

Velo Vision Sample Article

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I hope you enjoy the read.



Peter Eland
Editor and Publisher,
Velo Vision

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Small print

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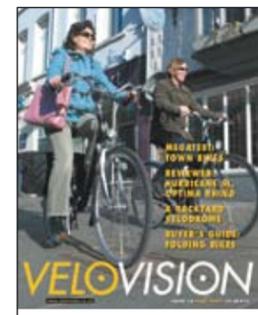
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VELO VISION AND VELO-VISION We weren't first with the name. Velo-Vision (note the hyphen) is a progressive HPV-friendly bike shop in Kärnten, near Bergisch-Gladbach, Germany, who also make their own recumbents. Velo Vision magazine is working in friendly harmony with Velo-Vision in Germany.

Velo Vision is printed on paper produced from sustainable forests to Nordic Swan standards.



COVER PHOTOGRAPH:
Town bikes on test: see page 16.
Photo by Richard Loke.

OPPOSITE: Sunset casts a long shadow from the Hurricane SL.
Photo by Peter Eland.

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GOING TO TOWN

For a magazine which is all about transport cycling, a comprehensive look at town bikes was well overdue. So I'm particularly grateful to reader and now reviewer Paul Robison from Cambridge for the considerable efforts he (and others) put into compiling this issue's mega-test.

Utility cycling on a very different level is described in Lou Parson's piece about binners and their bikes. A nice reminder, perhaps, that while some of us can afford to agonize over which of five quality machines might best suit our needs, many cyclists just make use of whatever bike they can lay their hands on.

And why not? So long as the tyres have some air, and it goes when you pedal, almost any bike has a magic-carpet effect: it vastly extends range of movement and load-carrying capacity compared to walking. Ongoing cost is minimal, and mobility opens up all sorts of opportunities.

There's a reason Norman Tebbit's famous exhortation to the unemployed "Get on your bike and look for work" has resonated down the years. If you're looking for a tool for self-reliance and a chance to take yourself places – get on your bike.

Peter Eland



tyre set. For disk brakes, add £15 and 400g for a hydraulic one on the front only, or subtract £140 and add 680g for Tektro mechanicals front and rear.

No luggage racks are fitted; it's intended that you use recumbent-specific luggage from the likes of Radical Design, which fits over the seat and hangs either side. Note that there is a weight limit (for rider and luggage combined) of 95kg.

As there are no bottle cages, a bag-mounted 'hydration system' with feeder tube is probably the best bet. You'll also need to add a seat pad for cushioning – Ben had used a minimalist piece of camping mat, though more breathable options are available. Finally, add your own pedals.

A BIKE IN A HURRY

We test the Challenge Hurricane SL, a racy recumbent from the Netherlands which cracks the 10kg weight barrier in some style. Plus, how it fared on Mount Ventoux...

It's sometimes argued that recumbents are intrinsically heavier than conventional bikes. The diamond frame is indeed superbly structurally efficient, but there could be another reason that recumbents lag behind uprights in the weight wars. Huge resources, driven by cycle sport, have pared every possible gram from UCI-legal racing frames, while recumbents are made by relatively small companies without huge reserves of cash.

So it's great to see Challenge, one of the largest manufacturers in probably the world's largest recumbent market, the Netherlands, launch a range of bikes around or below the 10kg mark. Thanks to clever engineering and a close eye kept on the end price, the 'SL' range

comes in at around 3000 Euros, or £2000ish in the UK. We tested the 20"-wheeled Hurricane SL, a semi-low racer also popular in its not-quite-so-lightweight form (from £1190, 15kg) with fast tourers. Other bikes in the series are the Seiran SL (26" wheels), the Fujin SL (20/26" wheels), the Mistral SL (20"ers, but a bit higher).

Our machine had some slight changes to the standard production spec, as it had just returned from Ben Sherratt's Mount Ventoux visit (see later). The base price from London Recumbents is £2179. Various upgrades and changes are possible, and they offer a useful datasheet showing the weight and price changes involved should you, for example, choose a different



Challenge's own-design brakes fit neatly behind the carbon forks



Compact bars, with the four cable runs neatly routed down below the stem



The main drive-side chain roller is really a toothed sprocket

FIRST IMPRESSIONS

Black may be a tricky colour to photograph, but I can't argue with the classic 'stealth' appearance of the SL. All in black, with natural titanium and aluminium shiny bits, all looks purposeful and

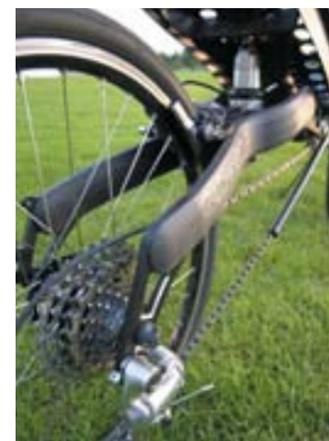


co-ordinated. If I have a niggle, it's that the labels seem to have been applied as stickers, and were peeling already. Perhaps putting them under a clearcoat would have added too much weight...

