

BIKE #04 EXCEL

FRAME TITANIUM  
GROUPSET DURA-ACE

WORDS: SHANE LOVEJOY



As a bowerbird I'd be a sad, lonely male. I've never been attracted to bling or shiny metal objects. That was until the unveiling (or, in our case, the un-boxing) of the Enigma Excel.

This bike arrived early and literally hung from a hook above me for several weeks, taunting me as we worked frantically to finish the previous issue. On more than one occasion I succumbed to my reptilian brain and found myself staring wistfully at the shining, polished titanium in some kind of voodoo trance. Each day as I sat down at my desk I'd find myself captivated by the light bouncing off its gleaming surface.

Yes, it's shiny but the Enigma has an elegance which surpasses the finish of the frame.

The subtle details in the tube shapes hint that this is not just another high priced titanium rig with pretty welding. When a bike hangs from our office's vertical bike rack it gives one the perfect vantage point to notice details of a frame which could otherwise go unnoticed. The rear triangle of the Enigma is a thing of beauty. Slight shaping and tapering of the seatstays and an understated sculpting of the chainstays make for a rear end with a much more refined appearance than one of just straight-gauge tubing.

With this frame, modern ideas meld into traditional aesthetics in such a way as to surreptitiously hide at first glance what has really

been achieved. The contemporary specifics such as the integrated headset don't immediately jump out. This is a frame that will please the tech-heads but shouldn't alienate traditionalists. It's light, but not to the extreme of contemporary carbon-fibre frames, and it's elegant without being retro.

This is the flagship of the British company's road bike range and it's easy to see why, although there are quite a few other titanium models and a very tidy looking steel option with the Elite. The frame's designer has allowed nothing to interfere with his vision for the Excel, so much so that the price mark-up on this frame had to be reduced to allow it a place in the market.

'Exogen' is Enigma's name for the process used to create the interesting shapes used in the rear stays and while traditionalists may tell you – in a condescending voice – that “nothing is stronger than a round tube”, there are applications where stiffness can be enhanced by manipulating tube shapes to better cope with directional forces in high stress areas. Carbon frame manufacturers have experimented with sculpting and moulding the rear of frames to get specific results for some time now. With recent advances in metallurgical manipulation why not have the best of both worlds in the titanium realm?

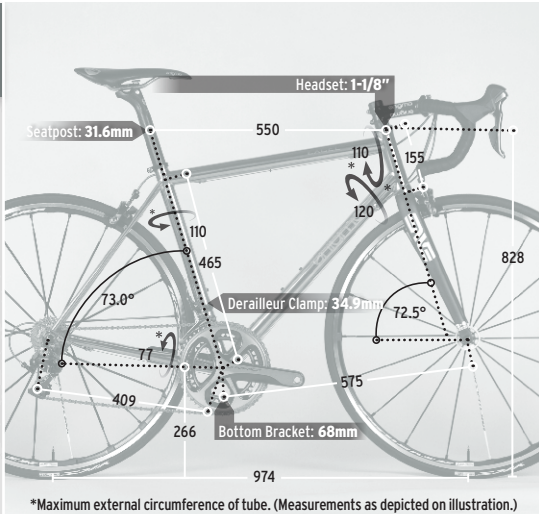
The Excel provided strong numbers on our flex test jig so, as far as we can tell, nothing has

been lost, with the Excel posting slightly stiffer numbers than the titanium Firefly (*RIDE* #61).

Enigma's Mark Reilly has been creating bike frames for 26 years. He is one of the most respected builders in the UK. When asked what the goal was in designing the rear stays, a one-word answer was all that was tendered: “stiffness”. By changing the form, the strength of the rear stays could be enhanced while still retaining the excellent ride qualities inherent in titanium.

The 6/4 double-buttet titanium used for the Excel is seamless and this is one area where I could glean almost no further information from Mark. Yes, it's 6/4, strong and seamless; and no, he insisted, “I won't tell you how they do it.” Fair enough too, as this point of difference sets the bike apart from the herd. This is one trade secret that will have to remain just that.

The mirror-polished finish on the bike in this test is by far the most expensive choice but there are three other options and they can relieve wallet stress. The default is hand-brushed but frames can be bead-blasted, anodised, painted or a combination. For the extra dough though you can have fun playing with minds. I had a self-confessed titanium tragic ask: “Is that stainless?” After stating that it's 6/4 Ti, you can enjoy five minutes of watching said tragic contort into all sorts of positions trying to find the seams.



\*Maximum external circumference of tube. (Measurements as depicted on illustration.)

