

Velo Vision Sample Article



This PDF is a sample of the material in *Velo Vision* 47, July 2014.

To find out more about this unique magazine, please visit our busy website:

www.velovision.com

where you will find a guided tour, full subject/author indices, sample articles to download and an online shop where you can subscribe on paper or as a digital edition (with free reader apps for iPhone, iPad and Android users). We're also on Facebook.

If you have any comments, problems or suggestions about the magazine in general, or this PDF in particular, please email me at

peter@velovision.com

I hope you enjoy the read!

Peter Eland
Editor and Publisher, *Velo Vision*

Technical notes

This Acrobat PDF file should display correctly on almost any computer. If you encounter problems the first thing to try is to download the latest version of Acrobat reader from the Adobe website: www.adobe.com

If that fails, please send me an email and I'll try to sort it out.

Small print

I don't much like copy protection and legalese, but a few things need saying:

You are free to print the document out for your personal use, but not for resale or for anyone else. Please do not make it available online without permission.

To protect the copyright of *Velo Vision* and of our contributors, modification of this document, and copying of the contents, may have been disabled.

Words and images remain copyright *Velo Vision* and the original contributors. Please don't reproduce anything without express permission.

Velo Vision is published by Velo Vision Ltd. Subscription details, news and updates can be found on www.velovision.com

ISSN 1475-4312

Velo Vision Magazine
York Eco Business Centre
Amy Johnson Way
York, YO30 4AG, UK
Tel/Fax +44 1904 692800
(from UK, 01904 692800)
Email peter@velovision.com
Website www.velovision.com

EDITOR AND PUBLISHER: Peter Eland
PHOTO ASSISTANT: Debz Wright
ART DIRECTOR: Brian Holt
WEB PROGRAMMER: Simon Ward
PRINTER: Stephens & George Magazines Ltd

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



COVER: The custom trike developed by Inspired Cycle Engineering for an attempt to cycle to the South Pole is tested in the disused Poldice quarry in Cornwall. *Photo: ICE*

OPPOSITE: A very different custom trike: Steve from Two Hoots Ice Cream (www.facebook.com/TwoHootsIceCream) shows us his solar-powered vending trike: the panels on the canopy power the freezer via a battery on the rear rack. *Photo: Peter Eland*

- 4 News**
ICE trike takes South Pole record, Alتنا's trikes, a Pino takes on the Ironman, a folding cycle caravan, Arcus velomobile launches and more.
- 10 SPEZI**
A full report from the German Special Bikes Show, with new products, ingenious creations and desirable developments aplenty.
- 18 Review: Bicipace**
We review this front-loading, stylish cargo bike from Italy. Does it also impress in rainy Britain?
- 22 Review: Suspension cargo bikes**
We visit Practical Cycles to try three cargo bikes with suspension: the Maderna Truck, the Riese & Muller Load, and the Bluelabel Transporter.
- 26 Review: Circe Cycles Atlas trailer**
An ingenious folding cargo trailer which stores away into a super-small carry bag.
- 28 Review: CompactDynamo**
We review this incredibly tiny rim-running dynamo. How does it handle winter weather?
- 30 Short reviews:**
 - 30** Hubs: readers review the Sturmey S-RC3 and the SRAM G8
 - 32** Books: *Bicycle Design – an Illustrated History*, *Diamonds weren't forever*, *Ordinary*, *Two wheels – Chains, Sprockets and Design*, *Battle of the Bikes*, *Bad Doctor* and *Pedal It!*. Plus: Cyclemiles mugs.
- 35** Reverse Gear: recumbent-specific clothing from Canada.
- 36** The Bridge Street saddlebag: a lightweight alternative?
- 37** P-works luggage labels: identify your panniers.
- 38 Bespoked 2014**
All the news from the hand-made bicycle show, including a new recumbent bike from Windcheetah!
- 42 Trikes: the basics**
A lifetime's experience of three wheelers from Tom Culver.
- 44 Readers' bikes**
 - 44** Making a moor trike: electrifying an ICE.
 - 46** Triking Turkey: a reader ventures along the Mediterranean coast by recumbent trike.
 - 48** Getting on with the GNAT: a reader modifies this rare folding trike.
- 50 Dropping in on dealers**
We visit touring bike specialists Popiel Cycles, and cargo bike centre London Green Cycles.
- 54 Letters**
A bumper crop of your letters, including a mystery bike to identify, watercycle building advice and much more.
- 55 Subscribe to Velo Vision**
How to subscribe, back issues and details of our distributors worldwide.
- 56 Advertisements**
The first place to look for specialist products and services. Please support these advertisers, who support this magazine!

