should also work okay)

4 x M4 flanged nuts

Probably a few other bits I've forgotten.

Non-printed parts needed:

D3530 1100KV motor

2 x Outside plates (3mm aluminium 6160) ("Panel.step")

Weapon (9mm 4140 steel) ("Classic Weapon Blade.step" or "Basic Weapon Blade.step")

(I had my non-printed parts made by PCBway)

Electronics:

(I ordered most parts from [here](#))

But you'll basicly need:

2 x 22mm [motors](#)

ESCs for those motors

Saftey link & connectors (I orderd [this](#))

Wheels and hubs (I am using cast urethane wheels and some squre hubs but you could also use 3in x .75in foam wheels with fingertech hubs. You can cast your own using the cast in the wheel STEP file.)

Model files



PLA parts

3 files

wheel-parts-and-motor-mounts.step

📄 75mm wheels

cradle-parts.step

wheel-parts-65mm.step

📄 65mm wheels



Non-printed parts

3 files

classic-weapon-blade.step

basic-weapon-blade.step

panel.step



TPU parts

2 files

sides.step

other-tpu-parts.3mf



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