

Coax the Torus through the technical sections and it's fine



Words: Guy Kesteven Photos: Seb Rogers

# BUILT FOR SPEED

Super-light titanium racer gets the hole shot on smooth 650b-wheeled speed

**W**e first met Andy from Clee Cycles riding the Grassington marathon – the day after he'd been racing cross-country at Dalby forest. So it's fair to say he's keen on his cross-country. He's hooked up with UK frame builder Justin Burls to produce Torus titanium frames with both 29 and 650b wheels. We were lucky enough to get the first test on a super-light sample of the latter.

## Race-influenced spec

The race influence shows in the Torus's classic cross-country 71/73-degree head and seat angles, as well as the very long (for a 17in bike) toptube. They're trail-aware enough to have dropped the bottom bracket low, rather than keeping you perched high above the bigger wheels, though. A 44mm headtube also gives compatibility with conventional straight-steerer forks, plus tapered forks if you use a Cane Creek XX-style external lower race. There's a thick reinforcing triangle welded into the angle between the high-insertion downtube and the headtube as well.

The post-mounted brakes are a contemporary touch for easy brake set

up, though we'd be wary of using a larger rotor as even a 160mm creates noticeable flex through the bracket and bowing of the seatstay. Andy tells us: "We wanted to keep the bike traditional with clean lines, so we sided with 'light and racy' rather than 'tough and trailie'."

As you'd expect for a titanium frame below £1000, tubing is plain gauge



44mm headtube works with all forks

**“The wheel size is obviously a big part of the appeal of the Torus”**

rather than butted, but it's still relatively light at a claimed 1.52kg (3.35lb).

The cowed dropouts and curved stay bridges look good and welding is neat throughout; there are currently only two sizes available, but a small is on the way.

Clee is the distributor for super-light component specialist KCNC, and its kit plays a big part in getting the complete bike under 20lb. The straight-arm K3 cranks are narrow across the pedals and matched with a downhill ring with deep reversible teeth – it works well in a 1x10 cross-country setup, especially when matched to a clutch-equipped SRAM X9 Type 2 mech that keeps the chain under some kind of control. The mech's upgraded with KCNC anodised jockey wheels and controlled by a Gripshift, via alloy segmented Alligator cables.



Cross-country angles and long toptube highlight the Torus's heritage



#### TESTER SAYS...



I started mountain biking when the first titanium bikes from Merlin and Litespeed appeared, and they instantly added a whole layer of smooth springiness above the established steel and fledging alloy frames. The Torus delivers exactly the same ductile distance-friendly dynamic, but the latest wheel size emphasizes its climb-floating, map-crossing character even further. *Guy*

The rear cassette is also a light KCNC piece with titanium cogs on an alloy carrier; the minimalist seat collar and 3mm titanium-bolted stem comes from them too. The flat bar is a bulged and swept titanium piece affair by Torus, as is that long seatpost.

While lots of companies are planning 650b products, actual availability meant Clee had to go with White Brothers Loop forks, which work smoothly enough but are relatively heavy. There are no such complaints about the American Classic wheels though, and racers won't have an issue with the only ready source of inbetween rubber being lightweight Schwalbe tyres.

### Easy acceleration

With a long stretch to the low bars (despite the mid-sized wheels), the Torus puts you in a racy frame of mind before the semi-slicks even start rolling. The KCNC cranks don't need much torque before the bike leaps forward, and at under 20lb the Torus accelerates with inspiring ease. It climbs with outrageous speed and enthusiasm too, surging forward whenever the gradient slackens in your favour.

While there's some surge and spring through the cranks, the long seatpost and the back end if you're really grinding a gear up a steep slope, at low speed it's definitely no noodle. The generous amount of breathing space means it

#### AT A GLANCE

<b>TORUS TI 650B</b>
<b>PRICE</b> £980 (f/o)
<b>TOPTUBE LENGTH</b> 24in
<b>SEAT TUBE LENGTH</b> 17in
<b>HEAD ANGLE</b> 71°
<b>SEAT ANGLE</b> 73°
<b>BB HEIGHT</b> 12.1in
<b>CHAINSTAY LENGTH</b> 16.5in
<b>WHEELBASE</b> 43.1in
<b>SIZES</b> 17 (tested) and 19in
<b>WEIGHT</b> 8.92kg (19.66lb)
<b>FRAME</b> Torus plain gauge 3AL-2.5V titanium
<b>FORK</b> White Brothers Loop 650, 15mm screw-thru axle
<b>WHEELS</b> American Classic 650
<b>TYRES</b> Schwalbe Racing Ralph Evo Pacestar, 2.25in
<b>CRANKS</b> KCNC K Type single ring
<b>GEARS</b> SRAM X9 Type 2 rear mech and Gripshifter, KCNC
<b>BRAKES</b> Hope X2 Race, KCNC Razor rotors
<b>OTHER STUFF</b> Torus Ti seatpost and bars, Velo Senso Miles saddle, KCNC Arrow stem, ESI grips, Alligator i-Link cables, KCNC seat collar
<b>CONTACT</b> <a href="http://www.torusbicycles.co.uk">www.torusbicycles.co.uk</a>

American Classic 650 wheels shod in Schwalbe rubber keep you spinning



KCNC titanium cogs help keep the Torus's overall weight nice and low

excels at holding a smooth tempo however far up your heart rate range you feel comfortable keeping it.

We had zero issues with the 1x10 gearing, despite deliberately battering it down as many steep step sections as we could. The Gripshifter and Type 2 mech feel fantastic through the metal-sheathed cables when you're feeding its seemingly insatiable appetite for the next gear up.

The wheel size is obviously a big part of the appeal of the Torus, and it's

surprisingly evident in the ride. While it definitely accelerates and changes direction more like a 26in bike, the way it irons out surface chatter and rolls over roots, rocks or frozen trail ruts is much closer to a 29er than we expected. Add in the pliable nature of the frame material and the long, lithe front end and the Torus positively glides across trails that are noticeably bumpy on a 26er. Given the amount of energy-sapping rough grass tracks







*“Andy’s design is unashamedly cross-country in influence”*

between the short sharp climbs and slow corners of most UK race courses, we can see this bike leaving you a lot fresher and less battered than most race hardtails we’ve ridden – whatever the wheel size.

The smoothness, low weight, low front and long reach of the frame does come at a cost, however, and that’s tracking accuracy. The steering is fine as long as you’re just guiding the bike gently and going with the flow, but cut hard across the grain of the trail and the front and rear wheels start operating independently. If a deep rut or off-camber section gets the bike in a headlock it’s likely to tap out early too, and the Torus has a definite tendency to speed wobble if you provoke it. Aggressive riders who want a more rigid bike should probably stick with alloy or carbon anyway, so as long as you’re prepared to ease off and coax the steering through more technical sections, you’ll be fine.

## Summary

Andy’s design is unashamedly cross-country in influence and, as you



KCNC cranks and one ring – it’s dedicated



650b wheels enhance the smooth ride feel



might expect, it rides with a sublimely light, smooth and supple quality that’s enhanced by the responsive rollover of the 650b wheels. The front end and brake-related flex mean it’s not a wise choice for aggressive, smash and grab riders though.

WHAT MOUNTAIN BIKE ★★★★★

“Smooth, light, well-priced Ti XC frame that benefits from the latest wheel size, but flexy when pushed hard.”

There is more titanium on the menu in the shape of the flat handlebars