

HYBRID

TWO

THOUS

AND

18

DT SWISS

MISSION

HYBRID

DT Swiss is on a mission, a mission to bring eMTB riders the components they need. The people behind this mission are people who know, understand and most importantly, RIDE eMTBs. So go ahead and discover our understanding of what eMTBs are here for and discover the technologies we apply to make it happen.

DT SWISS

RIDE FURTHER

250 watts of extra power broaden the horizon even for the fittest of us: Energy sapping ground and snowy rides just get a whole lot more fun. And what used to be an epic ride turns into a two hour experience condensing the vertical gained, the trails ridden and the vertical crushed. It's really like riding **TO HEAVEN AND BACK.**

Going on your familiar rides with the power of an olympic XC athlete lets you start to see the terrain with different eyes: Reverse the direction and you notice riding up trails is a lot of fun. Riding a root carpet at twice the speed, that long, painful push up the baby head gravel road to get to ride that secret trail? Now a game of navigating the obstacles, it allows you to **TURN PAIN INTO FUN.**

RIDE HARDER

Beyond bringing new people into the wonderful sport that mountainbiking is, eMTBs allow die hard athletes to share their riding adventures with their partners, their kids and virtually anyone who ever dreamed to go fast and far. Seasoned mountainbikers starting to feel their age continue to do their demanding loops. And riders which have to carry many hats in real life can still join their wednesday night group ride. So yes, eMTBs really are making sure that **EVERYONE ROCKS AND ROLLS.**

SHARE THE RIDE

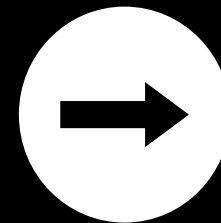
WHAT'S THE MISSION?



THE AVERAGE eMTB RIDERS SEASON

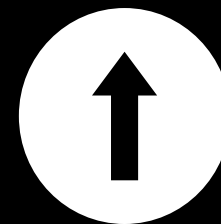
3500 KM

Average distance covered.



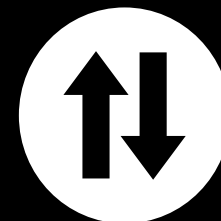
180 NM

Peak system torque.



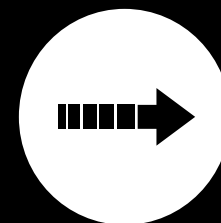
70'000 M

Elevation gained (& destroyed)



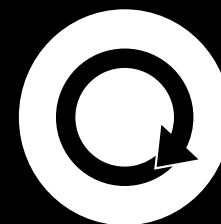
400 W

Average power output.



