

The development of the Empire MX6

interview by **Tim Morgan** photos by **Sam Needham**

Empire is just one of those brands that every mountain biker has something to say about. Innovative, imaginative and often controversial Empire's bikes and its founder Chris Williams stand out from the crowd as true one offs.

With such a huge range of trail bikes available these days, it's refreshing to hear of one that truly stands out from the crowd. One that is unafraid to go about things more than a little differently. Empire's new MX6 'all mountain' bike has appeared in various prototype guises for some time now and is now finally nearing the final stages of design, refinement and testing and approaching production. It's a machine that has huge appeal to me both as a rider and design engineer so I jumped at the chance to check it out, meet the man behind it and of course give it a thrashing on the trails.

Empire is a homegrown bike company from the North West of England who from the off set out to innovate and make a name for themselves with the world's only fully cast downhill bike. Keen to continue this philosophy, they have turned their attention to the highly competitive all mountain area of the market with an impressive new 160mm 'go anywhere, do anything' bike – the Empire MX6.

Keen to find out more I met up with Empire's main man and designer Chris Williams for a brew. Straight away it's clear that Chris is passionate about UK manufacture, focussing on high precision engineering and more sophisticated techniques that are often overlooked in favour of mass produced Far East alternatives.

Attacking bike design from an automotive background he has used both casting and machining from solid aluminium as a unique alternative to the vast array of hydroformed frames that are so common right now. This allows greater flexibility for making modifications and reduces tooling, whilst not forgetting the highly accurate finish.

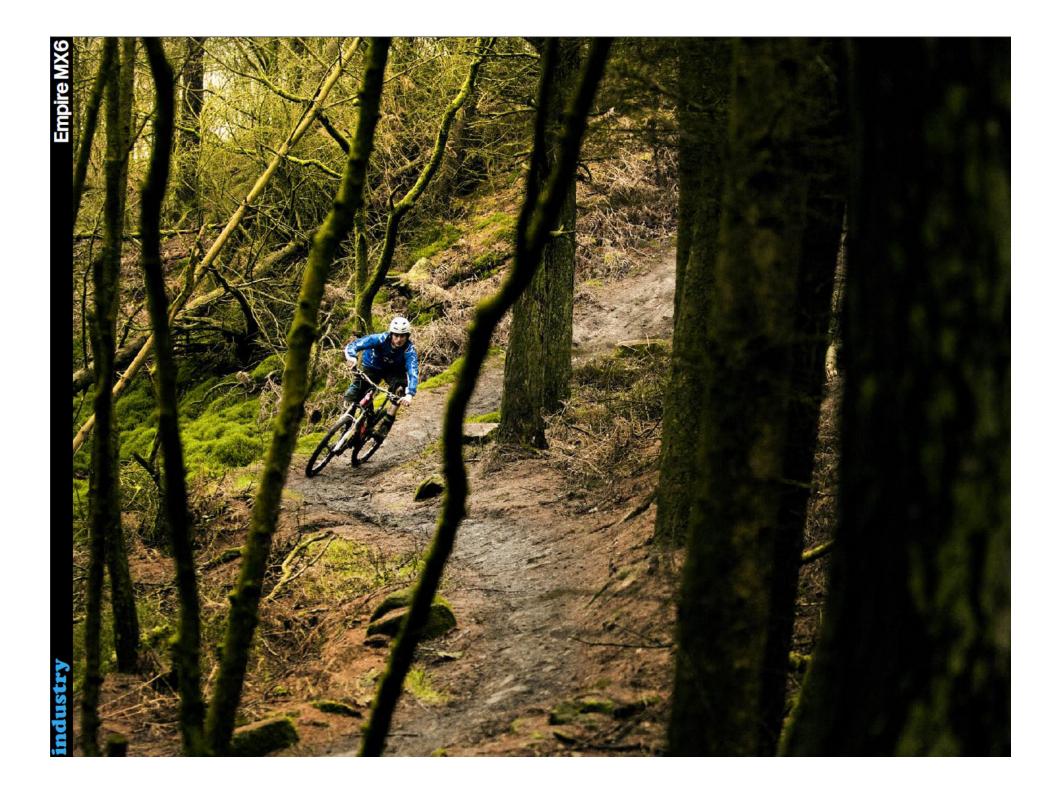
The main difference between the new MX6 and its big downhill brother the AP-1 is that the trail bike has a fully machined rear swing arm with a hybrid machined and box section front end. It's a slight step away from the full casting method we've seen on the AP but is still very true to the Empire DNA with a distinctive finish, especially in the spangly anodised red the prototype was in. Butthis bike has far more behind it than an alternative manufacturing technique. It includes swappable rear shock mounts to allow

ultimate angle adjustments to different rider's preference. Chris has also thought carefully about future proofing the design and

tailored the pivot point perfectly for 1×10 and 2×10 chain ring sizes in addition to a swing arm wide enough for new 142mm rear hubs. The well proven pivot arrangement is mirrored exactly with the DH bike and uses the same beefy 12mm axle and full compliment needle roller bearings and wiper seals that cement the bikes intention of being built to last. ISCG tabs and a beautifully machined tapered head tube complete a damn tidy chassis.