That aside, the bike shows off its engineering quality. Cutouts on the aluminium dropout plates inserted into the rear swingarm have their edges beautifully-radiused, cutting through the anodising for a 'lining' effect. The carbon parts – fork and swingarm – are neat and pretty. Welds on the aluminium main tube are fine, too. This tube is butted internally – so the walls are thicker where the stresses are highest. As Challenge modestly say in their brochure, that's harder to achieve than it looks. A cutaway even shows



A neatly-constructed carbon-fibre rear swingarm supports another Challenge brake and the air shock unit.



The return chain-run is via the small roller near the headtube, again in toothed-sprocket form.



the walls thinner on the tube sides, and thicker on the top and bottom...

The other main frame component, the rear swingarm, is apparently injection-moulded carbon-fibre, and very neat it is too, with aluminium plates integrated for pivots, dropouts and to support the air shock unit. Finally, the seat is assembled from sheet aluminium, with a spinal groove, and plenty of lightening/ventilation cutouts. The angle is around 30 degrees, and the seat base is around 40cm off the ground.

Superlight components always have a certain 'drool' factor for those of us who like such things, and the Challenge doesn't disappoint with its standard equipment: the American Classic hubs and quick-releases and Radius brake levers are all minimalist, tidy items. The Shimano 105 chainset is fitted with a Challenge own-brand combined 60-tooth ring and chain protector. The smaller ring you see fitted here isn't part of the usual spec, so ignore it. Ben was experimenting with it before Mt Ventoux. I also fitted my own well-used Bebob clipless pedals.

But the real eye-catchers on the bike are the Challenge own-design brake callipers: a bit like old MTB U-brakes in layout, but carved out of lightweight alloy and with a V-brake style cable entry. They were intended to fit behind the fork in its aerodynamic profile, and not to have any cables jutting out to snag your leg. They certainly have a nice action, and stayed perfectly centred during the test.

The bars are supported on a titanium stem tube, and the 'tiller' effect means you have to get use to moving them sideways – rather than twisting – to steer. Everything's packed fairly tight, with gripshifts for the gears (the left-hand one was unused on our bike, but a front derailleur post is fitted).

The chain (Dura-Ace is standard,

we had a SRAM model) runs through slippery plastic guide tubes, which also keep your legs clean. I should own up to getting the return-run chaintube the wrong side of the tension-side one for the photos, so don't go assembling yours like that. The power-side idler pulley is actually a large-diameter gear cog, reducing transmission losses and keeping it all quiet.

At the rear wheel, there's an Ultegra derailleur and nine-speed cassette. Our wheels were fitted with Schwalbe Stelvio tyres, standard equipment on the SL.

The seat is normally covered by a foam pad, and combined with the air shock, this soaks up bumps nicely without losing road 'feel'.



THE RIDE

If you get one of these, do yourself a favour, and make sure your first metres on it are on the open road. Climb aboard (requires some contortions, until you realise you need to swing the bars round first for easy access), settle back, and push off.

The SL builds up speed almost recklessly: this is the reason for finding an open road. Despite that fearsome 60T ring I found myself clicking up through the gears and suddenly going really rather fast. The handling stabilises as speed

increases, and the 'street luge' riding position is certainly a rush.

Having the bars a few inches in front of (and just below) your face seems odd at first, but at least for me (at 6' 2") the view ahead wasn't actually obstructed. I would need to fit a mirror for my own use: with the reclined seat (and perhaps lack of 'seat time' to get used to it) I found it almost impossible to glance behind without some serious wobbling.

At lower speeds, I found the Hurricane more of a handful. On tighter turns I'd sometimes miscalculate the 'lean' required, and need to accelerate to restore my balance and stability. But I've seen plenty of owners moving in total control at walking pace around events such as Cycle Vision, so this must come with practice.

The brakes worked fine, although York's lack of mountain descents limited my ability to stress-test them. Straight-line stopping is certainly very good: the Hurricane's layout seems to put just about the right amount of weight on the front wheel, so that it won't skid, and you also won't easily lift the back.

The suspension from the air shock unit was very welcome – even with the foam seat-mat, the rock-hard 20" Stelvio tyres did feed back road vibrations quite clearly. It was also nice to feel that any shocks were being softened somewhat before hitting that super-light frame.

Once you get it moving, the Hurricane felt a very efficient way to cover distance, rocketing down descents and light and responsive enough to power up most hills, even for not-super-fit magazine editors. It positively encourages you to keep up the momentum.

I also got the impression (or perhaps it was wishful thinking!) from the reactions of onlookers that the Hurricane SL, with its menacing black and low-slung curves, marks the rider out more as an athlete than a weirdo, as do some recumbents. Visually, it's a purposeful-looking piece of extreme sports equipment, and for once I'd make an exception to my general belief that cycling shouldn't need special clothing. This bike deserves a bit of Lycra!

CONCLUSIONS

Well, it does what it says. It's a pleasure to ride a bike this light, and congratulations to Paul and his team at Challenge for keeping the price relatively realistic, too.