Cargo centric

We're rather heavy on cargo bikes this issue, with no fewer than four tested to varying extents, plus the Atlas trailer and a visit to a London specialist dealer. I'm not sure I should be apologising, though. Cargo bikes are a vital part of the 'velo vision': goods and people need to be transported in any cycle-friendly community. And even if you're not fortunate enough to live in such a place, cargo bikes are a low cost, fitness-enhancing, non-polluting way to go about your business.

The pendulum will swing in a more laid back direction for Issue 48, though. Already lined up are reviews of the AZUB TriCON recumbent trike and the Windcheetah SL bike, and we're also hoping to do reports on the Greenspeed Magnum trike, Nazca Quetzal tandem and Veloschmitt velomobile.

And I hope readers will continue to write in too: your contributions are always very much appreciated, be it on cargo bikes, trikes, recumbents or anything velovisionary!

Peter Eland

THE CAPABLE CYCLE

We ride the Bicicapace, a cargo bike from Italy whose name implies both 'capacious' and 'capable'. Does it live up to its billing?



Photo: Ali Matthews



BACKGROUND

My first memory of meeting Davide Maggi, the founder of Bicipace, was at the SPEZI show maybe ten years ago: he'd just been bravely test-riding a prone (lying on your front) bicycle and we got chatting. He's been at the SPEZI every year since, I think, with an ever growing band of Italian cycle enthusiasts. But for the last few years he's been there as an exhibitor rather than just as a visitor, having realised that nobody was making a cargo bike with the style and practicality which he believed was possible. So with his designer colleague Francesco Lombardi he created the Bicipace, and set up production locally near Milan, Italy.

Two years after launch, the brand now has dealers across Europe (and one in New Zealand!). Our test bike was from the latest production batch, and I picked it up after it had been on display at the SPEZI. It has since been used around York, and also provided magazine transport for a number of events including the Big Green Week in hilly Bristol.

There is just the single basic model of the Bicipace, but with two options for the front: the standard option is the PVC cargo box as fitted on our test bike (70 litres, 30 kg capacity). There's also a 'flat bed' tubular metal rack ideal for carrying large boxes or to mount your own cargo container (50 kg capacity), and an optional trailer with a lockable aluminium box. All come in a variety of colours, or can be custom-painted for advertising (or whimsy!) purposes.

There are two levels of gearing on offer, too: Shimano Nexus three or seven speed hubs, both with roller brakes. Electric assist is also available in the form of the Sunstar crank drive system. Accessories include a rear rack, frame lock, and a rather stylish laptop shoulder bag made from the same material as the front box.

Our bike had the basic three-speed specification, and would cost £1036 via London Green Cycles, currently Bicipace's only UK dealer. The 7-speed version starts at £1234.

FIRST IMPRESSIONS

The Bicipace's TIG-welded steel frame swoops up elegantly, creating a fairly low step-through to make getting on and off easier. There's just a single frame size but it'll fit a good range of rider sizes. Smaller riders, though, might find the handlebars quite tall. There's an adjustable stem, but it doesn't give a huge range of movement and besides, the bars do have to be quite high to clear the front box.

This box attaches to the frame via four very solid anchor points, set well spaced on stub tubes welded on either side of the long headtube. Plastic spacers go between the tubes and the plywood backplate of the box, or the metal flatbed frame if that is fitted, for a rattle-free ride. It would be very easy to attach any custom-made front end if that were needed. I'll come back to the box in a moment.

Below the box there's a rigid steel fork holding the 20" front wheel, which is fitted with a 20" x 2.25" Schwalbe 'Crazy Bob' tyre for plenty



MAIN PHOTO OPPOSITE: It'll even carry a folded Brompton!

ABOVE: It's great to have hub dynamo powered LED lighting as standard, but the front light may not be very visible from all angles.

of capacity and cushioning. The rim painted to match the box is a nice touch. The wheel uses a Shimano hub dynamo, driving an LED front light fitted to the left-hand fork blade (and the rear LED fitted to the back mudguard, too). The placement of the front light below the box and to one side of the fat-tyred wheel is perhaps not ideal when it comes to viewing angles, but it's hard to think of a better alternative. Perhaps off the front of a beefed-up front mudguard?

RIGHT: A three-speed Nexus hub is standard.

FAR RIGHT: With stiffeners removed the box folds into a platform.

