

This is a translation of an article on the *Nazca Quetzal* tandem in *Ligfiets&*, the association's magazine of the Dutch Recumbent Riders Association NVHPV.

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# The Quetzal tandem

## An ‘experienced’ bike

By Gerold Ormel  
(front rider, ‘captain’)  
and Maartje Nonhebel  
(back rider, ‘stoker’),  
photos Saskia de Groot,  
Gerold Ormel

Writing this test of the *Nazca Quetzal* is proving quite a test for me. This bicycle, a tandem actually, has already been on the market for three years. There are a lot of them on the road already. I was familiar with the bike, even though I hadn’t ridden it yet. There are many opinions and ideas about the *Quetzal*, but really you should make up your own mind the first time you get to experience it. And also when you’ve never done any tandem riding yourself. That’s when you realize what a special bicycle it is.



I am biased, of course. I have ridden roughly 22,000 miles on tandems, but never on a *Quetzal*. You end up developing habits and preferences. I have ridden very many recumbents, but never a Nazca (not seriously anyway). I would have liked to write this article without revealing that I was drawing comparisons, but I realize this is not possible. I have been favored because Henk and Monique, the owners of Nazca, are allowing me to publish a test of the *Quetzal*.

Years ago the sales of recumbent bicycles were much higher than now. Obviously manufacturers don’t like to talk about it, but I am telling you: that’s the way it is. Years ago many more tandems were sold than now too. The reason is obvious. Just ask around: argument number 1 for most couples for choosing a tandem is the difference in power between the two people. The e-bike solves this problem and is for that reason a very competitive alternative for tandem sales. What emerges, in a fit of sincerity from Henk (he does this all the time): The *Quetzal* is currently one of the best-selling Nazca models and thus commercially important. The pressure is gradually increased on the independent reporter. The question is: why choose a tandem from Nazca?

The traditional recumbent tandem tour is an excellent occasion to put the *Quetzal* to a critical test. Bicycle

adjustment requires more precision for tandems than for solo recumbents, definitely if you are planning a 50-mile round trip. So we went off to Nijeveen a day earlier. Time to try out the test bicycle, ride a little circuit, make a few more adjustments, and be ready. Straight away the *Quetzal* seemed to be a bike on which you feel at home fast, everyone’s friend. Nazca’s have always had the name of being highly forgiving and predictable. This positive character has carried over well to the tandem. It is a partner you can trust, that much is already clear. Without any qualms we drove to the place we would stay for the night. The next day we would have more time to find out whether the *Quetzal* had any surprising rough edges too.

— ‘*This tandem rides like a train, sturdy, stable, reliable. Getting it going takes a bit of getting used to, but once it’s going, it almost rolls automatically. As stoker I can hardly feel the driver move at all.*’

### Yellow tandem is ‘experienced’ bike

We arrived in Peize at the starting point of the 8th tandem tour and lifted our yellow bike from Henk and Monique’s van. Two green tandems were next to it, and there was also a couple with their own white *Quetzal*. They folded their bike up and put it on a standard bicycle carrier at the back of the car. Not everyone wants to buy a van because they ride a tandem. The yellow tandem looked spick and span, even though it was an ‘experienced’ bike. You can’t tell. It could sell as a new bike. When the group was ready to start riding we got on the bike and rode with them. No need to discuss anything. We have saddles that fit, brakes that brake, the Rohloff changes up and down the 14 gears, the wide tires are nicely pumped up, not a squeak or creak out of place: total reliability. A positive addition to this is that the driver hardly feels anything of what is happening behind him. There is nothing which upsets you. Of course, the transport is many times heavier, but for the driver it almost feels like riding a



solo bicycle. A major achievement: just try to give such a long steel frame some torsional rigidity. — ‘*There is not a bump high enough or a hole deep enough to get me out of my seat. The suspension feels like an old-fashioned Citroen. Most of all, it feels extremely comfortable. This can be due to the wide tires and soft cushion too. I do (sometimes) miss feeling a connection with the ground, but on the other hand it is very pleasant to ride so smoothly on clinker paving.*’

### Sense of speed

There is something else that strikes you as soon as you ride the *Quetzal*. And that is the lack of a sense of speed.

