



RIESE & MÜLLER DELITE GT NUVINCI

BY NICK LEGAN

→ IN THE BOSCH EBIKE BOOTH at the Sea Otter Classic, a bicycle festival in Monterey, California, one bike stood out from the assortment of electric motor-assisted road and mountain bikes. Instead of large knobby tires and loud graphics or drop bars and aerodynamic styling, the Riese & Müller Delite GT Nuvinci looked decidedly practical with an integrated rear rack, accessory lock, and front and rear lights. Selling for the price of a good used car, the German-engineered touring/utility eBike was also the only one in the booth with two batteries.

Instead of making the bike faster — as assist speeds are regulated — the idea behind the twin batteries is to increase range. Aimed squarely at touring cyclists and long-haul commuters, the Delite GT Nuvinci demanded a closer look. During my time on a test bike, a few things became apparent. The first is that an eBike is, under some circumstances, a fantastic car replacement. The second is that going fast is always fun. And third, the future of electric-assist touring bicycles is bright if the Riese & Müller is truly a harbinger and not a blind alley exercise.

LET'S GET ELECTRIC

The heart of any electric-assist bicycle is the motor. With the Bosch Performance CX mid-drive system, the Delite GT can provide up to 300 percent assistance. So if you're

RIESE AND MÜLLER DELITE GT NUVINCI

Price: \$7,151

Sizes available: 49cm, 54cm, 56cm

Size tested: 54cm

Weight: 69.8 lbs. (with pedals, rack, lock, lights, fenders, dual batteries)

TEST BIKE MEASUREMENTS

- **Stack:** 615mm
- **Reach:** 420mm
- **Head tube length:** 135mm
- **Head tube angle:** 67.0°
- **Seat tube:** 540mm (center to top)
- **Seat tube angle:** 73.0°
- **Top tube:** 610mm (effective)
- **Chainstays:** 505mm
- **Bottom bracket height:** 315mm
- **Trail:** 101mm
- **Wheelbase:** 1220mm
- **Standover height:** 825mm

SPECIFICATIONS

- **Frame:** Alloy Riese & Müller, Control Technology dual suspension with Fox Float
- **Fork:** Suntour Aion Air 100mm travel
- **Handlebar:** Humpert ergotec ErgoXXL, 31.8mm
- **Stem:** Humpert ergotec Charisma, 90mm, 20°
- **Brake calipers:** Shimano XT hydraulic, 160mm rotors
- **Brake levers:** Shimano XT hydraulic
- **Shift levers:** Nuvinci N380 grip shift, continuous
- **Crankset:** FSA/Riese & Müller, 170mm, 26T chainring for Gates CDX belt



- **Cassette:** 28T for Gates CDX belt
- **Bottom bracket:** Integrated Bosch Performance CX motor
- **Seatpost:** Satori Trident
- **Saddle:** Ergon SMC4-L Sport Gel
- **Headset:** Acros AZX-220 tapered, block lock
- **Hubs:** Novatec QR front, Nuvinci N380SE 36-hole rear with 2.54-9.66 ratio
- **Rims:** Alex MD40
- **Tires:** Schwalbe Super Moto-X, 27.5 x 2.4in.
- **Rack:** Integrated Riese & Müller
- **Pedals:** VP-183
- **Accessories:** ABUS Bordo 90 folding lock, Riese & Müller Lumotec IQ-X E front light, Busch & Müller Toplight Mini LED rear light, SKS fenders

GEARING RANGE

13.1 to 49.7 gear inches

Contact: Riese & Müller GmbH Feldstrasse 16, 64331 Weiterstadt, Germany
team@r-m.de, r-m.de



doing 100 watts of work, the bicycle, at maximum assist, will deliver an additional 300 watts to the drivetrain. Of course, this will also empty the battery fairly quickly. Writing about battery life is always tricky because there are so many variables involved: the assist mode used, bike weight, rider and gear weight, terrain, and, of course, wind.

Thankfully an eBike rider isn't in the dark when it comes to real-time battery expenditure. Much like driving a Prius or other hybrid or electric car, a handlebar display shows battery life in terms of range, helping you maximize efficiency. It's fun to rip around country roads at 20 MPH (the assist cuts out at that point — it's still possible to go faster, you just have to supply all the power), but doing so limits range in a big way. For a touring cyclist, the best way to use an eBike is to dial it back on flat or downhill terrain and save the battery for the tougher climbing or headwind sections. Doing so will extend your range beyond 100 miles on the Riese & Müller, thanks to its twin 500Wh batteries. On shorter jaunts, the Delite GT can be ridden with a single battery, dropping 5.7 lbs. in the process.

WELL APPOINTED

The clever bits on the Riese & Müller don't end with the Bosch mid-drive system. The Delite uses a Nuvinci internal rear hub for its transmission. Note that I didn't mention the number of gears. Much like a Rohloff, the Nuvinci is self-contained inside a hub shell, but instead of preset gears it has a continuous, stepless range of ratios. Using a twist shifter, a Nuvinci rider simply makes the gear larger or smaller, tailoring it to her needs at that moment, and can do so while pedaling or stopped. With a total range of 380 percent, the Nuvinci's spread of gearing options isn't nearly as wide as Rohloff's 526 percent, but on an eBike, this is less of a concern. A powerful motor is there to help shore up range.

Connecting the Nuvinci rear hub to the Bosch mid-drive motor is a Gates belt drive. As we've discussed with other belt drive bikes, the lack of noise and minimal maintenance is great for a long-distance touring cyclist. A belt drive is also lighter than a chain. The downside? Sourcing a belt if one were to fail. Many belt drive riders simply carry a spare while touring.

The Delite GT frame is aluminum with 100mm of “Control Technology” rear suspension provided by a Fox Float DPS Performance shock. Up front is an SR Suntour Aion Air fork that also delivers 100mm of travel. Wide 27.5 x 2.4in. Schwalbe tires add another level of comfort and control, and Schwalbe’s 3mm Green Guard puncture resistance protects from flats.

Behind the seat tube and between the struts of the rear rack is an included Abus lock. That rear rack also features a slick, integrated LED rear light. The front light is a bright Lumotec IQ-X. Both lights are powered by the same batteries that feed the Bosch motor.

Because batteries and rear suspension take up the real estate usually given to water bottles, Riese & Müller places mounts on both sides of the head tube. This is a convenient place, though a bit in the way when pedaling out of the saddle. With the motor assist though, pedaling while standing is less frequent.

I found both the Ergon saddle and the Humpert handlebar comfy, and the Delite GT offers a nice upright position

for all-day comfort. I also appreciated the kickstand. Usually it’s the first thing I remove, but it’s difficult to maneuver a bike this heavy so the kickstand stayed.

THE ELEPHANT IN THE ROOM

So about that weight. The Riese & Müller weighs a whopping 69.8 lbs. Granted this includes front and rear suspension, fenders, a kickstand, a lock, a rear rack, front and rear lights, and bulletproof tires — not to mention two heavy batteries — but 70 lbs. is a lot of bike to manhandle. Add in clothing, food, water, navigation equipment, camping supplies, and the 1 lb. 10 oz charger, and it’s easy to get north of 100 lbs.

BRASS TACKS

For the multiday touring cyclist, the Riese & Müller is an exciting, though expensive, contender. Touring aboard the Delite GT Nuvinci requires careful planning to ensure that you reach a location for charging every 100 miles or so. But the experience of covering ground more quickly, or covering more ground than usual, is sure to put smiles on faces.

The Delite GT is perhaps best used as a credit card touring machine. This would keep gear weight to a minimum, making the riding and maneuvering more fun while improving battery efficiency. Because it requires infrastructure to recharge, why not take advantage of that and seek out indoor overnights? From fully depleted to a complete charge requires nine hours (both batteries charge via a single port), so it’s best to time that with overnight stays anyway.

As transportation, eBikes are very compelling. Bikes like the Delite GT show that long-distance touring is possible using current technology, but the motor and battery create a vicious cycle of increasing weight that then requires extra batteries to extend range. Adding gear only exacerbates the situation. Thankfully, as batteries and motors become more efficient, eBikes will only continue to improve. So while the Riese & Müller Delite GT Nuvinci is a wonderful eBike option, for some of us it only begins to get the wheels spinning. **AC**

Nick Legan is the Technical Editor of Adventure Cyclist. He can be reached at nlegan@adventurecycling.org.

FREEWHEELING
Adventures
Extraordinary Active Holidays Since 1987

Join us on one of two Japan Bike Tours. One follows the Shimanami Kaido Bikeway from Onomichi, across the Seto islands to the beautiful Shikoku. The other follows the coast of the Noto Peninsula and is complemented with significant cultural sites.

www.freewheeling.ca

Ride Japan in 2018