For me though, while the finish is special – and, as a side note, relatively easy to clean – the frame design is the feature. Any finish would do. This could truly be the last road bike I would need to buy. At 1.3kg for the 55cm frameset and under seven kilos for this bike, weight definitely isn't an issue. With a glut of light components available, the distributors could have gone crazy with a ridiculous spec that would look even better on paper. But they held back and I'm glad they did. This build, while still light, is a sensible and practical one. There would be no nervous thoughts of component weight limits as I hurtled down my favourite descents, allowing me to enjoy the frame all the more.

From the first pedal stroke I could tell the time spent on the Enigma was going to be pleasurable. The Excel is all I had hoped it would be. It has an alert, agile feeling through the bars and an eager spring in the tail. I've ridden bikes that do everything right: handling, stiffness, weight... but the Enigma has something else – something special. There is no other bike that I've felt so instantly in tune with.

At this point I started to get a feeling of dread that this review may sound like an advertisement. I started to look for some bad points. Nothing immediately came to mind. The Mavic Yksion Pro tyres spec'd are 23mm which don't sit well with the office preoccupation with wide tyres. Although 25s could fit the frame there was no need to change as the comparatively slender Mavics performed admirably. If time had allowed I'd have extended my first ride a few more hours. As it happened it was a good thing I didn't... alas the Enigma saddle was *not* for me and needed to be swapped. Ah, crisis averted. Bad point: I don't like the saddle.

The second ride made me smile all day. The Excel's low weight and eagerness to climb had me picking routes I would have usually avoided. My rhythm while climbing was made easier by the return from the bottom bracket. This gave the sensation of the frame not just responding to my efforts but working with me. The Excel also has the right balance of feel and damping. I could notice the road texture, every bit in fact, but it was muted and allowed sensation without vibration. Larger road imperfections were handled with the same poise. Where stiffness was once my main desire, these days finding the sweet spot between feel and comfort is the holy grail in frame design. Mark has, in my opinion, found it. >>



The shift quality of new Dura-Ace mechanical nails its design brief: mimic the speed and feel of electronic. Combined with clean external cable routing, it's very difficult to better.



Don't go looking for the seams: they're not there. Enigma is one of the few manufacturers – if not the only – producing frames with seamless 6/4 double-buttet titanium.



As unapologetic fans of fat road tyres, we expected less from skinny 23C Mavics, but were pleasantly surprised by the grip and comfort provided by the front/rear-specific treads.



The smaller diameter bottom bracket cups of new Dura-Ace threaded bottom brackets use smaller diameter bearings (and more of them) than the previous models. The theory is that smaller bearings spin faster than larger bearings, in addition to being lighter.



It's rare to see such heavily formed tubing in a titanium frame. These shapes used to require serious crimping or the cutting and welding of sheet titanium. Recent advances in fluid forming and other manufacturing techniques have allowed titanium to become even more desirable.



Specifying an Enve fork seems to be *de rigueur* for any self-respecting frame supplier these days, which is totally fine with us. It's light, strong and steers beautifully.



This saddle didn't win many friends, but the rest of the Enigma components were excellent without stealing any fanfare from the real star of the show... the Excel frame.



Classic from a distance, modern close up. The shaping of the rear triangle delivers a lovely mix of the stiffness required for quick accelerations with titanium's signature road feel.

PHOTOS: Greg Claiborn





Mavic's Ksyrium SLS wheelset felt like an ideal match for the Enigma. These are among the lightest alloy wheels available, but feel rock solid and brake like all wheels should.



The light action of the new Dura-Ace front shifting system needs to be felt to be believed, but set-up has gone from simple to quite tricky. Patience and precision is required.



It might not win a side by side comparison against a certain titanium master from Geelong, but the weld quality on display in the Enigma is certainly of a very high standard.



Hexagonal half cap? That's what we'll call this tidy drop-out design. Light and strong with plenty of surface area for welds. Pairing this frame with a quietly excellent parts kit results in an excellent all-round machine, or what we used to call a road bike.



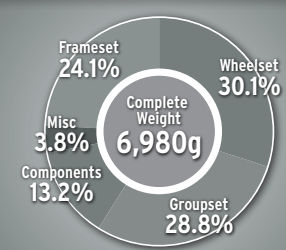
The Excel represents a master class in balance. Stiffness together with comfort; competitively light yet unquestionably durable; classic and modern; outrageous finish in an understated aesthetic; fun to look at and even more fun to ride. Yes, we like it.



