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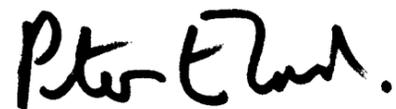
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Peter Eland
Editor and Publisher,
Velo Vision

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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.



COVER PHOTOGRAPH: Riding the Esprit. Photo by Peter Eland.

OPPOSITE: No fare dodging for *Velo Vision*! Waiting for a train, Tikit at the ready (sorry!) at Berwick-upon-Tweed station. Photo by Peter Eland.

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BUILDING THE FUTURE

Ample proof this issue, if any were needed, that the instinct for innovation is as strong as ever in the cycling world. We have clever, novel and functional solutions in all of our test bikes and accessories, particularly perhaps the Bike Friday Tikit with its ingenious cable-actuated folding system.

Then there are the reader contributions: people who, having come up with an idea, haven't just talked the talk, they've actually gone and built bikes to put their concept into practice. And then boldly shared the

details with us, for the feedback of fellow cyclists and designers. Each stage of the process requires some determination, some get-up-and-go, some skill and a certain bravery, and for this alone they deserve our congratulations and thanks.

Whether the ideas 'catch on' or not, we're all richer for the experience. It's a privilege that so many innovative designers have chosen *Velo Vision* as the forum to share their ideas, and we'll keep on doing our best to do them justice.

Peter Eland

A SPIRITED RIDE

The £2200 Moulton Esprit is the latest evolution of the full-suspension spaceframe bikes which pioneered the idea of performance small-wheelers. But could it make a Moultoner out of me?



FIRST IMPRESSIONS

Our review Esprit arrived in the customary fairly small Moulton box, pointing up the space-saving potential of the separating frame (see panel overleaf). Assembly took just a few minutes, mainly taken up by removing the packaging. Our test bike had done the rounds of a number of publications before arriving with us, so please ignore any signs of use visible on the photos.

The trademark Moulton lattice frame uses the same small-diameter steel tubing as their top Double Pylon model, brazed neatly onto the larger tubes which form seat and head tubes and bottom bracket. The small 'edge' tubes wrap neatly round the head and seat tubes, and close by are fitted the mounting points for front and rear panniers. There's a

boss just above the bottom bracket for the rear pannier lower support, too. Bottle cage mounts are fitted on the front of the seat tube.

Our bike was finished in a discreet dark, almost grey green. The dropouts are neatly cut from stainless steel, and are unpainted.

The rear suspension pivot is just behind the bottom bracket. A rubber suspension unit (available in two hardness grades) provides cushioning, and the swingarm also supports a neat little stainless steel chain guide which effectively prevents the chain jumping off the single front chainring. A mounting plate for a front derailleur is provided on the main frame, along with all necessary cable guides, in case you decide to upgrade to a double chainring in future.

A stainless steel chain guide is fitted to the single-chainring version of the Esprit.

There's a preload adjuster for the front suspension, and also a rubber bump stop in case you bottom out.

BACKGROUND

The Moulton spaceframe bikes have for some years been divided between the relatively affordable Pashely-made TSRs (as reviewed in Issue 21) and the custom-made and considerably more expensive AM and New Series ranges. The new Esprit model is an evolution of the AM Series, with a somewhat wider spaceframe (for extra rigidity) and narrower tubes, somewhat simplified suspension (rubber rather than 'Hydrolastic' at the back), redesigned forks, and numerous detail changes.

The Esprit costs £2200 in the version tested, price-wise a little more affordable than the full 'AM'

bikes (£2700+) but rather more than a TSR, which range from around £900 to £1450, or the £1250 non-spaceframe Bridgestone, as reviewed in Issue 16. A version of the Esprit with drop bars and double chainring costs £2400, and a frameset is available from £1480.

A range of accessories is available, including mudguards, large and small racks front and rear, and bags to match. Our bike was fitted with the (standard) MKS removable pedals and optional Brooks Swift leather saddle (£169.99) instead of the standard Fi'zik model. Esprit bikes are built to order, so contact Moulton to make changes to any aspect of the specification.



