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1501 SPLINE® ONE







1501 SPLINE® ONE CARBONIZED



WHY CARBON?

Carbon makes it possible to build lighter wheels, which improve riding behaviour of the specific wheels for various fields of application.

By further improving 1501 SPLINE[®] ONE wheels, we are able to reduce the weight by up to 180 g per wheel set compared to the previous generation while preserving its values.



1501

REQUIREMENT-SPECIFIC CARBON RIMS

for Cross Country, All Mountain and Enduro

DT COMPETITION RACE® SPOKES

Thanks to the higher inherent stiffness of the carbonrim, compared with an aluminium rim, the use of ultra light DT Competition Race[®] spokes ensures perfect wheel stiffness for precise riding without being too stiff.

Ultra light and super strong are the terms that describe the double butted DT Competition Race® spokes best. Unlike previous DT Competition® spokes, DT Competition Race® spokes use a middle section which is 0.2 mm thinner – allowing further weight savings on the new 1501 SPLINE® ONE with no compromise on durability.





240 HUB RATCHET EXP

Lighter, stiffer, more precise and even easier to maintain – the new 240 EXP hub is a must for 1501 SPLINE [®] ONE wheels. The RATCHET EXP free hub system, which comes with 36 points of engagement transfers the pedalling load directly to the trail and is more durable than ever.

XRC 1501 SPLINE® ONE

CROSS COUNTRY LIGHTER MEANS WIDER

30 MM INNER WIDTH LESS ROLLING RESISTANCE

Cross Country wheels are ideal for fast racing; therefore it's necessary to minimise resistance wherever possible. On a rough surface, rolling resistance can make up to 69% of the total resistance.

SPEED = <u>ENERGY</u> INTERTIA MOMENT + ROLLING RESISTANCE + GRADE RESISTANCE + DRAG

Rolling resistance is defined as: rolling resistance coefficient x weight x gravitational acceleration. The coefficient is defined by wheel size; tyre section; tyre characteristics, tyre pressure, tread and soil.

While most of those factors are hardly influenced by the wheel, we can modify the tyre support. A wider rim provides improved tyre support which offers lower tyre pressure and leads to less rolling resistance on rough tracks.



HIGHER TIRE SUPPORT ALLOWING LOWER PRESSURE

During cornering, lateral forces impact the tyre. The tyre contact patch moves in the opposite direction to the lateral force. When cornering with a narrow rim, the tyre contact patch moves sideward and is not supported through the rim. This results in an unstable riding experience.

The resulting folding in the tyre creates tension and the tyre pulls to the opposite bead. This causes a loss of air between the tyre bead and the rim bed, a so-called tyre burping.

The tyre contact patch of the wide rim is inside the rim flanges. The side wall of the tyre is supported by the wide rim, which increases control. A wider rim can therefore be ridden with lower air pressure than a narrower rim.



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LOWER AIR PRESSURE LESS ROLLING RESISTANCE

A wheel with low tyre pressure will always roll over rough surfaces more easily than a wheel with high pressure, as the tyre is able to adapt to the ground. A wheel with a high air pressure cannot absorb obstacles and the bike must move upwards, comparable to lifting work, which increases rolling resistance. Less air pressure leads to less fatigue, as the rider has to invest less lifting work.



LOW TIRE PRESSURE



XRC 1501 SPLINE® ONE

WHEELSIZE	29
AXLE SYSTEM	15 / 110 mm 12 / 148 mm
НИВ ТҮРЕ	240 Straightpull hub with NEW Ratchet EXP System
BRAKE INTERFACE	Center Lock (incl. IS 6-bolt adapter MTB)
RIM	Carbon, hookless bead, UD finish, tubeless ready
INNER WIDTH	30mm
SPOKES	DT Competition Race [®] , black
NIPPLES	DT Pro Lock [®] Squorx, aluminum, black
WEIGHT	From 1544 g
MAX SYSTEMWEIGHT	110 kg
ASTM CLASS	3
PRICE	From 1'499 € / 1'899 \$

XMC 1501 SPLINE® ONE

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ALL MOUNTAIN LIGHTER MEANS FURTHER

WEIGHT-TO-DURABILITY OPTIMIZED CARBON LAYUP

Sometimes, the most beautiful trails can only be conquered by your own muscle power. Long ascents and carrying passages require a light wheel set. When descending, however, the wheel must be stable enough to withstand obstacles like roots and rocks. This is exactly what the XMC 1501 SPLINE[®] ONE rim has been designed for.



