

What are teams using for wheels? Destiny seems to have stopped importing the drum brake style aluminum wheels that a lot of us have been using in the past.

My Bike shop guy is real excited about the new BMX wheels that have been coming out recently. He wants us to try them. I could get some brands from him if you're interested.

Watertown HS has been using custom built wheels from our Bike Shop so far. We have to tighten the spokes each year, but they have been good to us...

**Front Wheel Assemblies:** *(3rd year)*

Hub: Shimano Saint: 20mm thru axle - 36 hole - w/disc brake mount

Rim: 16" aluminum "Alex XRim"

Disc: 8" Shimano Brake Disc

Tires: Kenda Kwest "K-193-05" - 16x1.50 - 100psi

**Rear Wheel Assemblies:** *(2nd year)*

Hub: Shimano Hone: 3/8-24 Axle assembled - 36 hole - Disc Brake mount & Cassette Mount

Rim: 20" aluminum Alexrims "DM24"

Disc: 8" Shimano Brake Disc

Tires: Kenda Kwest "K-193-05" - 20x1.50 - 100psi

Cassette: Student designed & CNC machined & Splined. Aluminum. Standard Cassette nut holds assembly on hub.

Jesse Domer, Watertown High School

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J-Dommer,

On the subject of wheels I was wondering where we can purchase such wheels. Such as; Wal-Mart, Dunham's, local bike shops, etc...

This would be highly appreciated. Thank you J-D.

Anon, OHS

J-Domer and Electric-man4life....

I believe these wheels can for sure be purchased at K-mart and Bikes for Big Guys... I know that our school purchased them at both of these locations....

If you are looking at using a bicycle style wheel you are going to need to use a good bike shop that is willing to work with you and custom build your wheels. The Wal-Mart type wheels are light duty at best and you will need a heavy duty hub and rim with lots of spokes to survive. Otherwise you will need to buy a good stock of the light duty ones because you will be changing them quite often.

Jay

I am new to the world of Electrathon vehicles, but as for wheels, I do have some experience.

My suggestion is to make contacts with your local bike shop. I used to work at a bike shop and build wheels. You want to find a double or triple walled wheel. As for spokes, its not always better to have more spokes, but have them cross more times. The strength is in the number of crosses a spoke makes. You would want at least a 4 cross wheel. All and all, a good bike shop should know all of this, and be able to build heavy duty wheels for your vehicle. Hopefully this helps.

I agree, unless your budget is truly tight, stay away from Wal-Mart/ShopKo/Kmart! I do understand those wheels have potential to work, but getting good wheels to start with will actually "save" you money! These wheels should last you 5+ years! (I am hoping for 10 years) Just keep tightening the spokes, maybe replace spokes every few years? (I am not talking carbon fiber 1,000 wheels each here, but some nice hubs and rims, the rest will play itself out!)

My suggestion is to work with your local bike shop!!! If you do not have one local, where is the nearest? Both schools I have run Supermileage/Electrathon programs, my bike shop contacts were an hour away! And they still JUMP to help out where they can! They know wheels and you just have to explain to them what you are doing and what you need. Tell them you are building a car and these tires will see LOTS of side load!!! They will usually do the rest for you with the budget you give them. I have never had to pay over cost for parts and labor has always been free with the two bike shops I have worked with as an advisor and back in 97/98 when I was a student, it was the same then! (Not bragging, telling you what to ask for!)

**BUT THE BIGGEST BIGGEST THING! DO NOT WAIT UNTIL FEBRUARY** to ask for this! Bike shops get busy in Spring and they do not want to waste their overtime on your freebee. You will stress out waiting for built wheels the day of the race if you wait until spring... Get them hooked now, get them ordering parts now and then they will start to work with you. After the first year meeting your students and seeing your car, they will be asking you next year how they can help!

Jesse Domer, Watertown High School

Skyway Wheels makes several composite wheels that look promising for Electrathon use. Also Blue Sky Design handles these wheels plus free wheel hubs & brakes to fit them. Think outside the box, my new car has 6" wheels made of Zytel nylon. Very stable so far at 38mph. 1 wheel in front, 2 at rear. Try Ebay for Skyway wheels. I never had much success with spoked wheels, breaking as many as 7 spokes in 1 hr. We tried to calculate the side load on a car with 2 front wheels, what we came up with was over 400 lbs. of pressure, also had trouble bending 12mm axles. The alloy wheels with the built in brake can be converted to larger axles but it is a very difficult process. We had 1 car with 5/8 in. axles & another with 3/4 in. axles. Stan

In the three years I have been in Electrathon, we have yet to break a spoke. We run 20mm thru axle hubs on the front with brake discs with no troubles. 20mm is over 3/4" and you can use a hardened grade 8 bolt for your axle if you desire. Our front wheels are 16" diameter, and we would probably go smaller if we could easily find rims, but our Bike Shop struggles a bit getting smaller than that with 36 holes and reasonable wall thickness... (I am sure it exists, but we are doing fine so far.)

We run our wheels at 0-5 degrees off vertical, so almost straight up and down and they handle fine in serious slalom conditions. Tighten spokes once a year as a precaution and move forward.

HOWEVER these are not ShopKo specials. I am sure cheaper wheels will have problems when dealing with standard bicycle spokes and side loading with these vehicles... (the two places I tell advisors to spend money is wheels/steering and brakes. Handle well and brake well.. Safety first)

WHICH BRINGS UP A POINT, in thinking out of the box, our XRV (Preble's concept) runs 20" CNC Machined Aluminum Golf Cart Rims with low-profile DOT grade rubber and ATV Hydraulic Disc Calipers with custom machined Discs for FAR LESS money then the wheels on our standard Electrathon Vehicle and they look a lot better :) Just a bit heavier :)

Jesse Domer, Watertown High School

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Skyway Wheels does NOT warranty or suggest using high pressure tires on their rims. This is an old posting don't know if it will help, but I found some great hubs with a 20 mm through axle, 36 spoke holes, disk brake mounts, and a cartridge bearings from bikepartsplace.com. They are made by atom lab. \$65.95 / unit. Seem pretty decent?