The bicycle rolls, and in the meantime reveals nothing of the forces which are at work. When I start riding a bike I don’t know, it always passes information on to me. Sound. Movement. Reaction to my actions. Change in character, depending on speed. Vibrations. A liking. — ‘*It is difficult for me to estimate the speed without a speedometer. It turns out we were riding almost two miles per hour faster than I thought.*’

I have never ridden a bike which gave me so little information about how it was doing. It doesn’t have to. It goes fine. High-speed cycling: terrific. Bad road surface: not a problem. Walking pace (and slower): we can do

it. Gear change error: better next time. Bend: just say how you want to do it. Emergency stop: give it to me. I know how surprising riding a tandem can be. How the wheels can get a roasting, how you can keep pedaling together, how the forces can be extremely large. I have confidence in us. But imagine you don’t have that experience (yet). In that case it is very comfortable that the bicycle gives you confidence without reservation. And finally, there is a 100% basis for that confidence: not a single sound is unnecessary. The wheels are the strongest possible option. The Rohloff hub might leak oil every so often, but it will still keep riding for another 3,000 miles. You can pump the 50 mm tires up to >

### Nazca Quetzal specifications

**Frame** 25CrMo4, separable.  
**Wheels** 2x24” (ETRTO 507) or 2x26” (ETRTO 559).  
**Drive-train** Rohloff speedhub or Shimano XT 3x10.  
**Weight** Total weight including rack and mudguards from approximately 32 kg.  
**Prices** With Rohloff speedhub from € 5 095, Shimano XT from € 4 395, frame-kit from € 3 095.  
**Price of the test bike** € 5 790 including hydraulic disc-brakes, hydraulic rim-brake for stoker, hub dynamo, low-rider supports, cushions, kickstand.  
**More info** and specifications through [www.nazca-ligfietsen.nl](http://www.nazca-ligfietsen.nl), then look for *Downloads*.



> 5 bar, and they run easily and predictably. Take the powerful double struts. And that frame! Henk says he won't consider building a lighter version of the bicycle, although it would be an easy way to save some pounds. He feels responsible for his customers, also (precisely) the ones who don't always have the experience to treat a recumbent tandem sensibly. Henk is right: a tandem couple with luggage can go way over 440 pounds. Why would you deliberately seek risks and guarantee yourself less pleasant riding behavior? For 1% less train weight?

#### Comfortable seat

My seating position is particularly comfortable. The great seat has a lot to do with that, and the fact that you can adjust the seat angle very precisely. The height

of the crank axle relative to the seat is also ideal for me. It is just right. The seat height allows my legs to stand perfectly flat on the ground when we're not moving. You shouldn't underestimate how important that is: precisely on a tandem you need to be able to keep the entire weight stationary in a relaxed position, without tiring your legs. The armpit-fresh handlebars of the driver are something I have to get used to. The handlebars have a very comfortable position for the hands. They can be adjusted in all possible directions. The grip on gear shifters, brake levers, bell and hand grips couldn't be better. The handlebars provide a lot of rest and control of the bike, both at high and low speeds. Even though I had never ridden with this kind of handlebar position before, the four-hour ride left me with no pain at all. But. The MTB wheel size of the bike means the tire can meet your foot when you are steering. Quite a few recumbents have this. Once you are used to it, you know

how to keep your foot still when you are going around a tight corner. I had a bit of trouble intuiting this on the *Quetzal*. Firstly: I like to keep pedaling when going round bends, using the power to get around the bend more solidly. I don't like having to keep my feet still. That moment of tire-foot contact happens really fast on the *Quetzal*. In other words, you regularly have to keep your feet still. Secondly: apparently I have become accustomed to always stretching my outside leg when my legs have to stay still. That is something you really have to do on the racing bike. So on the *Quetzal* I steered the tire against my inside foot, which I had to turn away, that brought my knee inward, and the armpit-fresh handlebars steered precisely into it too. And there you go. Scratched legs. It was partly my fault: I should be more flexible and adapt my position. It's also partly inherent in the geometry of the bike: contact simply has to be avoided, left and right. But continuing to pedal is quickly out of the question too.