21 KM/H

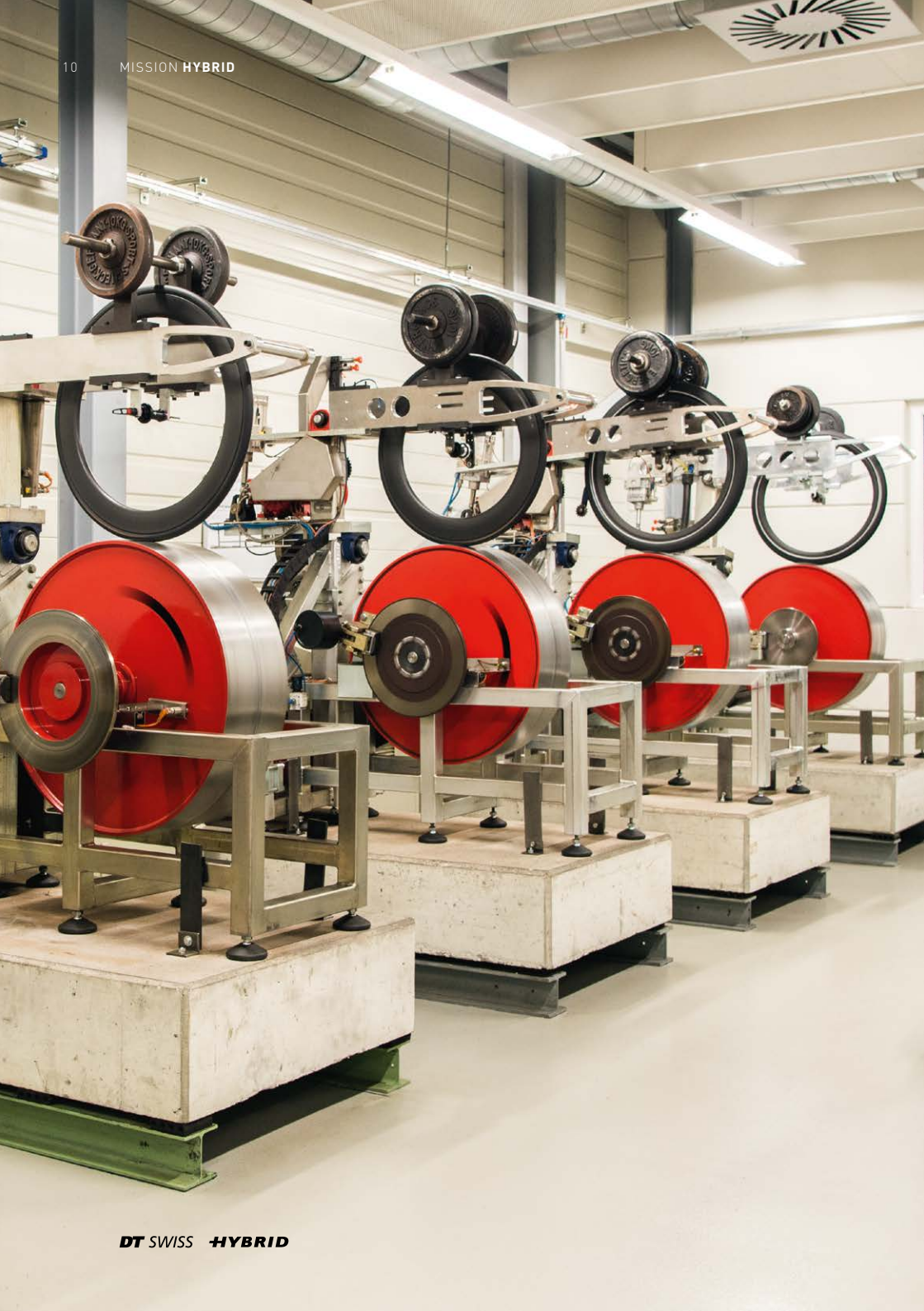
Average speed.



WHAT THAT MEANS FOR **HYBRID** COMPONENTS

An eMTB is much like a German sports car: You expect it to work flawlessly all the time: When you hop in for a sporty summer drive where you slam through the gears AND when you commute in it during winter, just happy that the heating works. Fact is, you want it to perform AND be reliable. This is just what our HYBRID wheels deliver. Follow us on the next pages to find out just how they do it.

PERFORMANCE AND RELIABILITY ARE KEY



THE LAB

The lab is where our HYBRID components are put to the test. Here we keep refining and finding new test procedures to simulate what happens on the trail as accurately as possible. All with one goal: To make your wheels even better and develop them even faster than today.

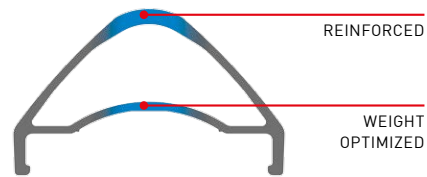
Over the twenty years DT Swiss has been developing wheels, we have gathered an unparalleled testing know how. With this know how and a tightly knit test rider group, we are able to design a wheel just right for its intended use. By verifying and knowing the loads occurring in real world riding, our in house wheel testing equipment can quickly go through a wheels whole lifetime to double check its performance for the intended use. Still many iterations are needed to find that perfect strength to weight ratio for a given appli-

cation. To do these product development iterations, you need the ability to quickly prototype products. We have set up a global network of inhouse and external specialists that make this happen. Enter Philipp Lüdi: It's the network he built and is leading. Being a die hard mountain biker himself, he also makes sure that the wheel prototypes that are tortured on the test benches, also hit the dirt as quickly as possible. Because in the end, what a rider feels through his arms, legs and butt is what ultimately counts.



