

Enigma machines

Enigma is a young UK company building off-the-peg and bespoke bicycles in titanium and steel.

Martin Thomas paid a visit

A confession first: I own an Enigma – an early Etape – and it helped change my cycling horizons. I went from a weekend mountain biker with touring ambitions to what Jim Walker, founder and head of Enigma bikes, would call a born again road cyclist. In training for my first Land's End to John O'Groats, I'm out on my titanium light tourer three times a week.

And I'm not alone. There's been a resurgence in cycling for fitness among middle-aged men like me. Sportive and charity rides have never been more popular and companies like Enigma have not been slow to capitalise. In these tough economic times this is one niche that shows no signs of shrinking.

The Omega connection

Enigma first appeared in September 2006, the brainchild of Jim Walker and Mark Reilly. Both were emerging from previous businesses, Jim from a 25-year stint with his eponymous cycle component distribution business, and Mark after 12 years at Omega, his own frame and bike business.

It was an unhappy time for both men. Jim was bought out of his business and, while he's reluctant to go into details, it's clear the way it ended left him with some scars. Mark's situation was worse. Although he'd established himself as an excellent frame builder, Omega had been struggling for some time before it finally closed, leaving unhappy customers. Jim undertook to sort out the financial mess associated with unfulfilled Omega orders – a decision that cost him a lot of money.

Enigma rose phoenix-like and both Jim and Mark must have been hoping for a smooth ride with their new venture after the difficult times behind them. In fact, says Jim, they've only recently emerged from a series of initial problems: 'It's really only in the last few months that we've finally turned a corner. Finally, three and half years on, our destiny feels like it's in our own hands.'

To begin with, the biggest issue they struggled with was supply. Their frames were made in Taiwan to Mark's exacting specifications, but building bespoke frames took the factory much longer than stock sizes, leading to a backlog and delays of several months for customers who had ordered

(Top) Enigma is best known for its titanium sportive bikes, but it makes others – in steel too

(Below) Precise and elegant welding is what handbuilt-bike customers want

bespoke frames – me included.

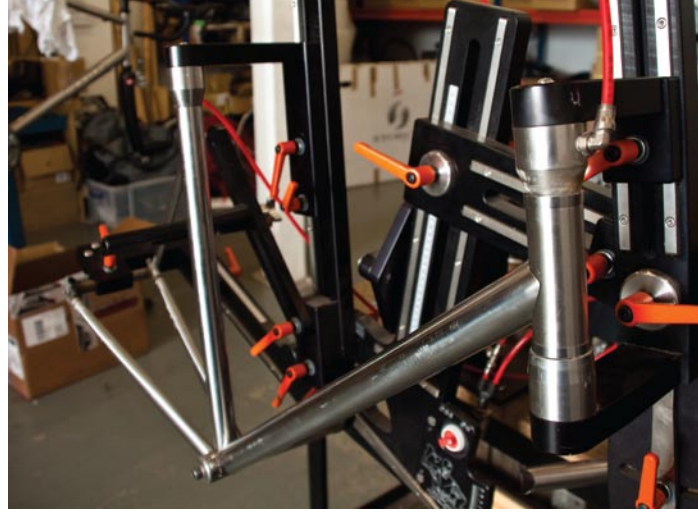
'It was our own fault,' says Mark. 'We were suggesting bespoke frame sizes for people who were only a centimetre or two off stock sizes. But we've learned that lesson now and we've got to the point where we're actually faster than most people at delivering bespoke frames. It takes up to 12 weeks for a titanium frame and around eight for steel.'

Titanium tooling

The other big change made by Jim and Mark was to move production from Taiwan to their own workshop. After two-and-a-half years in a converted barn in the quaint Sussex village of Hurstmonceaux, in March 2009 Enigma moved to a less quaint but much more suitable light industrial unit near Eastbourne, where they had the room to set up full production facilities.

The move to Eastbourne and the fitting out of the new workshop was managed by Jim's wife Christine, who also runs the company's books. Enigma is a family business: Jim's son Joe also works there and has trained himself to become a welder who's as good as anyone in the industry, according to his proud dad. The Enigma team is completed by Jon Aston, who joined the company in late 2009 to learn frame building.

A tour of the new workshop reveals a mix of old and new. Dominating the room is a colossal Bridgeport milling machine dating back to the early '80s. With its rudimentary tortoise and hare speed settings it hardly looks like the last word in precision engineering, but that's exactly what it is. A massive jig made of dully gleaming solid steel sits crudely near a space-age TIG-welding jig spouting orange pipes that squirt argon gas inside the tubing to complete the millimetre-perfect joints. Around the



Photography by Martin Thomas

“Sportive rides have never been so popular and firms like Enigma have not been slow to capitalise”

walls are hung gorgeous titanium frames of various sizes and types – some ready to build into bikes, others awaiting completion or repair.

It’s here in the workshop that Mark’s passion really becomes apparent. People who spend thousands of pounds on a bicycle demand perfection, and a relentless desire to achieve that perfection is what makes Mark the consummate frame builder he is. He picks up a piece of featherweight titanium tubing to demonstrate a test weld of such precision and elegance it’s impossible not to be impressed.

E is for everything

It was titanium bikes that made Enigma’s name but now half of their revenue comes from steel bikes, all made from Italian Columbus tubing. One model that’s been causing a stir is the Extensor, a racing bike made from Columbus XCR stainless steel tubing. Mark built

(Main photo) Mark Reilly, formerly of Omega, is Enigma’s master builder

(Top right) The workshop was in Taiwan but is now in Eastbourne

a prototype after being introduced to the new tubing by Columbus’ technical director and was so impressed with the ride that he requested – and got – XCR tubing exclusively in the UK for a year.

There are mountain bikes, single-speeds and even a commuter in the range, but the backbone is still titanium sportive bikes, all named – Lotus-style – with words beginning with E. They are:

- Eclipse – the lowest cost Ti Enigma, with plain gauge tubing and stock sizes only.
- Etape – capable of anything from racing to light touring, and the most popular model, accounting for about a quarter of all Enigas.
- Echo – the same geometry as the Eclipse but customisable, and with curved seat stays and double-butted tubing.
- Effusion – the same double-butted tube set and geometry as the Echo but with carbon seat stays.
- Esprit – a version of the Echo on traditional lines, including a level top tube and non-integrated headset.
- Eulogy – a full-blown race bike that resulted from a request from Tour de France stage winner Sean Yates to Mark for the stiffest frame he could make.

Now that Jim and Mark have turned their corner and the bikes continue to attract praise – and sales – from all quarters, the future’s looking bright for Enigma, which is good news for the traditional art of frame-building in Britain.

‘Enigma are classically beautiful British bikes,’ says Jim, ‘and that’s a source of great pride to me. The fact that they’re made in this country is very important. I’ve seen the British bike industry collapse over the years and I wanted to do everything in my power to keep it alive and help it flourish.

‘The future for Enigma is all about consolidating the success we’ve built up. We’re determined to impart Mark’s skills to as many people as we can to help ensure that the frame-builder’s art stays alive and well in this country.’

The Enigma website is: www.enigmbikes.com.