— *'Compared with my other bikes, I really have to get used to the position of my legs. My feet are under the driver's buttocks and therefore very low. That's too low for me to provide good power and for a comfortable hip*

*position. You can adjust the seat to a different position, but then I am more upright. The advantage of 'lower feet' is that people who do not often ride recumbents or who come from an upright bike will not quickly suffer from sleeping feet.'*

#### Well equipped

I'll be brief about the options for components. Everything on the bike is more than good enough. The Rohloff is an old friend. Its qualities are done even more justice on a tandem. Changing gear with two derailleurs on a tandem is technically quite complicated, especially with a load. Rohloff is far more infallible. It is expensive, definitely this 48-hole hub version which needs an external gearbox. But a good tandem rear hub for a cassette is not cheap either, and nor is having to replace parts regularly. Not to be underestimated: the Rohloff is spoked symmetrically, and that makes the wheel much stronger than a wheel with a cassette. The hydraulic disc brakes do their work like a charm, even though they are actually a reasonably basic model. The same goes for the crankset. The rear shocks do what they are supposed to, the way you want. The third rim brake on the back wheel is great. What should you

make of all this? The bicycle does what it is meant to do, and more. If you would prefer a different brake set (just to mention one part, but I can imagine it) for that sizable investment, I believe Henk is flexible enough to think together with you about possible options. — *'All the controls are at the front (except for an extra brake at the rear). I have all the time to take photos, look around and chat. The driver does the gear changing, so I am completely in his hands. You have to trust that he will steer straight, brake in time, change gear when you want him to and keep to a cadence that suits you. This does take a bit of getting used to for someone who always does these things herself on the tandem. But in practice usually the stronger person sits at the front, and an incorrect cadence or late gear change will be less annoying than the other way round. Personally I do like to have a bit of (gear changing) influence on the tandem.'*

#### Don't change a single thing

After a few hours' riding we were back in Peize. The route was really ideal for our test: it presented us with headwind on long country roads, crushed stone tracks over the heath, bends in the woods, clinker paving and pedestrian islands through the villages and bridges across the waterways. It all felt very familiar and my idea that there are great advantages to using a standard 26" (ETRTO 559) wheelset was borne out, when you know how to minimize the disadvantages. Like on this Nazca. We were sitting in the garden and talking about the ride. And that's when I started having doubts about writing this piece. The Nazca is a totally different tandem to my own bike, but that's not the point. Or is it? How can I estimate its value? The only thing I can conclude directly, and which I told Henk straight away: if I took this bike on vacation with me tomorrow, I would not want to change a single thing. That is a compliment to his drawings, choices and the quality of his construction. I change things on my bikes fairly often, but the qualities of this tandem really have me impressed. <

### The Quetzal rides like a train



Two shocks on rear swing-arm.



Frame is foldable and separable.



Large disc on rear swing-arm too, solid plate for kickstand fixation, external Rohloff gear-box.



Rohloff speedhub with chain tensioner.



203 mm Disc brake on front fork.



#### Reaction Henk van der Woerd, owner Nazca

"I am very pleased with the test of the Nazca *Quetzal* tandem. The issues discussed and appointed don't come as a surprise. The description is nuanced and the information is correct. It pleases me to read this report and I believe that riders of a *Quetzal* will recognize it. About the sitting position of Maartje: people with a lot of experience on a recumbent bike will probably have to get used a bit to the lower position of the stoker bottom bracket. People who are new to recumbent bikes tend to find this position rather pleasant and easier to get used to. Maartje sits on the Nazca cushion, the most comfortable pillow that we have. Perhaps the more firm Ventisit would suit her better in combination with the wide tires and suspension."