THE SUM OF ALL PARTS

Frame (bare, no fittings)	1,313g
Fork (with race)	336g
Headset (integrated)	74g
Stem	141g
Bar (no tape)	282g
Levers (pair)	364g
Wheelset (front and rear)	1,429g
Skewers	126g
Crankset	638g
Bottom bracket	65g
Front derailleur	77g
Rear derailleur	160g
Brakes (pair)	296g
Seatpost	203g
Saddle	220g
Cassette	173g
Chain	236g
Tyres/sealing (389g/159g)	548g
Frame parts & sundry	299g

WHERE IS THE WEIGHT?



FRAME JIG DATA (40kg on crank)

Bottom bracket	0.31mm
Head tube	0.23mm
Seat tube	0.35mm

WHEEL JIG DATA (20kg on rim)

Front	5.98mm
Rear (drive)	5.85mm
Rear (non-drive)	5.78mm

» After a few climbs and a short rest at a picturesque spot it was time to test the Excel on a fast descent. Approaching with caution, and going a bit lightly for the first couple of twists to test tyre grip, I let go and threw caution to the wind. Stability and predictability are the qualities we all want; the Enigma is impeccable in this regard. Leaning in for a particularly tight left hander saw me having to adjust my line quite significantly to avoid a longneck turtle on a suicidal jaunt across the road. I'm happy to say the turtle and myself are alive and well. I'd like to think it was my lightning fast reactions and bike handling skills that spared the collision but I'd wager the bike helped a bit too.

As I rode on I got another dreadful thought. I'd have to give this bike back. Not to worry, every time I've ridden a test bike I like I hop back on my old Merckx... and I'm content. I go for a nice long ride and forget about new temptations. I told myself: just enjoy the Enigma while you've got it and that will be the end of it.

Over several weeks I rode the Enigma when the opportunity for a *proper* ride was presented. Every ride was better than the last, the Enigma was starting to feel like *my* bike. I really couldn't think of any bike I'd rather be on, I was getting attached. But I rode on safe in the knowledge that my trusty old Merckx would pull me back to reality. The day came and back to the office this test bike went. A few days later, along came a courier – and it was gone forever. Time to saddle up the Merckx for some rehabilitation. But, alas, the magic has gone, my head has been turned and there's no going back.

Goodbye Eddy old friend, we had some great rides over the years but it's time to move on. ■ SL  
(FOR PRICE, WEIGHT AND SPECIFICATION DETAILS OF THE ENIGMA EXCEL, SEE P.207.)



Decals? Nah, not for this titanium frame. Instead, every graphic element has been etched. Enigma prides itself on the use of materials and finishing.

The polished option we had for review is the most expensive but there is a vast range that has colours made famous in the auto industry including Lotus racing green, Aston TDF blue, VW orange, Ferrari pearl... it's all part of the Paintworks scheme and customers can select their preference when finishing their order.

# MULTIPLE CHOICE

Like you, cycling is our passion. And to fuel that passion, we believe in offering you, our customers, the biggest choice of the worlds best brands

Whether it's a local coffee shop ride, a ride in the hills or your favourite race, we can help you pick the equipment that is right for you.

## I'm looking for a shop which has

- ☐ A) Standard bike stock
- ☐ B) Pro tour replica bikes
- ☐ C) Custom built bikes
- ☒ D) All of the above

## I'm looking for a bike shop

- ☒ A) Helps me select the bike which is best for me
- ☐ B) Selects the bike which is best for the bike shop

## I would like a bike shop

- ☐ A) With one brand choice
- ☐ B) With limited brand choices
- ☒ C) With lots of brand choices

## I want a bike shop which

- ☐ A) Caters for road riders
- ☐ B) Caters for mountain bike riders
- ☐ C) Caters for my family
- ☐ D) Caters for my children
- ☒ E) All of the above

## I wish my local bike shop would

- ☐ A) Tell me what I need
- ☒ B) Listen to my needs



To find your nearest store visit [bikeforce.com.au](http://bikeforce.com.au)



Not all brands available at all stores. Pictures for illustration purposes. Apollo, Malvern Star & Merida available at all stores. Basso available at Bundall, Cannington, Docklands, Essendon, Joondalup, Morley, Subiaco & Richmond. BH available at Bundall. Bianchi available at Richmond, BMC available at Bundall, Docklands & Essendon. Colnago available at Cannington, Docklands, Essendon, Joondalup & Subiaco. Guerciotti available at Bundall, Cannington, Docklands, Ellenbrook, Essendon, Joondalup, Morley, Subiaco & Richmond. Lapierre available at Balcatta, Bundall, Richmond & Southern River. Pinarello available at Bundall, Cannington, Docklands & Essendon. Ridley available at Bundall, Docklands, Joondalup & Morley. TIME available at Subiaco. TREK Bicycles only available in WA.