BELOW FAR RIGHT: The optional shoulder bag fits into the box and secures via the two Velcro strips.



I thought the front mudguard a little fragile; it's fine riding along, but without stays to support the lower section, it's relatively easily bent out of shape if you catch it while parking the bike, for example. The rear mudguard too could perhaps use some extra support. Both guards are aluminium, though, so a bit more rigid than you might expect and easily bent back if need be.

The rear of the bike is fairly conventional, although with extra clearance for the huge 26" x 2.25" rear tyre. The hub is the reliable Shimano three-speed, complete with outboard 'click box' to guide the cable in. The chain stays on this bike are more than long enough to ensure that even the biggest-footed rider won't risk hitting it with a heel.

Shimano roller brakes are fitted to both front and rear hubs, a good all-weather, low maintenance choice but not a brake known for its sheer stopping power. This made it slightly surprising not to see disk brake mounts fitted to fork and frame ready for possible upgrading – on the front especially, a disk would be a natural upgrade.

On a similar theme, it might have been good to see mounting eyelets for a rack on the rear dropouts. The optional Bicicapace rack fits onto the axle ends – not a problem, but adding to complication of wheel removal, and it would be nice for owners to have the option of fitting a 'normal' one instead. My favourite heavy duty rack is the Tubus Cargo, but there are child seats which come with specific racks, too. The mudguard holes could do double

duty, I suppose, but an extra set would be better.

The 'Ursus' twin leg centre stand is rated for 55 kg, and it spreads to a good 44 cm wide when deployed. It's set far enough back that it's always the rear wheel which lifts, even unloaded, so adding cargo doesn't move the bike at all. In fact, it makes it more stable, by loading up the front wheel. The friction against the ground of the large contact patch (from the low-pressure, fat tyre) ensures the steering won't move.

So back to the front box, perhaps the key element in this bike's design. It's formed from heavy PVC fabric, stitched together to form pockets into which plywood sheets can be slipped, giving it rigidity. The plywood backplate and base are pretty much fixed in, but the sides and front are easily removed via the top edges of the box, which are simply closed with Velcro. There's no plywood needed in the lid, which snugs down securely around all three sides to keep the load completely dry.

The load area at the base is around 40 cm wide and 30 cm long, rising to 44 cm long at the top, and it's around 45 cm deep, making for a capacity

of around 70 litres. There are also two pockets on the back of the bag, facing the rider, for smaller items. Payload capacity is 30 kg.

So far so good – a useful load area! But it's also versatile. First you can tuck the lid inside the box for an open 'pickup' type arrangement, perfect for dry weather and easy access. Or, with plywood stiffeners removed the box can form an open-fronted shelf for loads too big to fit inside. The PVC can also all be folded up flat against the backplate if you wish, or even removed entirely (which does take a few minutes more).

Finally, the optional shoulder bag. This is constructed from the same heavyweight PVC as the bike box, and it's reassuringly rugged. You could wear it courier-bag style as you ride, but unless the cargo box is full it's better to just pop it inside. Wide Velcro strips on its back match those on the box backplate, so it's held securely yet resiliently in place, ideal for safe laptop carrying.

Within reason weight isn't critical for cargo bikes, but bike weight as tested was 27.8 kg. The shoulder bag weighs around 800 g.

THE RIDE

Steady and stable sums up the Bicicapace's ride. It's a bike with a longish wheelbase, wide bars and wide tyres, and the combination works to give calm, predictable handling even under load. Like most cargo bikes it's actually a little better with some cargo on board to balance the bike and really 'plant' the steering.

But it rides fine unladen, too. The riding position is upright, handy in traffic and easy on the wrists. You have a good view over the cargo box: with its width and bulk ahead of me I did feel extra-confident in traffic. This is a bike with street presence: not easy to miss, even in a rear-view mirror.

The handling, though, is only part of the Bicicapace experience. It's the sheer practicality of it as transport which I should try to convey.

The bike's first outing in my care was a simple shopping trip, so I tucked the box lid inside and threw a lock and some reusable bags in after it. At the shops, parking was easy – it was a relatively low risk area so I just parked it up on the stand and locked through the rear wheel to the frame. Then on returning, lock and two full shopping bags were simply placed in the box and I was off. Much less hassle than messing with (and carrying around) panniers...

Shortly after, and in torrential rain, I took the Bicicapace to the new cycle track on York's university campus where the British Human Power Club were holding a race. Two cameras, a pile of magazines and some spare clothes were in the box, and all remained bone dry after several hours out in heavy rain. It was even possible to open the lid enough to extract things without letting the rain in.

