# Onderdelen:

T-motor U5 KV400 (4x):

[https://store.tmotor.com/goods-318-U5+Power+Type+UAV+Motor+400KV.html](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstore.tmotor.com%2Fgoods-318-U5%2BPower%2BType%2BUAV%2BMotor%2B400KV.html&data=05%7C02%7CMartijn.Guilliams%40STUDENT.PXL.BE%7C0962960b2f7c4f2b1aba08dc2bba53d4%7C0bff66c545db46ed8b8187959e069b90%7C0%7C0%7C638433326534476907%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=pXCUKLuusQuWdiEX89Qwjto%2FdV%2FsDazesYPXZdvj8PI%3D&reserved=0)

HobbyWing ESC (4x):

[https://www.hobbywingdirect.com/products/xrotor-pro-40a-esc?variant=1306506956](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hobbywingdirect.com%2Fproducts%2Fxrotor-pro-40a-esc%3Fvariant%3D1306506956&data=05%7C02%7CMartijn.Guilliams%40STUDENT.PXL.BE%7C0962960b2f7c4f2b1aba08dc2bba53d4%7C0bff66c545db46ed8b8187959e069b90%7C0%7C0%7C638433326534487155%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=NqQB%2B26m1AAQVhAC9cz0qAATTVxFS5uzlWJ3Latdtnk%3D&reserved=0)

T-motor props (4x):

[https://store.tmotor.com/product/folding-carbon-fiber-16\_2x5\_3-prop.html](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstore.tmotor.com%2Fproduct%2Ffolding-carbon-fiber-16_2x5_3-prop.html&data=05%7C02%7CMartijn.Guilliams%40STUDENT.PXL.BE%7C0962960b2f7c4f2b1aba08dc2bba53d4%7C0bff66c545db46ed8b8187959e069b90%7C0%7C0%7C638433326534494419%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=209tZ4gTbwIqA4duydbVq%2BaZzPupRUSwVwbz7obcKME%3D&reserved=0)

Connectors voor motoren:

MT-30-F & MT-30M AMASS (+ zie afbeelding in bijlage voor aansluiting, Thiago kan je hiermee helpen)

Carbon arm (buis - afmetingen):

Carbon buis 25/23mm x 250mm [https://www.carbonwinkel.nl/carbon-plaat-staaf-buis-materiaal/carbon-buis-gewikkeld-pw-3k?diameter\_en\_lengte\_buismateriaal=o\_25\_23\_x\_1000\_mm\_120\_gr](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.carbonwinkel.nl%2Fcarbon-plaat-staaf-buis-materiaal%2Fcarbon-buis-gewikkeld-pw-3k%3Fdiameter_en_lengte_buismateriaal%3Do_25_23_x_1000_mm_120_gr&data=05%7C02%7CMartijn.Guilliams%40STUDENT.PXL.BE%7C0962960b2f7c4f2b1aba08dc2bba53d4%7C0bff66c545db46ed8b8187959e069b90%7C0%7C0%7C638433326534500557%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=WNfo%2BQPxqaIi8Vth7G4JnX8%2B6Ayw2aaggaWhY2FB1qQ%3D&reserved=0)

Plastic poot (buis - afmetingen):

PVC buis 16mm x 235mm

Motor mount (wit printstuk):

Dit laten wij 3D printen

ALU arm mount bottom & top:

Voor inklemmen carbon arm aan het frame van de drone (tekeningen in bijlage)

# Testbank:

Aluminium profielen:   
<https://www.tech-specialist.com/be/>

12x ISB profiel voor kubus   
1x ISB profiel voor montering arm  
x aantal verbindstukken en bevestigingsmateriaal   
2x scharnier stukjes  
1x deursluiting   
Voetstuk?

Kippengaas:  
<https://www.hubo.be/nl/p/giardino-kippengaas-zeskant-10m-x-50cm-25mm-verzinkt/175555/>

# Parameters om te meten:

## Thrust:

Rekening houden met max thrust van motor, sterkte testbank, accuracy

Max thrust per motor volgens spec is 2,85kg

Load cell: temperatuur afhankelijk, data in zomer/winter kan problemen veroorzaken voor ML model. Omgevingstemperatuur sensor om onderscheid in data te maken.

Mogelijke opties:

1. <https://stekon.nl/producten/?cat=loadcells&gclid=Cj0KCQiAoKeuBhCoARIsAB4WxtexrQwfVgc_whOzSKeZVb9ybcvBf32HFtxJGVJBpXNtJ8ArMupNuqAaApoOEALw_wcB> <https://stekon.nl/app/uploads/2018/04/1005.pdf> -
2. <https://www.antratek.be/load-cell-5kg-straight-bar-tal220b> [https://cdn.sparkfun.com/assets/e/5/f/5/6/TAL220B.pdf?\_gl=1\*1dpma5n\*\_ga\*MzI2MzE3MTgwLjE3MDc3MzM4OTg.\*\_ga\_T369JS7J9N\*MTcwNzczMzg5OC4xLjEuMTcwNzczNTY4Ny42MC4wLjA](https://cdn.sparkfun.com/assets/e/5/f/5/6/TAL220B.pdf?_gl=1*1dpma5n*_ga*MzI2MzE3MTgwLjE3MDc3MzM4OTg.*_ga_T369JS7J9N*MTcwNzczMzg5OC4xLjEuMTcwNzczNTY4Ny42MC4wLjA). [https://www.sparkfun.com/products/13879?\_gl=1\*jngf4r\*\_ga\*MzI2MzE3MTgwLjE3MDc3MzM4OTg.\*\_ga\_T369JS7J9N\*MTcwNzczMzg5OC4xLjEuMTcwNzczNTgxMS4zMy4wLjA.&\_ga=2.14387703.1925323417.1707733899-326317180.1707733898](https://www.sparkfun.com/products/13879?_gl=1*jngf4r*_ga*MzI2MzE3MTgwLjE3MDc3MzM4OTg.*_ga_T369JS7J9N*MTcwNzczMzg5OC4xLjEuMTcwNzczNTgxMS4zMy4wLjA.&_ga=2.14387703.1925323417.1707733899-326317180.1707733898)
3. Tyto – kant en klare thrust stand (~ €1000) <https://www.tytorobotics.com/collections/all/products/series-1580-test-stand-bundle?utm_source=youtube.com&utm_medium=social&utm_campaign=how-to-measure-thrust-of-a-propeller-video>

## Spanning:

## Stroom:

# Website:

# Testen:

# Resultaten: