

TEST REPORT

Test:	European Bicycle Standards (Rear Hub Durability and Strength Criteria)
Test Articles:	CVP's: enviolo CITY, enviolo TREKKING, enviolo HEAVY DUTY Shifters: enviolo Twist Pure, enviolo Twist Pro
Date:	30 JUN 2021
Reference:	ISO 4210:2014(E) which supersedes: <ul style="list-style-type: none">• EN 14764:2005• EN 14766:2005• CEN/TC 333 N.96:2002• DIN 79100-2:1999 ISO 8098:2014(E), US CPSC 16 CFR Part 1512
Test Method:	Reference standard tests specific to rear hub durability and strength criteria
Test Location:	enviolo Inc., Leander, TX

Test Results:

The enviolo CITY, enviolo TREKKING, and enviolo HEAVY DUTY are tested to industry standards for internal hubs, as well as proprietary additional tests specific to enviolo technology in use with traditional, as well as electric-assist bicycles (eBikes or pedelecs) up to 250W (rated) power for the enviolo CITY, and enviolo TREKKING and up to 500W (rated) power for the enviolo HEAVY DUTY. Specifically, the enviolo CITY, enviolo TREKKING, and enviolo HEAVY DUTY meet rear hub durability and strength criteria for bicycle standard ISO 4210:2014(E) and ISO 8098:2014(E). The enviolo TWIST Pure and Twist Pro shifters comply with requirements set forth in ISO 4210:2014(E) and ISO 8098:2014(E). In addition, the enviolo CITY, enviolo TREKKING, and enviolo HEAVY DUTY hubs and enviolo TWIST Pure, and enviolo TWIST Pro shifters meet US CPSC 16 CFR Part 1512.

Proprietary enviolo Inc. testing that exceeds industry standards include:

- Durability (simulating 20,000 km of use at extreme conditions)
- Dynamic Shift Test
- Canted Wheel Bump Fatigue Test
- Coasting Fatigue Test
- Drop Test / Accelerated Impact
- Hub Shell and Cover Axial Fatigue Test
- Hub Shell spoke Flange Fatigue and Ultimate Tests
- Brake Fatigue Test
- Shifter System Durability Test (Manual and AutomatiQ)
- Corrosion Resistance Test
- Weatherability / UV Test
- Environmental Intrusion Test
- Ride Audit Test (including cold weather testing)
- Mileage Accumulation Testing
- End of Line Efficiency, Ratio Range, and Leak Test