

DT SWISS ENGINEERING PERFORMANCE

EMBARGO
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2 PM CEST

HYBRID ROAD BUILT TO ASSIST



1

**EXECUTIVE
SUMMARY**

P. 4

2

**COMPONENTS
TO ASSIST**

P. 7

3

SPECIFICATIONS

P. 14

4

TECHNOLOGIES

P. 17

5

**HYBRID
UPBUILT**

P. 19



HE 1800 SPLINE®



HG 1800 SPLINE®

1

EXECUTIVE SUMMARY



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HYBRID ROAD **BUILT TO ASSIST**

Participate in rides again, commute to work, plan longer trips, or simply discover the joy of cycling. E-road bikes assist riders to keep going. In doing so, the wheels undergo higher loads & torques on longer distances, due to the extra weight and power from the specific frame/motor constructions.

Hybrid Road wheels are built to assist with these additional loads by increasing the strength of the individual components that make up the wheel.



2

COMPONENTS TO ASSIST



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PURPOSE-BUILT HYBRID ROAD COMPONENTS

Electric road bikes for on and off the road riding see their system weight increase. Even though road e-bikes are usually lighter in comparison to most e-MTB or utility (SUV) bikes, the motor and its battery add similar constraints due to the extra weight and power.

This results in increased drive torque from the additional power and increased break torque demand from the additional weight.

The components of our Hybrid Road wheels are adapted accordingly to be tailored to these new constraints and to provide the trusted quality DT Swiss products are known for.



RIM

DIFFERENT TERRAIN, DIFFERENT RIMS

HE 1800 SPLINE

The new rim is lighter and has a wider inner width to better support bigger tires which can be ridden at lower pressure to ensure better grip, and comfort.

HG 1800 SPLINE

The robust, sleeved rim with an inner width of 24 mm supports tires up to 50 mm and provides riding comfort.



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SPOKES

UPDATED SPOKES

While keeping their aerodynamic benefits, the DT new aero® hybrid spokes have reinforced heads at 2.15 mm. This comes as a solution to the higher dynamic load from the higher system weight, which makes the spoke head a potential weak spot.

Furthermore, the increased thickness on the length of the spokes improves their resistance to fatigue that occurs during a wheel's rotation as each spoke is loaded and unloaded.



HUB UPDATED 370 HYBRID

The hub body has been redesigned to support higher torques generated by motors in e-road bikes. A higher system weight means higher break forces needed to decelerate, while the battery providing extra power means higher drive torque when accelerating.

The hub shell has been accordingly reinforced to meet these higher demands.



FREEHUB BODY

Reliable engagement and increased durability thanks to an upgrade to the Ratchet LN freehub system, which distributes the forces evenly over a larger area and achieves lower peak loads.

Even our entry level Hybrid wheels will now be able to count on the reliability and on the simultaneous engagement of the Ratchet System.



3

SPECIFICATIONS

HE 1800 SPLINE®

FRONT WHEEL	12 / 100 mm; 12/110 mm
REAR WHEEL	12 / 142 mm; 12/148 mm
HUB	370 SPLINE® with 18T Ratchet LN System
BRAKE INTERFACE	Disc, Center Lock
FREEHUB BODY OPTIONS	Shimano Road Sram XDR (only 12 / 142 mm)
RIM	Aluminum, sleeved rim joint, hooked bead, tubeless ready
RIM DIMENSION	622 x 22 mm
RIM HEIGHT	23 mm
SPOKE FRONT	DT new aero® hybrid straightpull, black
SPOKE REAR	DT new aero® hybrid straightpull, black
NIPPLES	DT Pro Lock Squorx Prohead alu
LACING	28 x 3-cross
WEIGHT FRONT / REAR	From: 908 g / 1042 g
MAX SYSTEMWEIGHT	130 kg
ASTM CLASS	2
ACCESSORIES INCLUDED	DT Swiss tubeless ready tape (mounted), DT Swiss tubeless valve, valve guard
PRICE	Front: from 243.9 \$ / 192.9 € / 184.99 £ / 202.9 CHF Rear: from 338.9 \$ / 266.9 € / 229.99 £ / 280.9 CHF



HG 1800 SPLINE®

FRONT WHEEL	12 / 100 mm; 12/110 mm
REAR WHEEL	12 / 142 mm; 12/148 mm
HUB	370 SPLINE® with 18T Ratchet LN System
BRAKE INTERFACE	Disc, Center Lock
FREEHUB BODY OPTIONS	Shimano Road Sram XDR, Shimano Mirco Spline (12/142 mm and 622 mm)
RIM	Aluminum, sleeved rim joint, hooked bead, tubeless ready
RIM DIMENSION	584 x 24 mm; 622 x 22 mm
RIM HEIGHT	25 mm
SPOKE FRONT	DT new aero® hybrid straightpull, black
SPOKE REAR	DT new aero® hybrid straightpull, black
NIPPLES	DT Pro Lock Squorx Prohead alu
LACING	28 x 3-cross
WEIGHT FRONT / REAR	From: 977 g / 1111 g
MAX SYSTEMWEIGHT	140 kg
ASTM CLASS	2
ACCESSORIES INCLUDED	DT Swiss tubeless ready tape (mounted), DT Swiss tubeless valve, valve guard
PRICE	Front: from 243.9 \$ / 192.9 € / 184.99 £ / 202.9 CHF Rear: from 338.9 \$ / 266.9 € / 229.99 £ / 280.9 CHF



4

TECHNOLOGIES

TECHNOLOGIES



RATCHET OVERVIEW
TECHNOLOGY

[More information](#) →



TUBELESS
TECHNOLOGY

[More information](#) →



BEARING
TECHNOLOGY

[More information](#) →



SPOKE
TECHNOLOGY

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HAND-BUILT
TECHNOLOGY

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5

HYBRID UPBUILT

HYBRID UPBUILT

Electric bikes and their uses are evolving and diversifying. At high altitude in the mountains, between the tape on a trail, climbing a steep mountain road or weaving between cars with loaded bags in town, the bikes and their expectations are not the same. This expansion in the e-bike category requires an adaptation of the components. DT Swiss, a pioneer in the diversification of hybrid components, has upbuilt its Hybrid range. Hybrid Upbuilt answers the new demands of users concerning their electric bikes.

MORE INFORMATION

www.dtswiss.com/en/hybrid-upbuilt





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