

triathlete

Buying Aero Wheels On A Budget

- By AJ Johnson
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Photo: Courtney Johnson

While there is no shortage of high-end aero wheels, finding the ones that perform well for the right price can be a challenge. Although this fact is hard to comprehend, the truth is that a “budget” set of race wheels is still pretty spendy. We compare six sets that can double as high-performance training wheels and race day wheels. They cover a range of features and all cost \$2,200 or less.

Before we start in on the wheels, here are some points that cover the entire selection. Clinchers with wide rims (broader than 23mm) add more comfort than a standard width rim. Second, wider rims work best with wider tires. Whether it’s an aluminum brake track or carbon, if the width is over 24mm use a wide tire to match; at least 23c. Additionally, putting a wider tire 25c or broader on a standard rim can improve the ride and cornering. Finally, an aluminum brake surface provides the best braking performance. Many of the carbon clincher wheels are improving their braking ability and much of that is also in re-designed brake pads. Still, for consistency and power, especially in the wet, aluminum is

the clear winner. Disc brakes are starting to capture tech headlines in the cycling world, but triathlon bikes haven't yet adopted the technology and options are still limited for road riding as well. This review is limited to standard rim-brake road wheels.

Zipp 60 – MSRP \$1,500

The Specs

What's old is new again with the Zipp 60. Looking to be the "budget" race wheel in the line, the 60 takes some older rim design elements mixed with new components to create a new take on a familiar backbone. The rim is 58mm deep and has the hybrid toroidal rim shape that debuted in 2005, not the uniformly wide Firecrest shape. Zipp mates this rim to their new 122 and 249 hubs with Sapim CX spokes, 18 front and 20 rear. The rim measures only 18.7mm at the brake track, narrow when compared to most of the others in this review. The carbon rim is bonded to an aluminum brake track and the set come in at 1,820g. They come in white decals only, with removable valve core tubes, skewers, rim tape and are 10/11 speed compatible for Shimano, SRAM or Campagnolo.

The Ride

Even without the new Firecrest shape, this is still a fast rim. Normann Stadler was on a pair of tubular hybrid toroidal Zipp's when he set the Kona bike course record in 2006. Zipp sent a pair of their Tangente tires with the wheels so I put those on for the test. The weight of the 60's is apparent when trying to get to speed. The sluggish feel is noticeable, especially at lower speeds. However, once up to speed the 58mm rim cuts through the wind nicely. They don't feel as fast as Zipp's top end wheels for sure, but the savings is substantial—about \$1,000. When compared to the wider rimmed wheels the 60's have a bit of a harsh ride. With the narrower rim and tires, I could definitely feel the bumps and cracks in the road more. The aluminum braking surface gives you the best stopping power possible. Zipp.com

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Specialized Roval Rapide CLX 60 Carbon Clincher – MSRP \$2,200

The Specs

This isn't the Big S's first foray into the aero wheel market, but it is by far its best effort. Considering Specialized just built its own wind tunnel, it's not surprising to see them launch these hoops. This full carbon clincher is 60mm deep with a 17.3mm internal width and 24.4mm external width. The profile of the rim features the semi-blunted inner diameter shape that is the most popular right now. Exceptionally light for a set this deep and wide, the pair weighs only 1,555g. The Roval hubs feature ceramic bearings and are compatible with Campagnolo, Shimano/SRAM and can be used with 10 or 11 speed drivetrains. Each set comes with carbon rim brake pads and skewers.

The Ride

I was surprised at how quickly these wheels accelerated, both from a stop and coming out of a corner. For a wheel this deep it has a lot of snap to it. When at speed they hold their speed well with the ceramic hub bearings providing that little extra bit of efficiency. With 60mm of rim they do catch some cross winds as I expected, but for any confident rider

over 150lb. they won't pose a concern. The ride quality is amazing. With the extra width at the rim and 24mm tires (I rode these on Specialized S-Works Turbo 24's that were sent with the wheels) these wheels eat up the bumps and cracks in the road. The Specialized-supplied brake pads, sourced from SwissStop, do a great job of burning speed off. The feel is consistent without any pulsing or grabbing. As the most expensive in the test, they offer all-around performance that justifies the cost. Specialized.com

RELATED: [Specialized Debuts Carbon Road Clinchers With Disc Hubs](#)

Inertia Racing Technology i50C – MSRP \$1599

The Specs

Inertia Racing Technology is a smaller company with its own way of doing things. They recently brought all of their production and materials to the US so the product is 100-percent made and assembled stateside. As implied by the name, the i50c is a 50mm deep carbon clincher with a standard V shaped rim and width. These wheels are the lightest in the group at 1,520g for the set and feature 20 spokes up front and 24 in the rear. The pair comes with brake pads and skewers and is compatible with Shimano, SRAM and Campagnolo and work with 10 or 11 speed drivetrains.

The Ride

As the lightest set in the group, these wheels feel fast and responsive. They get up to speed quickly and, for wheels of this depth, the i50c creates the sensation of holding top speed well on the flats and rollers. You'll notice a bit of loss from the deeper wheels, but they don't get as pushed around in a crosswind so lighter riders may be better suited with this depth. The full carbon rim eats up road chatter well, but it lacked that extra bit of comfort offered by wide rim wheels. I used these wheels with 23c- and 24c-width tires and the broader tire certainly helps smooth out the road. Braking power is not quite as strong as some other carbon clinchers in the test but is still adequate. Even on some of Boulder's steepest descents I felt comfortable as long as I planned ahead a bit. Irtwheels.com

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Rolf 58 RSC – MSRP \$1299

The Specs

Another aluminum brake track wheelset, the Rolf 58 RSC's are aimed at the budget-minded racer. A carbon rim is co-molded with an aluminum rim cap for the brake surface. Weighing in at 1,920g, it's the second heaviest in the bunch. The identifying paired spoke design isn't just for looks—it allows for a low spoke count, just 16 up front and 20 rear, while providing plenty of lateral stiffness. The traditional width of 19mm is narrow for this test. The 58 RSC's come with skewers and work on Shimano/SRAM and Campagnolo drivetrains in 10 and 11 speed.

