Folder April 2024



Dear all,

I like to inform you that my CBW5 Hybrid- and CBW1 Hybrid- wheel with 36 mm wide aluminium rim is available now. OEM price is € 90,-. This is with the new more automotive rim I made together with my rim supplier. That rim is more friendly for the tire than a standard bicycle rim. CBW5 Hybrid with 50 mm aluminium rim will be available at the end of April '24. OEM price is € 5,- euro higher.







Left; CBW1 Hybrid with 5/10 boults on 60 mm circle. Right; CBW5 Hybrid 50 mm rim with 4/100mm.

I will be present at "Spezi" in South Germany at the end of this month. https://en.spezialradmesse.de

I'm planning to make a 35-406 mm. full plastic wheel for the new Heinzmann motor.

I'm a distributor of the Podbike seat.

And if you want a high end seat, the Golo-bike seat is available too and to see at Spezi too. We share a booth there.



Above, front, Alligt seat and behind Podbike seat. Right the Flevobike seat.



I'm also planning to extent the lifetime of some disc brakes by adding a mudguard to the wheel. You have probably seen it by Velove and Golo.bike. I am going to make an injection mould for that part and make a smaller version for velocars available. This is/will be designed by Flevobike and produced by Alligt.



Small and compleet mudguard in the planning for mass production.

I wanted to tell you a lot more about the version that is 300 gr. lighter, CBW1 Hybrid, but give you here the short version. The testing was/is so learningfull and is not completed yet. To find the right balance between rim, spider and screw is delicate. Here you see the outcome. Two small cut outs in the end of the spoke. That gives the longest lifetime, because it gives more flexibility in that region. Together with a high momentum on the 2 screws it is perfect in balance if I test it on my drum with slat testmachine. (That does not mean that that is the best balance in practice) We will see that over the years. That wheel can be used till 100 kg static weight. It is mend for multi track vehicles till 250 kg total weight.

At this moment I don't make a lighter aluminium rim for CBW1 hybrid.



Tested CBW1 Hybrid with 2 cracks in alu rim after testing.

Where to use what wheel !!!???

Hereby some information about my wheels. It is just the start of a new line of hybrid wheels as extension on my full plastic wheels. As I wrote before I was very happy with the test results from CBW5 H and CBW1 H. Hybrid means to me. Plastic inside and aluminium automotive rim.

Hybrid wheels are for commercial use. Commercial use is doing things with your vehicle what you would not do and what no one advise you to do, but what is standard practice if you put a driver who is not interested in keeping the vehicle alive, a boss who only cares about speed and overload is normal and use the vehicle on average, not adequate, infrastructure.

Full plastic wheels are for vehicles for private users and or well suspended and/or with thick tires and/or if you carrier people. And your practice-test should confirm this.

There is probably a factor 5 difference between the resistance to high impacts (kinetic energy) between hybrid wheels and full plastic wheels. The norm with the drumtest does not includes this at all! I hope that I can provide some objective figures about this in the future.

Plastic wheels are mostly light and affordable. My hybrid wheels are still very light in comparison to full aluminum and steel wheels and more expensive due to extra parts. <2 kg.

Advice: Test wheels (and of course your complete vehicle) with your own customer group before going into mass production!

Some data:

I have two spiders for hybrid wheels. Both for 406 mm wheels. (20" bicycle and 16" moped)

CBW5 H, 800 gram, good for 4*100 fit. Likely till max 200 kg. CBW1 H, 500 gram, good for 5*60 fit. Likely till max 100 kg.



I have two black anodized aluminium automotive rims. Made together with RAD15.bike 36 mm wide rim, 1,0 kg 50 mm wide rim 1,2 kg

I'm still working to get two automotive wheel bolts in my assortment to serve users like you. M6 and M8.

Kind regards,

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P.s. I couldn't resist picking up my roots again. www.alleweder-velomobile.com