PHILIPP LÜDI
MANAGER PROTOTYPING TESTING

TESTING



When testing to our set HYBRID standards, we found two things: 1. The spoke contact area needs to be strengthened, 2. There are areas that can be kept just as lightweight as on regular MTB rims. These findings have led us to optimize the profile of our HYBRID rims for weight in non critical areas and reinforce them where it counts. Classified for a 150 kg system weight they are available in 25, 30 and 35 mm widths for increased traction and comfort.

Torque test force



400 Nm
500 Nm



Spoke pull out force



100% Reference
20% Above reference



Loaded dynamic test



120 kg system weight
150 kg system weight



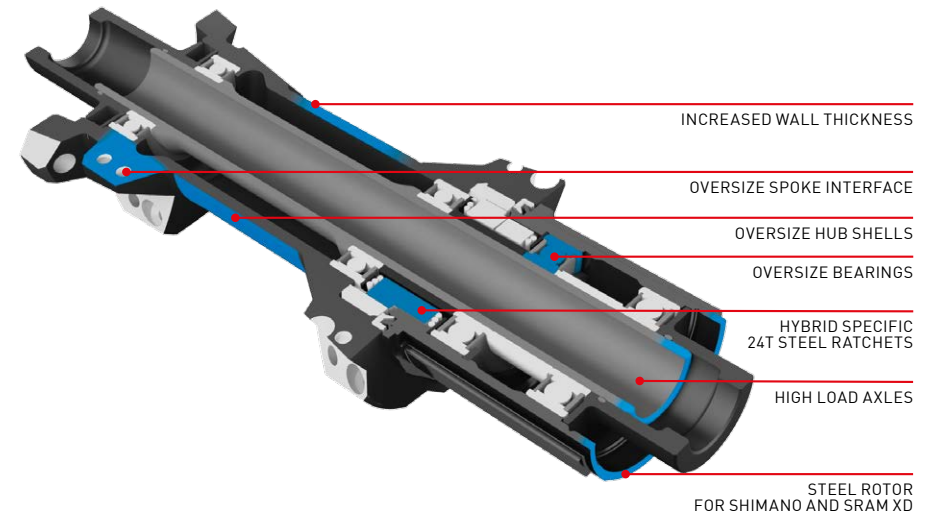
Durability test Tested to min.



13 Standard lifecycles
27 Standard lifecycles



TECHNOLOGY



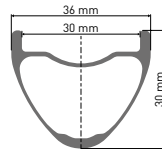
Putting our HYBRID hub prototypes through the rigorous testing procedure, it showed that many components were strong enough for the high demands, but only just strong enough. Therefore we took many small measures to strengthen the whole hub system. As a result, HYBRID hubs feature increased wall thicknesses in the oversized shell, high load axles and oversized spoke interfaces. This is complimented by new,

hardened steel 24T ratchets, oversize bearings and steel rotors. Via this clever optimization we have achieved a 150 kg system weight classification with only a minimal weight increase compared to same level MTB hubs. The final result is a gem of a hub that can withstand huge torque loads, offers quick engagement and when used in combination with our HYBRID system components is part of an amazingly robust wheel set.

HXC 1200 SPLINE®

WEIGHT FROM 1678 g

The best of the best. Where do you start? At the center: A super reliable straight pull spoke interface. Lightweight spokes that are eMTB strong. A stiff, precise full carbon hookless rim. But the whole really is even greater than the sum of its parts with the HXC 1200 SPLINE®, it's a wheel that accelerates like no other, has traction like no other and is precise like no other. Out on the trail it is an absolute blast!