Like the original Hurricane, its stable handling at speed and good aerodynamics make it appealing as a fast leisure or light touring bike, though heavier riders or those wishing to carry significant luggage will have to watch that weight limit.

But for a performance-oriented rider this must be a really intriguing product. Finally, a recumbent whose weight won't draw ridicule amongst roadie friends. Indeed, it was the first test bike we've had in on test to seriously tempt some of my dyed-in-the-wool road-riding friends. Now if only the UCI would let them race it...

Peter Eland

AVAILABILITY

From Challenge dealers worldwide: see their website www.challenge-bikes.com or Tel +31 55 521 2405. Test bike supplied by Lifecycle/London Recumbents: Tel 0208 299 6636 or see www.londonrecumbents.com

Ben Sherratt descending after his attempt on Mt Ventoux was thwarted by snow. Incidentally readers are strongly advised NOT to try lifting your hands off the bars at 60mph to test stability at speed, as he apparently did...



HURRYING UP MT VENTOUX

Our test bike was newly returned from a trip to Mount Ventoux in France with Ben Sherratt of Lifecycle in Brighton (an offshoot of recumbent and special needs cycling experts London Recumbents, who import Challenge Bikes). Here's his account of how the SL handled the legendary climb.

I have owned Hurricanes since 1998, but despite lavishing them with top end bits and pieces the lightest I ever built was 26lb (11.6kg), and that was at great cost. But I have always maintained that the Hurricane is the best handling bike that I have ever ridden. I have been downhill at a shade under 60mph and the bike was solid as a rock at that speed. So I wanted to see how the SL compared to its heavier stablemate, both up and down hills.

Starting about 20k away from the base, the Ventoux is an impressive mass that dominates the skyline for miles around. At 1909m it is a relentless climb. I chose the route up from Malaucene as it is a shorter, steeper climb and I really wanted to blast apart the myth that recumbents can't climb. I would be returning the same way and there are a few long straights on that side of the mountain that would really let me fly on the downhill.

As this was a day-trip out from a family holiday I had prepared the bike with just nine gears for ease of assembly and had figured (after testing it up Ditchling Beacon) that a 60 tooth chainring ought to do it coupled with a 11-32 cassette, giving a nominal 37.5" low gear.

From Malaucene, the only way is up. On the lower slopes you can't see the mountain, just a beautifully smooth road heading upwards to the next hairpin in the sky. All you can do is sit and grind and smile through gritted teeth as you pass other cyclists. Climbing on a recumbent is always regarded as being hard work and it can be – you are overcoming gravity after all! But it is not really any harder than climbing on a road bike of equivalent weight.

There are advantages too: you are rigidly fixed in the seat, freeing up your heart to power your quad muscles and not diverting effort to the complicated muscular feat of pulling on the bars and honking on the pedals. With a bit of practice you can lift your bum out of the seat to honk on a recumbent if you are



VENTOUX PHOTOS: MICHAEL BARNES

suffering. You just need to be trained to use your legs differently.

Anyway, back to Ventoux. I had noticed signs saying that the road was closed up ahead, though I was assured by an American cyclist that the road was passable by bike. So I carried on, bathed in sunshine, dancing on my back, up the mountain. Climbing on a recumbent allows you to see around you even despite your heart pounding in your ears, though it is important to stay focussed if you want to make good time. At about 1000m altitude I started to notice snow in the woods on the side of the road, and this built up as I gained altitude until there were great drifts as tall as me.

For the last 55 minutes or so I had been kicking the SL up the slopes and I was getting into the swing of how well the bike went uphill. The acceleration when I kicked was unlike any recumbent I have ridden. If I felt I was running out of low gears all I had to do was to kick a bit and the thing shot up the hill.

As I rounded the last curve there it was, a huge snow drift that stubbornly clung to the upper slopes. About 1500m would have to be my summit of Mount Ventoux for today. I was disappointed to say the least. All that remained was to take a few photos and to point the bike down hill.

I clicked up through the gears as I headed down the 11% slope until I

spun out. Then gravity kicked in, my world became the road in front of me, the bike seemed to accelerate like a motorbike, way faster than I have ever been before. You hear of *Tour de France* riders hitting 70mph plus down Ventoux and I think that I must have been close to that. I had a car following me that I left behind at 60mph! The bike just lapped it up: cornering and handling were just like on my old Hurricane. I lifted my hands off the bars at around 60 and it was fine, I was flying.

The bike was fitted with Challenge's new lightweight braking system and this was severely tested as I hauled the bike down to tackle the hairpins. They squealed like a banshee as the pads overheated and I stopped a couple of times and cooled the rims off in the snow. I think that for riding in the Alps I would have preferred disc brakes and a 400 gram penalty, just to allow for maximum speed on descending and later braking. It seemed to take just seconds to get back down to the warmer air of Malaucene.

Despite being foiled by the snow, the Hurricane SL had proved that you can comfortably climb fast on a recumbent. It was also a dream at speed: slicing off a third of the bike's weight has compromised nothing.

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