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LIGHT WEIGHT EFFICIENT UPHILLS

The low weight of the XMC 1501 SPLINE[®] ONE reduces the moment of inertia, allowing a higher speed with the same amount of energy compared to aluminium wheels. The low moment of inertia saves energy on ascents and allows for more fun on descents.



STRONG ON DESCENTS

The impact resistance of XMC carbon rims lies in between the EXC and XRC.

The XMC 1501 SPLINE[®] ONE is classified as ASTM Category 4 with a maximum system weight of 120 kg, which represents the use of components in the conditions in very rough, blocked terrain. Exactly what you need for your adventures.





XMC 1501 SPLINE® ONE

WHEELSIZE	27.5 / 29
AXLE SYSTEM	15 / 110 mm 12 / 148 mm
НИВ ТҮРЕ	240 Straightpull hub with NEW Ratchet EXP System
BRAKE INTERFACE	Center Lock (incl. IS 6-bolt adapter MTB)
RIM	Carbon, hookless bead, UD finish, tubeless ready
INNER WIDTH	30mm
SPOKES	DT Competition Race [®] , black
SPOKES NIPPLES	DT Competition Race [®] , black DT Pro Lock [®] Squorx, aluminum, black
SPOKES NIPPLES WEIGHT	DT Competition Race [®] , black DT Pro Lock [®] Squorx, aluminum, black From 1639 g (29) From 1545 g (27.5)
SPOKES NIPPLES WEIGHT MAX SYSTEMWEIGHT	DT Competition Race [®] , black DT Pro Lock [®] Squorx, aluminum, black From 1639 g (29) From 1545 g (27.5) 120 kg
SPOKES NIPPLES WEIGHT MAX SYSTEMWEIGHT ASTM CLASS	DT Competition Race [®] , black DT Pro Lock [®] Squorx, aluminum, black From 1639 g (29) From 1545 g (27.5) 120 kg 4

EXC 1501 SPLINE® ONE

ENDURO LIGHTER MEANS MORE <u>PRECISE</u>

LESS WEIGHT BETTER HANDLING

When developing an Enduro wheel our main focus is on impact resistance. The reason for this is quite clear - when riding through the chunkiest trails, you want a wheel you can trust.

Along high impact resistance our goal was to reduce the weight of wheels. A lighter wheel is nimbler and more precise, enabling the rider to be in total control of his direction, and helps to hit even the trickiest line precisely. Due to fewer rotational mass, less braking power is needed to slow down; the rider has simultaneously to move less mass and is therefore able to manoeuvre the bike more easily - saving valuable energy on long descents.

These are the reasons why we decided to resort to carbon.



LIGHTER = BETTER PERFORMANCE

Who wants to get down has to go up first... The advantage of less weight is clear to most of us – the lighter the bike, the easier the climbing and the nimbler the bike feels when handled through the trails. This is where the weight saving of 176 g compared to the previous EX 1501 SPLINE[®] ONE shines through. But there is also another great advantage...

...the suspension performance. While riding the suspension of a bike constantly compresses and rebounds. All the parts that are isolated from the suspension, the so-called unsprung mass, must therefore constantly change direction. The lower the mass of these parts, the lower their inertia and the easier it is for these components to change direction. The lower the weight attached to the suspension, the faster the wheel can react to changes in direction and the better the suspension works.



6-BOLT Brake interface

Due to popular demand from Enduro riders, EXC 1501 SPLINE[®] ONE wheels are offered with a Center Lock disc interface and now also an additional 6-bolt option – letting the rider choose the perfect system for his needs.





EXC 1501 SPLINE® ONE

WHEELSIZE	27.5 / 29
AXLE SYSTEM	15 / 110 mm 12 / 148 mm
НИВ ТҮРЕ	240 Straightpull hub with NEW Ratchet EXP System
BRAKE INTERFACE	IS 6-bolt Center Lock
RIM	Carbon, hookless bead, UD finish, tubeless ready
INNER WIDTH	30mm
SPOKES	DT Competition Race [®] , black
NIPPLES	DT Pro Lock [®] Squorx, aluminum, black
WEIGHT	From 1719 g (29) From 1609 g (27.5)
MAX SYSTEMWEIGHT	130 kg
ASTM CLASS	4
PRICE	From 1'499 € / 1'899 \$

DT SV/SS ENGINEERING PERFORMANCE

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