Both wheels are built with 24 spokes in the Moulton 17" (369) rim size, and are fitted with Schwalbe Stelvio 32 mm tyres. A nice touch is the offset spoke holes on the rear Velocity rim, which reduce the dish required and hence make a stronger wheel.

The front wheel is supported by a leading-link suspension system, with almost impossibly delicate-looking tapered tubes running down from the fork crown. A bridge then takes the load up to the shock-absorbing unit within the steerer tube. Here there's a choice of soft, medium or hard coil springs. Rotating the lower knurled section adjusts the preload, and a rubber collar acts as a bump stop if you bottom out.

An angle-adjustable stem allows a certain amount of latitude when it comes to setting the riding position.

It supports a set of 'Mosquito' bars, quite narrow at around 40 cm, and covered in dense Grab-on foam. The brake levers are reverse-pull '200TT' time-trial models from Cane Creek, with the cables running neatly concealed under the foam. Note also the soft rubber bungs on the bar ends, which have a comfy little groove into which you can rest your thumb as you ride. Shimano 105 callipers do the actual braking.

The gear shifter is a Shimano Deore trigger-type, placed at the centre of the bars, and it controls the rear derailleur on the 9 to 26 tooth Capreo rear cassette. With the 53T chainring, this gives a gear range of around 33 to 100". Chainring, cranks and bottom bracket are all Shimano 105, as are headset, chain and rear derailleur – all fine components, if

no less than you'd expect on a bike of this price.

The seatpost is a long alloy model from Nitto. With a fairly low seat tube, the Esprit can accommodate a wide range of rider heights, and a number of shorter riders rode it without difficulty. But without easy adjustment for reach, many found themselves uncomfortably stretched out. A shorter stem would help to some extent. Moulton do offer an optional 'Parallel' stem, available in four lengths.

One final nice touch is the 5 and 6 mm Allen keys secured rattle-free in a soft rubber block under the saddle – handy for running adjustments.

Weight as tested was 11.01 kg including the pedals. A lighter fixed frame version (non separating) is also available, as shown below.

THE RIDE

The first impression of riding the Moulton is that it's so light it's almost skittish. This is largely down to the narrow 'Mosquito' bars; they put the hands fairly close together, so there's not much leverage, and any movement you make is very directly transferred into steering. Coupled with quick acceleration from the small wheels and overall light weight, it almost feels like it's running away.

But a few hundred yards later it falls into place, and your reflexes catch up with the Esprit. It's a bike which reflects your inputs; ride it with a calm upper body and it'll track straight and true: twitch around and it'll twitch right back.

The 'Mosquito' hand position is actually my personal favourite, and

it's how my own town bike is set up. It puts the wrists into a relaxed, straight position, and the fingers fall naturally onto the brake levers. The brakes didn't have a super-positive feel on our bike, and it was easy enough to squeeze the levers to the bar. But actually on the bike, even coming close to that supplied plenty of well modulated stopping power.

On the Esprit, the narrow bars make it easy, almost natural, to drop into a narrow, elbows-in 'aero' tuck on the downhills, and this no doubt helps the bike's feeling of speed. Of course, you can also ride with the hands close together inside the bars on the 'flats', at the loss of some control, or resting your palms on the bend. It is a little annoying sometimes to have to lift a hand off to change gear: in rolling terrain I would often ride with my left hand on the side of the bars in the 'normal' position, with the right semi-permanently on the flats ready to change gear. Were it my bike I'd probably like to try a bar-end shifter.

Gear shifting was, however, very positive, and I found the range adequate, even once I'd escaped flat York to find some hills. This isn't the bike to choose for a hilly camping tour, but with just a light day-ride bag under the saddle or on one of the optional carriers, a fit rider should be able to cope with most terrain. The only real limitation is at the bottom end, and I often found myself wanting to rise out of the saddle as I ran out of gears. But this doesn't work so well: the front suspension heaves up and down and while this can be limited with practice, it can't be eliminated. A lockout, as fitted to some of the other Moulton models, would be welcome. They do say the 'hard' spring helps reduce heave, as does choosing the double chainring version for more gears. But on the bike we tried, riding with 'roadies' who will stand up to sprint or climb at the drop of a hat can leave you suffering to keep pace.

