

Syntace

WHEELSET W35 MX

Wheels, that are distinctly different where it matters.

It all began with the simple wish for really wide rims that are still light enough for all-round use from XC races to All Mountain. However, no manufacturer wanted to know anything about it. We've dealt with this before, so we decided to get to work and make our wide and tough rims and nice durable hubs. And both had to be really light.

System wheels vs. systematic fine tuning

Agreed - system wheels look very chic. But should you have to put up with their fundamental drawbacks? For example low spoke counts, which prevent any continuation of a ride when a spoke is broken? In an emergency non readily available spokes and nipples? Heavy and less stiff wheels? We believe not. The Syntace W-series relies on the results of a wheel configuration which has proven superior for over a century.

Configuration

Asymmetrical Syntace W-Series MX rims with custom drilling and spoke angle matched hub flanges. Sapim CX Ray bladed spokes, 28 or 32 per wheel, triple crossed, Sapim alloy nipples. Hand lacing quality.

Tubeless-Ready

With Yellow tape or the Syntace Tubeless system (in development).

Rolling revolution

Light weight tyres with thinner side walls that roll better only really start to show good all-round performance when mounted to wide rims, without reduced puncture resistance. That's why Syntace the W-35 MX

rims are really wide and also extremely light weight. Lighter than any other aluminium rims designed for the intended application. They are even on-par with extremely expensive carbon wheels which need immediate replacing when damaged, but are distinctly wider than these.

1595g for the 35mm wide, spur gear freewheeled Syntace W35 MX wheelset in 26" and a rider weight limit of 120kg.

More effective than helium in the tyres

With a rim width (inner) of 28.4 mm the Syntace W35 will provide the „RightTireShape“ for tyres up to 2.5" tyre width. Cleverly combined with weight reducing tyres, that use the now made suitable thinner side wall carcasses, the W35 wheelset allows a weight saving of up to 600 g.

Mix und match

You can combine all available Syntace W-Series front and rear wheels, completely to your personal preference in terms of rim width, spoke count, axle standard, ... simply configure, order, and assemble. By changing the end caps you can adapt your wheel to any of the current axle standards. No matter how exotic your combination is, you just pay the one regular Syntace wheelset price.



NEW

NEW

Syntace

RIM W35 MX

Black aluminium instead of carbon

The ductile material aluminium has its rightful place in two finger wide rims rolling over sharp rocks, roots and steps. If it were just possible to bend sufficiently light weight rims. It is possible.

Light weight... and tougher than carbon rims

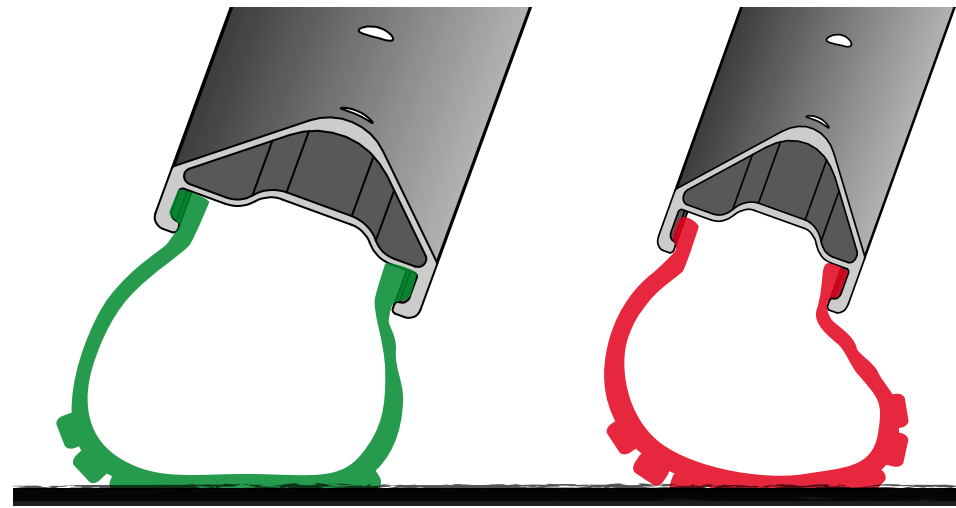
Thanks to the Syntace precision profile made of a custom high strength alloy, welded and multiply cold worked and heat treated. Stress reducing asymmetrical Syntace W-Series profile design with side step drilling pattern.

Mere 500g for the 35mm wide W35 MX rims (26") speak a clear language. Who can compete with that?