All this may sound like it would cost the earth, but thanks to Empire's setup of selling direct to customers the end result is still reasonably affordable and comparable to other high end bikes in this sector. This arrangement cuts out the usual large distributor and retail mark ups which allows for a comparatively high manufacture cost with out hitting our pockets too hard. Again, this is another area Chris is clearly passionate about and is also reflected in his aim to give rider's choice in spec, colour and setup. This is another advantage the homegrown company has over the big boys and something with real appeal to riders.

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Overall, his inspiration and aim with the bike was for it to be an aggressively ridden 'all day warrior built to have the living daylights kicked out of it'...right up my street! And this no nonsense approach is shown by the brutal cumulative lab testing and the vast amount of northern grit the prototype goes through before production.

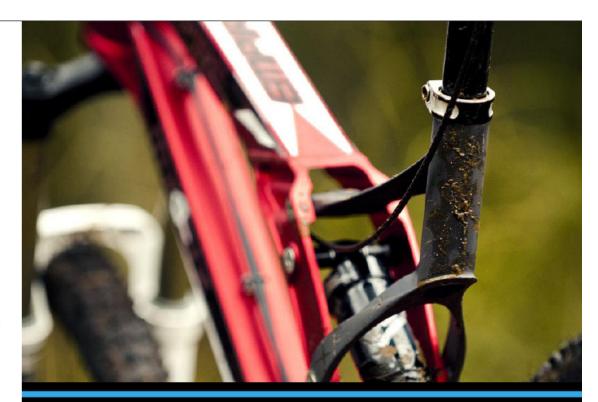
So hopefully by now you're not bored of engineering geek chat and keen to hear about the ride. Tea cups drained, we headed out to Chorley's local trail to throw the MX6 at some rocks, roots, mud and flowing turns on a refreshingly natural 'red' trail with ace photographer Sam Needham catching the action. Straight away I was blown away by how well the bike sprinted up hill. For a 160mm travel bike it was very impressive and actually encouraged me to attack the climbs as much as the downs! I also never felt the need to lock out the rear shock which added to the flow and fun of the ride with one less thing to think about. A reason for this is Chris' close work with SRAM to develop the optimum setup for the shocks, finally selecting a pretty high platform which works extremely well overall thanks to its match with the reward axle path. The complete build is well within the weight ball park at 31lbs considering its overall strength which also helps give the bike a lively feel.

I gave it a blast round the whole red loop which really showed how the bike's behaviour makes you want to attack each section as hard as possible regardless of whether it's up or down, smooth or rough; its big grins all round!

Chris' attention to detail on the angles make it immense fun to descend, especially on rougher rock sections, where the solid construction of the frame with no hollow sections in the swingarm feels amazing and also gives an almost totally silent ride. It's a far cry from many echoey tubular frames which the Empire goes up against.

Pumping it through some bermed switchbacks showed how the MX6 is far more than a beefcake rock basher and I loved how flickable it was when the trail got tight. Lofting the front wheel to manual over obstacles or from turn to turn was no problem which I find really adds to the fun of riding any bike.

The complete build of this preproduction model was also very impressive with Hope brakes, wheel set and stem, Sram finishing kit, Renthal bars and a few choice Superstar components. Rock Shox Sectors took care of duties up front with no complaints. Not that setup would be an issue as Empire will offer as much customisation to individual builds as possible. I'd probably go for a slightly shorter stem, around 50mm but that's about the only change I'd make.







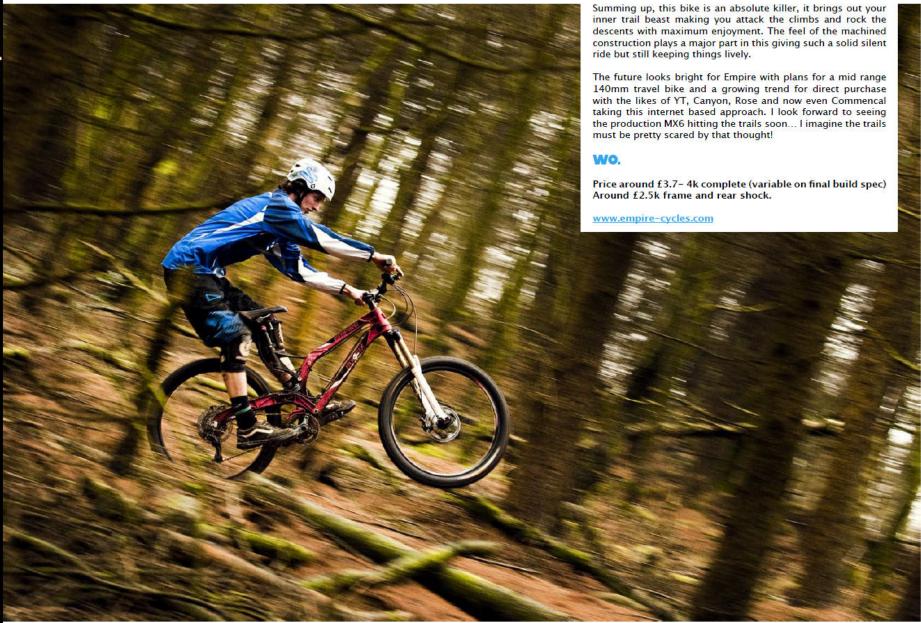












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