The Ride

Out on the roads this wheel performs better than the specs would imply, and it looks pretty good on paper. I was most surprised at the pleasant ride quality from these hoops. While not as smooth as some full carbon rim I have ridden, the harshness I associate with aluminum-rimmed wheels simply isn't there. I also dropped the pressure to 110psi to help

smooth out the road. If you put a quality set of 24 or 25mm tires on these that would also help the ride feel. The second heaviest of the bunch, they are noticeably slower to reach top speed than others. At speed they are quiet and quick. As with the others in this group, the depth means there is some cross-wind steering effect but it is kept to a minimum. Like the Zipp 60's, one advantage these wheels have over their carbon competitors is the consistent and strong braking power from the aluminum brake surface. As one of the least expensive options in the bunch, the 58 RSC's offer a good bang for your buck value.

Rolfprima.com

Profile-Design TwentyFour 58/78 – MSRP \$1899.98

The Specs

Profile didn't just copy what others were doing with their new wheel line. They used computational fluid dynamics software to create a proprietary rim shape and hub shell for aerodynamics and a carbon lay up Profile claims will make these wheels both fast and durable. A high-temperature resin that won't melt under hard braking and a custom pad material combine to increase braking performance. The rim is 24.5mm wide and as the name implies the front is 58mm deep and rear is 78. These wheels are 10- and 11-speed compatible for Shimano, SRAM and Campagnolo. They come with skewers, brake pads, rim strips, extra spokes, a spoke tool, valve extenders, extra nipples and even tire levers.

The Ride

As with the other wide rim carbon clinchers in this comparison, the Profile 24's exhibit a ride quality that is noticeably better than the standard width. I rode them with a 25mm training tire and felt like I was on perfectly smooth roads no matter the true condition of the pavement. The 58mm and 78mm depths mean better aerodynamics, but also more area for side winds to catch. Lighter athletes or those that aren't comfortable in windy conditions should consider a 58 for the rear. It's hard to quantify if the proprietary rim shape is faster than others, but they certainly feel fast. These wheels feel better the faster you go, holding their speed well. Some of that sensation can be attributed to their 1,724g weight, which helps give these wheels a quick and snappy feel. Stopping power is fantastic with a strong initial bite and minimal fading. For under \$2,000 you'd be hard pressed to find a better set of race day wheels. Profile-design.com

FLO 60 – MSRP \$898

The Specs

First, that MSRP is not at typo. Designed using computational fluid dynamics software then tested in the A2 wind tunnel, FLO did its research when shaping these wheels. The carbon clincher rim, called FLO Wide Toroidal Fairing, is actually a standard aluminum box rim with a non-structural carbon fairing making the deep section. The rim starts at 24.4mm at the brake track and has a max width of 27.2mm. It is positively blunt without a sharp inner edge where the spokes enter the rim. At 1,936g for the set they are surprisingly the heaviest in the bunch. Sapim CX-Ray spokes, 20 up front and 24 in the rear mate to FLO VORTEX hubs. Buyers can choose between nine colors for decals with white or black lettering. Choose between Shimano/SRAM and Campagnolo and 10- or 11-speed compatibility.

The Ride

With such a wide rim it's no surprise that the ride quality of the FLO 60's was comfortable no matter the road condition. That said, it wasn't as smooth as hoops tested in this review that feature full carbon construction. It's a subtle difference but a noticeable one. As for their speed, they take some time to reach full speed due to the extra weight. The additional mass is most obvious when coming out of slow speed corners. Once at speed they do hold it well. At a cruising speed near 20mph the FLO 60's feel ready to go faster. The blunt shape of the rim seeks to mitigate effects from cross winds and they do handle well. Our set didn't come with brake pads, so I used the new SwissStop Black Prince pads that many other companies are using. With those pads, which are some of the best, stopping power was good. I did notice some fade during longer descents where heat build up is more of a concern. At this price these wheels are a fantastic bargain. [Flocycling.com](#)

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HED Jet 6 – MSRP \$1900

The Specs

The HED Jet is a unique blend of everyday sensibility and race-worthyspeed. Built as an aluminum box rim with a blunted fairing affixed, it runs 60mm deep and 23mm wide at the brake track. With 18 spokes up front and 24 in the rear, the clincher model weighs in at 1,660g and is 10/11 speed for compatible for Shimano, SRAM and Campagnolo. The Jet 6 set has a rider weight limit of 190lb., but heavier riders can choose the Stallion build for anyone up to 225lbs. The Jets come with skewers, valve extenders and rim tape.

The Ride

These wheels have a lot going for them, blending the comfort of a wider rim and the steady, consistent braking of aluminum with good aerodynamics and capable handling. The ride quality was as expected with 24c tires—comfortable due to the width, but just a bit stiffer than the full carbon wide-rimmed hoops. A few less psi and you won't notice it. Crosswinds do push it around some, but the blunt shape keeps it manageable. The Jets feel fast. With 60mm of rim to cut through the air they have no problem keeping speed. These wheels feel as fast as any others in this comparison. With the light weight they also get to speed quickly out of T1 or coming out of corners. The aluminum braking surface adds a level of stopping security. Cornering was adequate, but I felt it lacked a bit compared with the others. The stiffness seems to lack a bit when pushed in twists and bends.

[Hedcycling.com](#)

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