Less tyre pressure, more control

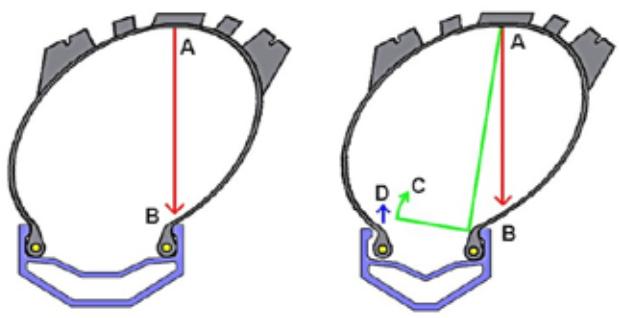
Less tyre pressure means: more grip, less rolling resistance in rough terrain, higher capability to absorb impacts, higher speed in corners as well as better braking traction.

Why can a wider rim be ridden with less air pressure? Because the carcass remains upright better and is in contact with the rim via more air volume. On the wide Syntace W35 MX rims, mountain bike tyres mount wider and more directly on the rim with less "bulging" than on previous conventional narrow rims with low support width. This significantly reduces the tendency of "folding" when running low air pressures. Additionally, both the danger of snake bites and rolling resistance is reduced!the rim.



Wide rims provide optimal grip and allow a thinner carcass combined with increased traction and tracking ability.

Narrow rims provide little guidance for the tyre. The tyre "folds" and can even jump out of the rim.



"At 20 degrees of imaginary lateral distortion, the wide-rim tyre's contact point is just nearing the danger zone over the rim flange."

For more infos see:
<http://www.pinkbike.com/news/Tech-Tuesday--Wider-Rims-Are-Better-and-Why-Tubeless-Tires-Burp-.htm>

Grafik: Richard Cunningham for Pinkbike.com

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Energy saving

The above described reduced "bulging" additionally also generally reduces the rolling resistance: Thanks to a slight straightening of the S-form of the tyre's side wall profile, the undesired deformation work of the carcass in this area is reduced. Additionally, the rotating mass is reduced, because tyres are heavier than rims. A narrower rim considered on its own is lighter than a wider rim, but this narrow rim requires a significantly heavier tyre in order to achieve a similar contact area. Consider the rim and tyre as one unit, then the total mass of the rotating wheel is reduced with more rim and less tyre. Especially, where the effect is the greatest, right on the outer edge.

Tailor made

The Syntace W-Series MX rims are available with the largest multitude of sizes: four widths, two spoke counts, and as a world first Syntace also offers the same rims in four diameters. Namely, 24", 26", 27.5" (650B) and 29". We go to this extend, simply so that if you don't fit the "norm sizing" you can still build the best possible mountain bike for yourself.

Recommended use

Best handling characteristics combined with free rolling. Previously unheard combination of free rolling and traction control for all application from Xc to trail/All Mountain.

360° Syntace ToughSkin™

All round, meaning even inside the bead hook, the rims are shot peened for increased surface density. This cold working process of the aluminium not only achieves a measurable increase in material surface hardness but also creates a "grippier" surface at all tyre contact areas for the tyre to hold onto. This reduces the the likelihood of the tyre to move on the rim under large loads, especially when riding with low air pressure. And reduces the likelihood of tearing off a valve.

NEW

Weights:

26"	ISO 559	500 g (28 and 32 hole)
27.5"	ISO 584	530 g (28 and 32 hole)
29"	ISO 622	560 g (28 and 32 hole)

(ISO: standard measurement for the tyre inner bead Ø)

Rim width (outer):	35 mm
Rim width (inner):	28,4 mm
Recom. tyre width:	from 2,25 to 2,5"
Profil height:	20,5 mm
Valve hole:	6,0* mm Ø (Sclaverand)
Tubeless-Ready:	Yellow Tape or Syntace
Material:	Custom alloy
Color:	Raceblack with Laser logo
Preis:	Only available in Syntace W-Series complete wheel, not separately.

* extending the valve hole to 8.5mm Ø for a Schrader valve is possible. Stepped hand reaming highly recommended..

