

House of **Orange**

Orange mountain bikes have won world championships and often get plaudits from the press. **Jon Sparks** visited the factory

ow do a champion windsurfer and A Clockwork Orange lead you to Britain's leading maker of mountain bikes? It may sound like a QI question, but it's a logical progression.

Back in the 1980s Orange founder Lester Noble was a sailmaker and windsurfer (European champion in 1982). And what do windsurfers do without wind? In Lester's case, ride a bike. Mountain biking was in its infancy and windsurfing fitness made Lester a handy competitive rider. It wasn't long before he was designing bikes too, originally under the Tushingham brand.

Those bikes were made in Taiwan, which is ironic because they were the forebears of what is now one of the largest bike manufacturers left in the UK. Other 'British' bikes may be developed and designed here but they are built overseas, usually in the Far East. Most of Orange's hardtail frames are too, to be fair. The full-suspension bikes, however, are built in Halifax and the Union Jack in the head tube badge is there by right.

A hundred bikes a week may not be massive on the world stage, but there are precious few firms making bikes in those sorts of numbers in the UK today. There are Pashley and Brompton, of course, but no volume road bike makers at all. And in the mountain bike arena there is only Orange.

Steve Peat says...

Orange as such began when Lester linked up with Steve Wade, whose family owned a sheet-metal works in Halifax. The original, even iconic, Clockwork Orange appeared in 1988 and the rest is pretty much history. More than 20 years on, Lester and Steve still own the business. Today Lester concentrates mostly on the marketing side while Steve takes the lead on design, working mostly from bases in Spain and France, where he stacks in the miles.

'He rides more than anyone I know,' is Lester's assessment. 'I think he would do anyway, but it all feeds the design process.'

While Steve punishes the prototypes on Continental trails, there's plenty of feedback from the rest of

the team too. In fact it seems as if everyone rides, rides regularly and usually rides hard. Vaughan Evans, for example, is a highly competitive downhiller when he's not running the paintshop – and he regularly commutes on his big rig.

In the early 'noughties' Orange sponsored World Cup overall winners Greg Minnaar and Steve Peat. Lester recounts with a grin the story of Peaty's first ride on a new Orange steed.

'He came back and we asked him what he thought, and he said "Can you make it bigger?" Then he thought about it a bit more and said, "Can you make it lighter?" That's quality feedback...'

Function v hydroforming

The story of an Orange full-suspension model begins at the sheet-metal works in Halifax. This is now run by Steve Wade's nephew Ashley Ball who, naturally, also rides the bikes. Aircraft grade 6061 aluminium sheet is first cut into (Above) Welder Ben prepares the front triangle for a 224 Evo downhill bike

(Below) Orange bikes wear their origins on their sleeves, or rather their head





complex shapes and then folded in a scary-looking press. Bike frames account for about a third of total production, spreading the investment in machinery.

Ashley (clearly another who's driven by passion as well as profit) is keen to explain why this process gives a stronger result than the now prevalent technique of hydroforming.

'Hydroforming makes pretty shapes, but it stretches the metal; if you're not very careful it ends up thinnest just where you most need the strength.'

The sometimes boxy sections and visible welds of an Orange may not make for the prettiest bikes, but as Ashley is keen to point out the real test of a bike is not how it looks but how it rides, and on that count Orange are confident their bikes are as good as any and better than most.

The folded sections are married up with pre-formed tubes and welded by hand. During the process the frame sections are heat-treated not once but twice, raised almost to melting point, which means that they effectively become a single unit.

From here the sections are shipped all of a couple of miles to Orange HQ, an anonymous modern building on a small industrial estate in one of the cramped valleys that spider out around Halifax. Here they are painted, wheels are built and finally the bikes are assembled, often to custom specifications (ordering is easy through dealers or the Orange website – www.orangebikes.co.uk).

I take the factory tour with Michael Bonney, another

Aluminium sheet is first cut into complex shapes and then folded in a scary-looking press

mainstay of the company. I ask him what his job title is and he shrugs. 'We don't really have job titles here.' Reading between the lines I get the feeling 'Chief Executive' wouldn't be too far from the truth, but I also get a strong sense that everyone mucks in together and does whatever needs doing.

Simpler, effective suspension

I ask Michael about the policy on sourcing components. Like most things around here, it's simple: 'If we can buy British, we will.' Hubs, disc brakes and headsets mostly come from Hope Technology, not far away in Lancashire (and recently featured in Cycle). Of course, that choice doesn't always exist and so gears, suspension forks and rear shocks have to be imported.

As resolutely British as they are, it's hardly surprising that Orange draw most of their sales from the domestic market, with less than 10% going for export. Even so, in such a competitive and globalised market place, that export record is no mean achievement, and testament to a distinctive philosophy that's appreciated by expedition tourists as well as regular trail riders and racers.

As Michael Bonney says, 'Most of the 2010 models might look a lot like the 2009 ones, but if it ain't broke, don't fix it.' And not breaking is definitely part of the Orange ethos.





The tried-and-tested and carefully honed production methods ally with equally evolutionary design. The fullsuspension bikes still glory in the proven simplicity of a single-pivot layout, but good geometry and component choices mean they still ride as well as any and better than most – according to the consistent verdict of independent reviewers.

If that sounds like an overly conservative approach, Orange are not scared of innovation; they've experimented with belt drives and with gearbox systems for the downhill bikes. And Lester and Michael are coy enough about plans for 2011 to make me think they might have something up their sleeves.

They have made a few road bikes in the past, cyclo-cross is enjoying a quiet resurgence, and the expedition market is growing too... so who knows?

(Top) Orange in action: a Five on the new trail in Gisburn Forest, Lancashire (Above) Frames lined up ready for assembly