

## 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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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 Körten, 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.



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Andrew Walters rides his prototype Monval Excel semi-recumbent tourer.

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### SURPRISE!

I keep on being surprised by bikes. The electric bike review and Stokemonkey report show just how much of a practical proposition today's quality models have become. The Catrike review overturned my ideas on trike direct steering and amazed me with the performance on offer for under £1000. Riding Andrew Walters' 36"-wheeled bike showed that semi-recumbents need not be slow. And Bike Friday's Tikit, seen at the SPEZI, promises to be an extremely exciting development in folding bikes. On a smaller scale, the Weber mLite is one of those simple inventions so useful I'm still amazed it hasn't been done before.

There's more, too, as you'll read in this issue of *Velo Vision*. It's a reminder to keep an open mind, to revisit assumptions. Improvements in materials and technology, or just clever design, can make practical transport solutions out of ideas which just a few years ago seemed non-starters. It's an exciting time to ride your bike!

Peter Eland

# THE BIG RIDE

**Andrew Walters couldn't find a bike he liked – so he designed one for himself, and hopes soon to go into production. He brought his latest prototype to York for us to try.**

## THE IDEA

When, in around the year 2000, telecommunications engineer Andrew Walters rediscovered cycling, he fell back in love with the whole idea. Day rides, weekend tours, utility riding – all were great, but marred by just one thing: his discomfort on the bike. After a day's riding he'd have back pain and saddle pain, wrist ache and neck ache. But after going repeatedly through the process of changing saddles, bars, stems, frames and so on to try to get an upright bike to be comfortable, enough was enough.

He was sure there must be a better bike out there, so started combing the magazines and websites. Soon he learned about recumbents – surely that was the answer? Full of hope he went off to Futurecycles in East Sussex to try some.

First he had a go on some trikes: great fun at first, and comfortable. But the fast ones were very low down, and while he wasn't so worried about being seen, he found the lack of a view disappointing. If you ride somewhere where the minor roads are lined with hedges, a day's ride on a low trike can end up rather monotonous. And even with mudguards, you get splashed in the wet from the front wheels.

His favourite, the Anthrotech, has a rather higher seat. But it felt oh so slow, and that meant it would be hard to keep up with riding companions.

Then he tried bikes. Generally these have higher seats and a decent view. But Andrew's not tall, and found very few recumbent bikes would really fit him. The seats were, in this position, uncomfortably high, making starting and stopping awkward. This, together with the inability to see out into the traffic at junctions, made him realise that a recumbent bike was not really the solution either.

For a few years he let it lie, sure that before long someone would fuse the upright and recumbent designs. This was before the Giant EZB, before the RANS crank-forward bikes. The Tavara, designed by Pieter Tauber from the Netherlands (see Issue 23, p. 41) was little known, as was the Riese und Mueller Equinox (see Issue 2). By the time the semi-recumbent concept had gained currency, Andrew had already decided to develop his own design.

And as the commercial designs eventually appeared (and never caught on in a big way) he realised that none of them did what his bike would do. He found the Giant EZB heavy and cumbersome, with unnecessary styling bells and whistles. It also put too much weight over the small rear wheel, thus requiring suspension and compromising the handling, as did several other similar designs. The RANS crank-forward bikes (see e.g. Issue 24 p 32) were closer to his concept, but he felt they lacked clearance between pedals and front wheel, often had a poor turning circle and also lacked a backrest, needed on a semi-recumbent to push properly up hills. And most of them had little luggage capacity – he needed to carry at least a laptop and a briefcase, often more. If they did have a carrier rack, it would often be way out past the rear wheel, further compromising weight distribution and handling.

So the project continued. Andrew was also looking for a career change, and realised that this could be about more than just building a bike for himself. There must be others with the same need. Maybe it could sell...

## THE BIKE

So, how to marry the comfort of a semi-recumbent with the efficiency of a tourer? The answer, says Andrew, is to forget the 20" wheels that most such bikes use to keep within the storage envelope of a conventional bike. To get the comfort, ride quality and luggage capacity something had to be compromised, and here it's the overall length of the bike (and to some extent, weight). But once that decision is made, the benefits start to flow.



That huge rear wheel is a full 36", fitted with a smooth-rolling 4-ply unicycle tyre (easily mail-ordered from [www.unicycle.uk.com](http://www.unicycle.uk.com) and other outlets worldwide). As well as giving the bike a 'wow' factor it rolls ever so easily over rough surfaces, the large diameter reacting hardly at all to smaller bumps. This saves the need for additional suspension, so the structure can be simpler and lighter. There's plenty of room for luggage in front of or over the rear axle, where it'll have a minimal effect on the handling. The rack is very much a prototype, and Andrew says the final model will

have space for four full-size panniers. The rear mudguard is also very much a temporary measure, as is the Giant EZB seat and backrest. Andrew's own versions are in the works, but he was keen to get the bike to us in time for this issue.

The frame is 'one size fits all', with capacity to accommodate all sizes up to very tall and very heavy riders (and again, details and finish will be tidied for production). There's a low step-through for easy mounting. At the front, a 29" w Big Apple tyre and suspension forks. Andrew had fitted the bike with a Rohloff hub (there's an eccentric

bottom bracket for chain tensioning) and Hope disk brakes, in keeping with the high performance, low-maintenance philosophy.

## THE RIDE

As you'll see from the pictures, the riding position is truly upright, with a straight spine and neck, and no weight on the wrists. The comfort, and the view, are undeniable. It's very easy to get a foot flat on the ground when you stop. I did find the bars just too wide, though. It's not an aerodynamic position to start with, and the splayed-arms pose

seemed to catch the air even more. Andrew says that narrower bars are on the way.

On the road the bike largely lives up to its design goals. Comfort and stability is superb, and adding a couple of well loaded panniers made no discernable difference. The bike also felt fast – not so much in acceleration, but it rolls easily and smoothly. With no decent hills to hand, I couldn't really test its climbing ability, but you could certainly push off hard against the backrest when setting off or accelerating.

The bike's length was never a problem while riding, but in very tight manoeuvring or if you have a small shed for storage it could be an issue. There's also a question mark about transport: it's too big for most car racks. Andrew says a separable model may be possible if there's demand.

Certainly it's a machine I could tour on with great pleasure – though I'd want to try it in a headwind and on some proper hills before giving any sort of definitive verdict.

## THE PLANS

The bike, provisionally named the 'MonVal Excel', is still a little way away from commercial production, but it's months rather than years, hopes Andrew. He sees three main potential markets:

- For individual riders who want the ultimate in comfort in a tourer, especially on rougher roads. He'll sell in the US as well as Europe, as the design aesthetics should go down well there, he thinks. He could also pick up on the cruiser movement and offer cruiser style with 'real' performance. Equipped with the finest components such a bike might cost in the region of £2000 – high end to be sure, but with unique benefits for riders of all heights and weights.
- For bike pool schemes, for companies or organisations. Normally such a scheme would need to buy at least two gents and two ladies bikes (small and large frames), all at a reasonably high price-point for reliability. Instead, just one of his bikes would fit all users, and also be more fun and comfortable for employees to ride.
- For utility cyclists or even courier companies who want to take advantage of the huge luggage capacity and good handling when loaded.

Production infrastructure is already falling into place, with frames to be built by Doug Pinkerton, assembly to take place at Leicester's Cyclemagic and wheels to be built by Mike Hesson of Knight Cycles (at the other end of the size scale, he also supplies wheels to Brompton).

Andrew would very much welcome all feedback and comments on the design. We'll report any further developments with interest!

**Peter Eland**

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