NEW

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HiTorque MX

**The toughest hub we know of.
On climbs and descents.**

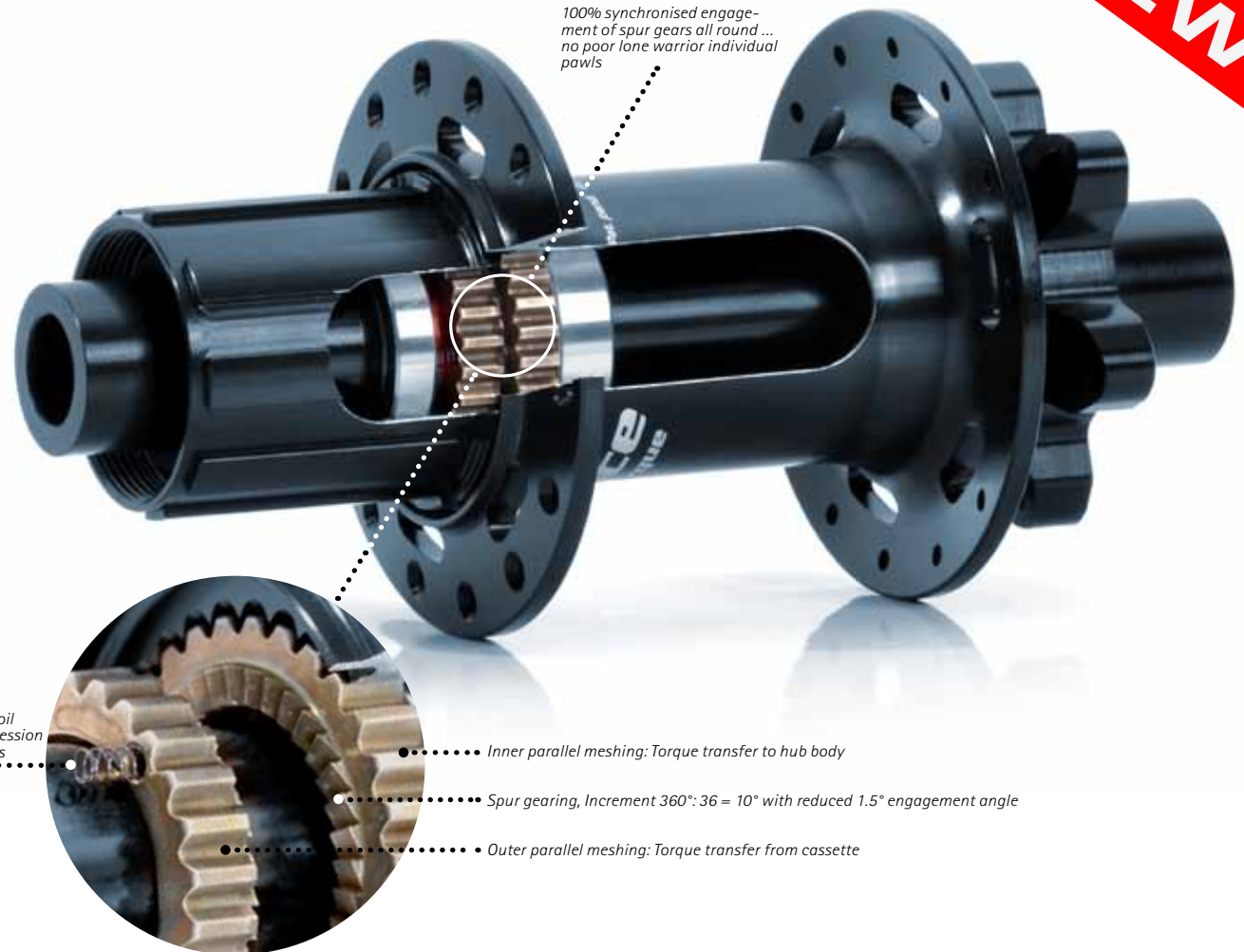
The heart of the Syntace wheelsets are the Syntace developed and manufactured Syntace Hi-Torque MX hubs (Pat, pend.). Finest turning and machining, inconspicuous appearance, but with superior inner qualities.

Spur gearing: all or none!

The name and the crisp sound already lead to the presumption: the freewheel mechanism of this Syntace hub will withstand more than others. The spur gear mechanism principle which we have further refined, guarantees that force transmitting teeth can't engage individually and as a result are overloaded. In exactly that moment when one tooth wants to engage, all teeth inevitably engage in synchronisation. The 36tooth, in Germany precision machined high strength spur gears, are driven by four spiral springs. The result in the rough every day mtb use: the German uphill master Jan Lämmel has been using the same rear hub in his Liteville 301 since fall 2011. Without any maintenance, just like the hub in the rear wheel of World Trails Champion Thomas Öhler. Just for comparison's sake: conventional pawl freewheel bodies are completely destroyed within four weeks of being in one of these boys' bikes - regardless of the number of pawls. Trial riders - not to be confused with trail riders - know exactly what is meant here.

Winter resilient

Even with icy cold winter temperatures the Syntace Hi-Torque MX shows no engagement denials or signs of "chain-push" issues with consequent chain wrap attacks. No slippage, and long lifespan spur gears.