More errand-running around York followed, but the next notable trip was to Bristol for an electric bike event as part of the city's Green Week. The plan was to park up well outside the busy centre and to cycle in, and the Bicicapace seemed perfect for carrying magazines to the show. I'd be using (at least!) the full 30 kg capacity of the bike, and it would also be a good opportunity to try it out on hills: Bristol has plenty.

With several hundred magazines on board the bike was harder to push than to ride. The weight is fairly high up: great for loading and unloading, as you don't have to lean down, but it means you need a certain strength to push the loaded bike back upright if you let it tilt as you're manoeuvring it. Get on board, though, and your natural cycling balance kicks in and the high weight becomes a bonus, a 'slow pendulum' giving you plenty of time to react as the bike moves under you. The steering is slowed too, and on slow sharp corners you can really feel all that weight moving sideways with the front wheel. But it's all easy to cope with and actually what you expect on a cargo bike. Just enjoy riding with a different, more deliberate technique.

After a few hundred yards of back streets I was on to Whiteladies Road, descending to College Green via Park Street, the location of the event's electric bike hill-climb. Bristolians will know that these are significant descents, and speed built up. As it did I would occasionally just tweak the bars to see if I could provoke any wobble. Not a thing, even at probably the best part of 30 mph – being a fairly heavy rider probably helped, though. Don't try this at home...

At that point it seemed wise to try the brakes, and with a full squeeze of the levers they did pull the speed



back down – with some reluctance perhaps, but they did it. Still at a fair speed I hit the odd pothole as I completed the descent, and the bike handled these with little drama. Once all that weight is going in a straight line it would take more than a wee bump to shift the front wheel off course.

At the event I simply locked the bike to the fencing near the entrance, took my camera and left the bundles of magazines in the box, with lid closed, until they were needed. Nothing was disturbed the entire day.

The return trip, thankfully with far fewer magazines on board, did involve me pushing the bike up some of Park Street: the gears just weren't sufficient for the steepest sections. But I cycled the subsequent more gentle ascents quite happily. Mission accomplished!

Many cargo bikes could accommodate a waterproof box and complete similar transport tasks, but the Bicipace did them oh so elegantly. With its waterproof carrying space neatly integrated, and in a format no longer than a normal bike, it's a superbly practical machine. The colour co-ordination and style does no harm either to the feel-good factor when riding it.

CONCLUSIONS

I really liked the Bicipace: it's wonderfully practical, stylish and a relaxed ride even loaded up. It's also low maintenance and ready for year round use. It may come from sun-

drenched Italy, but that waterproof front box is ideal for the rainy UK.

What it is not is a nippy, aggressive courier bike, and while you can push it along if you must, it doesn't really suit that sort of riding: witness the limited gearing and roller brakes. It's a more continental style of cargo bike, perhaps, on which you travel at a civilised pace in comfort and style.

Some may quibble at getting just a three speed hub on a £1000 bike, but it is sufficient for a flattish city, and you're getting a very complete, industrial quality cargo bike for your investment. And I'm struggling to think of any direct competitors. There are a number of twin 20" wheel cargo bikes, including the rather lighter and cheaper Biba which we reviewed in Issue 42, or the Kemper Lorri (similar in price to the Bicipace, from Practical Cycles in the UK) or the Donki bike (a mere £499, via Really Useful Bikes). All of these have cargo racks front and rear to which you could fit a box, but none has comparable waterproof, easily accessible capacity off the shelf and I suspect they won't have the comfort which comes from the Bicipace's big rear wheel, either. Perhaps something like the Kemper Filibus comes closer, but it's a noticeably longer machine. That matters: bike parking for city-dwellers is often cramped.

Overall I ended up feeling very positive about the Bicipace. It's a bike format which I found very city-friendly and well suited to carrying the sort of loads, of moderate size and bulk but sensitive to being rained on, which were my most frequent cargo. You can't beat the convenience of just chucking stuff in that big front bag, swinging the lid shut and riding off, rain or shine. It's easy to park, easy to load and easy to ride. I'll miss it when I've sent the test bike back!

Peter Eland

AVAILABILITY

Manufacturer: Bicipace, Italy.
Tel +39 329 21 65 950 or see www.bicipace.com
UK dealer: London Green Cycles.
Tel 020 7935 6934 or see www.londongreencycles.co.uk

