

# FiftyOne Custom carbon upstarts making round tubes great again

Words **JAMES SPENDER** 



ounded in 2014, FiftyOne is a relative newcomer to the custom carbon world, but it has already built up some impressive credentials. Founder Aidan Duff is an ex-pro who counts Tommy Voeckler amongst his former teammates. If you travel to Dublin, where the brand handbuilds its frames, you'll get fitted for the bike by Stephen Roche's bikefitter, Aidan Hammond, while head framebuilder Aaron Marsh was schooled by Mauro Sannino, who made custom bikes for pros including Duff and went on to make custom frames for German giant Corratec. Given all this cumulative experience, it may seen odd that FiftyOne makes just one bike. But every one of them is unique.

### Special measures

This bike was built specifically for me. I was measured up by Hammond and had various consultations with Duff about the type of rider I was and the type of characteristics I want in a bike. I also had free rein with the paint.

Duff told me that 'everyone has a dream bike in their heads, the problem is they mostly don't know what it looks like', so his solution is to draw it out using Pinterest, the virtual pin board to which users 🕻







was less glove and more familiar boxing mitt. Seat height and bar angle set, the FiftyOne felt like a bike I'd ridden a hundred times before, albeit in about as aggressive a position as I could realistically sustain. I found myself gravitating towards riding in the drops, and I found my average speeds over known loops increased slightly, as did my power numbers.

More scientific testing would be necessary to prove a link there, but the fact remains, I felt comfortable and powerful on the FiftyOne, and the numbers did nothing to undermine this.

#### Refinement refined

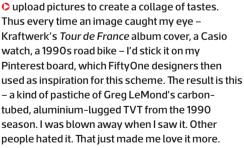
Handling was a big aspect of the custom brief and was an area in which the FiftyOne excelled, hitting a delicate and delicious sweet spot where nimble meets assertive.

On long, straight descents at 60kmh-plus it felt smooth and stable, but on tipping it slightly towards the apex of a corner it snapped into a new line as if dragged by wire. I've ridden more 'reactive' bikes – you need only blink on a Bianchi Specialissima and it starts to turn – but there are few, if any, that manage to balance such agility with such stability.

If I had to explain it I'd say it's a combination of marginally shorter trail (53mm, while many 'race' bikes come in around 55–57mm) and a longer wheelbase due to longer chainstays (412mm as opposed to 405–410mm). In theory, short trail means fast handling, long wheelbase means stable at speed. In practice, the FiftyOne was tame enough to cruise on yet wild enough to let fly.

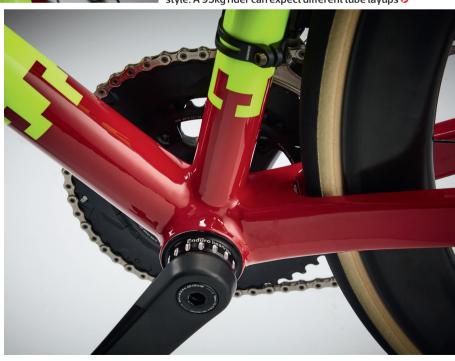
#### Simple yet sophisticated

Like any carbon framebuilder worth its resin,
FiftyOne selects tubes based on rider weight and
style. A 95kg rider can expect different tube layups •



I wanted the bike to reflect that I'm a bit of a chopper at heart, who might once have been a decent sprinter were it not for eating a bowl of Frosties and a Ginster's pasty every day throughout secondary school. Souplesse is not my forte, but I enjoy laying down what limited power I have and cornering and descending as fast as I can. I like stiff, I like responsive, but I also appreciate a bike whose grip and stability flatters my bike-handling skills.

To that end, the finished FiftyOne ended up long and low, with a 155mm head tube and 555mm top tube paired up with a 120mm stem (I'd usually happily ride a stock 550mm frame with a 110mm stem). As such, the immediate sensation of fit





to a 65kg rider, for example, and a different degree of wrapping around each tube joint.

This bike is therefore built to accommodate my 78kg physique, using specifically selected stays from Deda and tubes from Enve that meet over a FiftyOne-built T47-type BB shell (a splendid new standard that combines the 30mm bearings of press-fit with the non-creaking nature of a threaded BB). The bike leans towards the stiffer end of the spectrum, but retains enough lateral flex that it still corners well over rougher surfaces.

That ability was bolstered by the 28mm Vittoria Corsa G+ tyres, which at 80psi made the bike glide like oil down silk, and delivered grip to make you wonder why we ever bothered with 23mm tyres.

There was a slight drawback, however, After several hundred kilometres small rub marks appeared on the inside of the chainstays, as the rear wheel flexed (quite naturally, all wheels do) under bigger loads. It's minor stuff, and largely due to the frame being rated for 28mm tyres but the Vittorias coming up closer to 30mm on Enve's ultra-wide wheels. And, embarrassingly, me not noticing this.

It's not a major issue, but as a customer I'd ask for even wider clearances, or be clearer about what tyre/wheel combo I was running before the build. But otherwise, I wouldn't want to change a thing, and in particular I'd defend one crucial aspect of the FiftyOne to the hilt: the tube shapes.

## At 80psi the 28mm Vittoria tyres made the bike glide like oil down silk





The chainstays are big and boxy, which makes for excellent power transfer, but the rest of the tubes are round, and in my experience roundtube bikes just ride better.

Because they're round, round tubes display the same mechanical properties through all axes of applied force, and this seems to create a bike that feels not only smoother but more cohesive and more balanced too, compared to an aero-tubed bike, for instance. It's no great revelation, but it is an engineering cue FiftyOne has employed to great effect, and buffed to a fine shine in this example through thoughtful design and really understanding the intended rider.

I've heard it said that most people don't really need a custom bike, as the same fit points (hands, feet and backside) can be achieved by speccing certain-sized components on a stock geometry bike. This may technically be true - I can certainly make most bikes fit comfortably enough - but the reality is, when executed to the level of this FiftyOne, nothing will ride quite like a bike made specifically for you. Nor will it look like it. #