100% synchronised engagement of spur gears all round ... no poor lone warrior individual pawls

Four coil compression springs

Inner parallel meshing: Torque transfer to hub body

Spur gearing, Increment 360°: 36 = 10° with reduced 1.5° engagement angle

Outer parallel meshing: Torque transfer from cassette

In Europe - as opposed to sunshine states such as California - for every committed mountain biker an absolute must, as we believe.

Robust flange

High strength 7075 alloy, fatigue test machine optimised dimensioning and spoke angle matched flanges.

Strong heart

Butted 17mm oversize axle, intelligent bearing positioning for maximum stiffness and life span at lightest possible weight. Adaptable to all current axle standards by simply changing the end caps.

NEW

HiTorque MX Rear 12

- Butted 17mm oversize axle, for maximum stiffness, durability and lowest possible weight
- Hub body with two double sealed 17x30x7 precision cartridge bearings, Freewheel with two double sealed 17x26x5 precision cartridge bearings
- Perfect engagement by use of 4 spiral springs and optimised spur gear shape
- Spur geared freewheel with 10° pitch (36 tooth), with reduced 1.5° engagement freeplay. Total engagement angle approx. 11.5°
- Choice of axle standard by swapping end caps (one set of your choice included)



Weight:	225 g
Spoke count:	28 or 32
Disc standard:	6 hole
Axle standard:	142x12 und X-12, 135x12, QR
Material:	Aluminium 7075
Color:	Black with laser logo
Price:	Only available in Syntace W-Series complete wheel, not separately.

HiTorque MX Rear 12 Wide

- 15 mm wider hub
- Butted 17mm oversize axle, for maximum stiffness, durability and lowest possible weight
- Hub body with two double sealed 17x30x7 precision cartridge bearings
- Freewheel with two double sealed 17x26x5 precision cartridge bearings
- Perfect engagement by use of 4 spiral springs and optimised spur gear shape
- Spur geared freewheel with 10° pitch (36 tooth), with reduced 1.5° engagement freeplay. Total engagement angle approx. 11.5°
- Choice axle standard by swapping end caps (one set of your choice included)



Weight:	248 g
Spoke count:	32
Disc standard:	6 hole
Axle standard:	157x12, 150x12
Material:	Aluminium 7075
Color:	Black with laser logo
Price:	Only available in Syntace W-Series complete wheel, not separately.

NEW

HiTorque MX Front 15

- 17mm oversize axle
- Two double sealed 26x17x5 precision cartridge bearings
- Choice of axle standard by swapping end caps (one set of your choice included)

Tipp: for extreme use and heavy riders, we recommend the use of the 20 mm 32 hole Hi-Torque MX Front 20 hub even if you had planned to use either a QR or QR15 axle for extended bearing life.



Weight:	99 g
Spoke count:	28
Disc standard:	6 hole
Axle standard:	QR, Ø15 mm
Material:	Aluminium 7075
Color:	Black with laser logo
Price:	Only available in Syntace W-Series complete wheel, not separately.

HiTorque MX Front 20

- 25mm oversize axle
- Two double sealed 37x25x7 precision cartridge bearings
- Choice of axle standard by swapping end caps (one set of your choice included)



Weight:	150 g
Spoke count:	32
Disc standard:	6 hole
Axle standard:	QR, Ø20 mm, Ø15 mm
Material:	Aluminium 7075
Color:	Black with laser logo
Price:	Only available in Syntace W-Series complete wheel, not separately.

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Complete wheelset W35 MX

Complete wheelset weight:	1595 g (26" 28 hole) 1687 g (27.5" 28 hole) 1872 g (29" 32 hole)
Rim width (outer):	35 mm
Rim width (inner):	28.5 mm
Disc standard:	6 hole
Spokes:	28 or 32 pcs Sapim CX-Ray, black
Nipples:	Sapim Alu double square, black
Spoke pattern:	3 cross
Rim material:	Custom Alu
Hub material:	7075 alloy, custom heat treatment
Tubeless-Ready:	Yellow Tape or Syntace
Max. rider weight:	120 kg
Color:	Raceblack with laserlogo
Price:	€ 998,-



Rear W35 MX:

Weights:	28 hole:	32 hole:
26" ETRTO 559	860 g	875 g
27.5" ETRTO 584	906 g	923 g
29" ETRTO 622	954 g	969 g
Hub tyre / axle:	see separate sheet	
Price:	€ 599,-	



Wheel warranty 3+7

For all wheels Syntace gives s 10 year warranty on all material and manufacturing defects. This is free of charge within the first 3 warranty years, and a 50% discount on the respective current retail price is offered for the remainder of the 10 year warranty period. The warranty does not cover normal wear of consumable parts or high impact damage on rim etc.