30 27.5
29



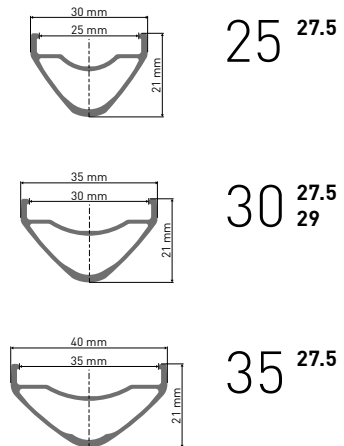
EUR 2.248*

USD 2.962*

HX 1501 SPLINE® ONE

WEIGHT FROM 1898 g

For some, flow means to pedal up a never ending gravel climb and getting into a trance like rhythm. To others, flow is when corners are linked up seamlessly, dirt flying sideways. And yet another group of riders seeks new adventure in burly terrain. Either way: The wheels of the HX 1501 SPLINE® ONE line up feel right at home doing all of the above. Strong, light and offering the right width for your riding needs, it climbs with the best and descends with the best. The Ratchet System is the most durable freewheel system out there, safely driving you forward in any conditions, all year round. A light and strong spec through and through makes sure you pedal into the flow, whatever your flow is.



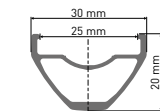
EUR 1.078*

USD 1.420*

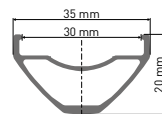


H 1700 SPLINE®

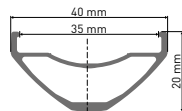
WEIGHT FROM 2000 g



25 27.5



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35 27.5

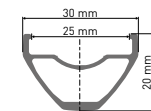
EUR 698*
USD 920*

Versatility. A mountainbike is meant to go up and down mountains and to provide fun while doing so. The H 1700 SPLINE® do precisely that. And since e-bikes allow the rider to go up and down many mountains in one ride, reliability is key. And weight, because fun is to be had. On the H 1700 SPLINE® both requirements are met. With

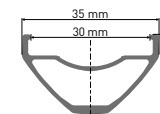
an unparalleled know how in wheel component manufacturing and industry leading testing processes, we are able to design and spec a wheel set to perform just as required. And this is what we did on this wheel, to leave you the part of pedalling up and down mountains.

H 1900 SPLINE®

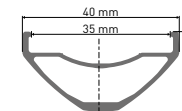
WEIGHT FROM 2003 g



25 27.5



30 27.5
29



35 27.5

EUR 388*
USD 512*

When motor assist and human leg power meet, the range of terrain a bike can conquer grows almost exponentially. The H 1900 SPLINE® are designed for that. We have given them the reliability of Swiss precision hubs, tough spokes and a strong, yet lightweight rim to head out into unknown rides, just to see how far this new

man / machine system can go. But you needn't worry: Like all of our products, passionate employees have tested the H 1900 SPLINE® to their limits in the notoriously rough and steep Jura mountains. To prove their reliability so you don't have to, for that and because it's a whole lot of fun.



WE LIVE PERFORMANCE eMTB

DANIEL BERGER

VICE PRESIDENT MARKETING, DT SWISS
MOUNTAIN BIKER SINCE 1986

Internally known as «eBerger», heck he even has his own eBerger cap.
That's how much he is infected by electrically powered mountain biking.

« The eMTB has lit my fire for the sport like the first Stumpjumper I bought back in 1986 has, when I first put its knobbies to the dirt. I immediately knew that these bikes will have a great future and slowly realized what we could contribute to make them even greater. Once we had mission HYBRID outlined, we quickly worked together as an organization to make it happen. I am super stoked on how it came out and I am even more stoked for what's coming up. »

HYBRID RIMS – Have your own hubs you think are HYBRID strong? Then go ahead and build your wheelset with one of these. Welded and sleeved versions are available to suit your wallet.

WELDED

HX 491



25 ^{27.5}

EUR 109.90
USD 162.70

HX 531



30 ^{27.5}
29

EUR 126.90
USD 162.70

HX 581



35 ^{27.5}

EUR 142.90
USD 162.70

SLEEVED

H 522



25 ^{27.5}

EUR 74.90
USD 115.30

H 552



30 ^{27.5}
29

EUR 89.90
USD 115.30

H 612



35 ^{27.5}

EUR 104.90
USD 115.30



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DESIGNED AND EDITED BY
DT SWISS AG, SWITZERLAND

PHOTOGRAPHY MICHAEL RIEHLE & FRED LEISER

#EXTENDYOURRIDE