Then again, the Esprit isn't built as a racer, and in the longer run you may end up hurting less than the roadies. Where the Esprit shines is in its suspension, which not only takes the edge off the 100psi Stelvio

Separation

The Esprit is separable without tools into two halves: undo the two colour-coded cable separators, loosen the lower knurled collar, and then the knurled end on the main frame joint. After a few turns you can release the two halves and unhook the lower joint, splitting the bike into two. It's easily done, and when reassembled the tapered surfaces wedge together to form a solid joint.

The front half, with the steering and handlebars, can feel a bit unwieldy, but if you turn the stem 90 degrees and fold the bars down flat, it's much tidier. Drop the seatpost and the rear is also quite compact.

It's certainly easily car-bootable (the design objective, I believe), but it's by no means a folding bike, and in any case I'd be concerned about those small tubes in the rough-and-tumble of a public transport luggage rack. The separable Bridgestone Moulton, as reviewed in *Velo Vision* 16, is more appropriate for this sort of use, with its more robust frame and optional carry bags.



Separating the bike takes under a minute and no tools, leaving two relatively compact halves to stow.



The Shimano Capreo 9-26 cassette gives a gear range of 33 to 96". Note also the unpainted stainless steel dropouts.

Several comfortable hand positions are available, but you can't brake and change gear at the same time.



The intricate structure of the rear swingarm. All that brazing no doubt contributes to the Moulton's £2200 price.



20" tyres, but also swallows up rough surfaces with sheer aplomb.

It's not intended for the 'big hits' which something like the Tout-Terrain tourer would take in its stride, and any sympathetic rider wouldn't make it try. But it can and does absorb bumps and potholes up to an inch or so in height with remarkable composure, feeding just a gentle push into the handlebars from a sharpish impact, and feeding back almost nothing of the usual harsh vibration from coarse concrete surface or broken asphalt.

When one of our rides took us across an unsurfaced bridleway, the effectiveness of the Moulton's suspension became absolutely apparent. Swapping bikes with a rider on a 26"-wheeled unsuspended machine the difference was night and day: a harsh, tooth-rattling ride on one, and smooth, unrattled progress on the Esprit. Of course, the small wheels with hard tyres bogged down at a mere hint of mud – but for gentle, dry off-roading the Moulton

acquitted itself remarkably.

Again, that assumed careful riding at reasonably slow speed to avoid some of the bigger bumps and holes (which a 26" wheel would ride over with no harm done). But if you take that care, using a bridleway to link up quiet roads becomes much less of a chore and more of a pleasure.

CONCLUSIONS

It seems to me that the Esprit is a hedonist's bike. Yes, it rides superbly well and, with accessories, could be pressed into all sort of roles, limited perhaps only by tyre clearance. Yet as supplied, stripped down and lightweight, it's perhaps closest to its nature. As one person who rode it said 'it's like riding a finely-tuned musical instrument'. I agree, and attempting to force it into a utility cycling, load-hauling or other role (and then complaining about its practicality) misses the point.

This instrument is tuned for day-riding for pleasure, offering a fast yet comfortable ride over

any sort of terrain a road cyclist might encounter – even down to occasional unsurfaced bridleways. It's light, rigid and responsive, pared down to the essentials. A little delicate, perhaps, so not for the heavy-handed rider, but heavy-handedness never sits well with fine-tuning.

£2200 is a lot of money: in cycling terms it could buy a good (even lighter) racer or randonneur, and a capable MTB, and a very decent folding bike, with change left over. But if your practical cycling needs are already covered, and you want a bike for the sheer pleasure of riding and ownership, that's where the Moulton magic comes in.

Peter Eland

AVAILABILITY

Alex Moulton Cycles: Tel 01225 865895 or see www.alexmoulton.co.uk They have dealers in a number of countries: see website or contact them for details.