Tip: for extreme use and heavy riders, we recommend the use of the 20 mm 32 hole Hi-Torque MX Front 20 hub even if you had planned to use either a QR or QR15 axle for extended bearing life.

Front W35 MX:

Weights:	28 hole:	32 hole:
26" ETRTO 559	735 g	805 g
27.5" ETRTO 584	781 g	853 g
29" ETRTO 622	829 g	903 g
Hub tyre / axle:	see separate sheet	
Price:	€ 399,-	

NEW

REAR W-SERIES

Breite	Größe	Speichen	Nabe	Achse	Artikelnr		
W25 MX Rear Wheel	559 (26")	28	HiTorque MX Rear12	135x12	112667		
				142x12	111233		
				QR 135	111301		
W30 MX Rear Wheel	507 (24")	28	HiTorque MX Rear12	135x12	113367		
				142x12	112087		
				QR 135	112094		
	559 (26")	32		HiTorque MX Rear12	135x12	112681	
					142x12	111318	
					QR 135	111325	
					135x12	112674	
					142x12	111356	
					QR 135	111363	
	584 (27.5")	28		HiTorque MX Rear12	135x12	113381	
					142 x12	111417	
					QR 135	111424	
		32			HiTorque MX Rear12	135 x12	113404
						142x12	111455
						QR 135	111462
622 (29")	28		HiTorque MX Rear12	135x12	113411		
				142x12	112629		
				QR 135	112636		
	32			HiTorque MX Rear12	135x12	112643	
					142x12	111493	
					QR 135	111509	
W35 MX Rear Wheel	507 (24")	28	HiTorque MX Rear12	135x12	113374		
				142x12	112100		
				QR 135	112117		
	559 (26")	32		HiTorque MX Rear12	135x12	112698	
					142x12	111332	
					QR 135	111349	
					135x12	112568	
					142x12	111370	
					QR 135	111387	
	HiTorque MX Rear12Wide			HiTorque MX Rear12Wide	150x12	112575	
					157x12	112582	
	584 (27.5")	28		HiTorque MX Rear12	135x12	113398	
					142x12	111431	
					QR 135	111448	
32				HiTorque MX Rear12	142 x12	111479	
					QR 135	111486	
622 (29")	28		HiTorque MX Rear12	135x12	113428		
				142x12	112650		
				QR 135	113435		
	32			HiTorque MX Rear12	135x12	113442	
					142x12	111516	
					QR 135	111523	
W40 MX Rear Wheel	559 (26")	32	HiTorque MX Rear12	135 x12	112599		
				142 x12	111394		
				QR 135	111400		
				HiTorque MX Rear12Wide	150x12	112605	
					157x12	112612	

FRONT W-SERIES

Breite	Größe	Speichen	Nabe	Achse	Artikelnr		
W25 MX Front Wheel	559 (26")	28	HiTorque MX Front15	15 mm	110922		
				QR 100	110939		
W30 MX Front Wheel	507 (24")	28	HiTorque MX Front15	15 mm	112520		
				QR 100	112537		
	559 (26")	32		HiTorque MX Front15	15 mm	110946	
					QR 100	110953	
					HiTorque MX Front20	15 mm	110984
					20 mm	110991	
	584 (27.5")	28		HiTorque MX Front15	15 mm	111073	
					QR 100	111080	
		32		HiTorque MX Front20	15 mm	111110	
					20 mm	111127	
	622 (29")			HiTorque MX Front20	QR 100	111134	
					15 mm	111172	
20 mm					111189		
QR 100					111196		
W35 MX Front Wheel	507 (24")	28	HiTorque MX Front15	15 mm	112544		
				QR 100	112551		
	559 (26")	32		HiTorque MX Front15	15 mm	110960	
					QR 100	110977	
					HiTorque MX Front20	15 mm	111011
					20 mm	111028	
	584 (27.5")	28		HiTorque MX Front15	QR 100	111035	
					15 mm	111097	
		32		HiTorque MX Front20	QR 100	111103	
					15 mm	111141	
	622 (29")			HiTorque MX Front20	20 mm	111158	
					QR 100	111165	
15 mm					111202		
20 mm					111219		
W40 MX Front Wheel	559 (26")	32	HiTorque MX Front20	QR 100	111226		
				15 mm	111042		
				20 mm	111059		
				QR 100	111066		

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