

BIKE TEST

DAVE YATES DIABOLO

Take a handbuilt frame from one of Britain's best known frame builders, then add a well planned component package to get a bike that rides like the devil.

Photography by Geoff Waugh



Every frame is hand made, usually in batches of eight to ten, by Dave at M Steel's frame shop in the North East.

The Dave Yates Diabolo comes as a frameset only. At £280, it lends itself very well to shops on the lookout for a quality frame to build up to customers' specifications while keeping the price within the bounds of reason. Simply draw up a spec sheet and bolt on whatever components your heart desires or your bank balance allows.

Fit up a Diabolo with a selection of trick bits from Ritchey, X-Lite, Rhino and Mavic as we did, and it has the feel of a custom mountain bike, but the price tag of an 'off the peg' machine.

The Frame

Acknowledged as one of the best frame builders in Britain, Dave has been making MTBs since 1983. Partly because of its low cost, the Diabolo is one of his most popular models and so far he has built around 200 of them. Every frame is hand made, usually in batches of eight to ten, by Dave at M Steel's frame shop in the North East.

Standard models come in three sizes - 16, 18 and 20 inches - and a two colour fade finish. For an extra £59, you can get one custom made to your own specifications and sprayed up in the colour of your choice.

The frame is made of fillet brazed Columbus Cromor OR tubing, very durable though definitely not the lightest tubing around. Dave also makes bikes from a selection of other tubesets, including Columbus Max OR and a special Reynolds tubeset called 731 that is specifically drawn for him. A typical 731 frame would cost around £429.

Columbus Cromor is a race oriented tubeset, based on the Italian company's own Nivacrom steel but with extra material around the butts. The additional butting makes a stronger frame by reinforcing areas where strength is most needed - around the head tube, bottom bracket and seat cluster.

All cables are routed along the top tube, though instead of a top pull front mech the front cable runs to a standard mech via a brass pulley two inches above the bottom bracket. This arrangement is a bit unnecessary and doesn't improve shifting, but it would be possible to ignore the pulley and run a top pull mech instead.

The frame also comes with

two water bottle bosses and, as a nod to anyone in search of versatility, a set of mudguard eyes.

The Forks

On a frame like this, you can have any forks you want. Mend-a-Bike, who specced this bike and distribute Dave Yates bikes in the South East, plugged in a pair of Joe Murray's triple butted Project Two forks. Triple butting means the tubing used in the forks' manufacture has three steps - thicker at the top, thinner at the bottom. This saves weight and puts strength where it is needed: at the top, near the crown.

The current version also features slimmed down dropouts - the bit that holds the wheel. The new style dropouts are lighter than before without any compromise in strength, so they won't fall apart on the first gnarly downhill. Another factor in the choice of Project Twos was price. A pair only adds £40 to the £280 frame price. The way these straight bladed black forks complemented the black seat pin and black livery on the LX groupset was an incidental bonus.

The Groupset

The components selected were a mixture drawn from Shimano's new LX and Deore DX groupsets. We are going to see more mixing and matching next year, as the custom look has been picked up by a lot of builders and bike companies.

The new LX group has been so well received that many companies - Specialized, for example - have specced bits from it at the top end of their range, selectively upgrading other parts, such as front and rear mechs, for enhanced performance and durability.

The Diabolo was built with



Frame

Columbus Cromor Off Road

Fork

Joe Murray Project Twos

Colours

Blue/Plink/White fade

Brace-ons

Two bottle cages

Groupset

Shifters

Shimano STI Rapid Fire Plus

Cranks

Shimano LX 175mm

Bottom Bracket

Shimano Sealed cartridge bearings

Pedals

Steel Bear traps

Chain

Shimano UG

Freewheel

Shimano cassette 7 speed 12-28T

Chain Rings

Shimano LX 46/36/26

Derailleurs

Shimano DX

Brakes

Shimano LX

Components

Headset

Japanese steel model, Zoom hanger

Stem

Steel silver 135mm

Bars

Steel silver

Grips

Ritchey True Grips

Saddle

Turbo

Seat Post

Kalloy UNO

Tires

Ritchey Z-Max Black wall

Wheels

Rims

Mavic 231CD

Hubs

Shimano LX

Spokes

Swiss DT Double Butted Stainless

Purple alloy nipples

Extras

X-Lite bar ends

Price: £745

Supplier: Dave Yates - 091-234 4275

this philosophy in mind. The upgraded DX mechs provide similar performance to the

cheaper LX ones but last longer.

Shimano's latest LX STI



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Rapid Fire Plus levers were fitted. There have been big changes in this department. The increased performance and fingertip control is very good. Shifting used to be a case of waving your thumb around above the bars until it connected with the thumbshifter. Now your fingers are over them constantly, which results in quicker shifts and less crunching of gears.

Also, Shimano have improved the LX brakes. The new M-System brakes now work better in the wet, partly due to a new block compound. The brakes are easier to set up as well. Gone is the old guide wire between the two cantilever arms, in is a tube, that sets cable length and adjusts the angle to 90 degrees - supposedly the best angle for efficient and progressive braking.

A sealed bottom bracket and new, better quality LX hubs finish off this well rounded package.

The Components

Bars/Stem

A Rhino stem and bars were fitted to the Diabolo. The cromoly stem has a neat hidden Allen key clamping bolt, which sits under the stem back from the clamp and works very well.

The cromoly bars are not the lightest around but they are stiff and strong. This bar and stem combo can be bought separately from Mend-A-Bike for around £25, great value for money.

Saddle/Seatpin

A Turbo saddle squatted on top of the Kalloy Uno seatpin. Turbos have been around for as long as we've been riding. Though not as light as the new titanium railed crotch splitters seen on some bikes, they are comfortable, durable and popular. The seatpin has a one key adjustment. The column itself has a hard black finish that seems durable, and the cluster (the top bit) is painted gloss black and looks cool too.

Extras

X-Lite stubbles were fitted to the steel bars. In case you didn't know, bars ends provide more climbing positions and let you stretch out when your arms are aching. They also open your chest for better oxygen uptake - important whether you're racing or just out riding. The X-Lites are some of the lightest on the market and look good in anodised purple. They're also British made.

Tyres

Ritchey Z-Max tyres wrap the wheels; rubber that's rising fast in the popularity stakes due to its light weight and awesome tread pattern. The black walled version is a tad heavier than the standard model but is still lighter than most of the competition.

The tread pattern is designed by Vector Force Analysis. This sounds complicated but all it actually means is that a computer has analysed the directional forces at work on a tyre and come up with a tread pattern based on the info.

The Z-Max knobs are arranged to provide maximum grip in all but the most extreme of conditions. On dusty single track the tyres were very good, and they hooked up pretty well on steep climbs and loose stuff. Cornering, they floated smoothly and never bit so hard that the front wheel washed out. Clogging wasn't too much of a problem either as the tyres cleared quickly, squeezing most of the mud out of the sides. A new thinner 1.9 version Z-Max is now available, look out for a test in *Trickology* next month.

Wheel Deal

Mavic 231CD rims were built onto LX hubs using DT's stainless steel double butted spokes and alloy nipples. Nice to see a pair of handbuilt wheels on a bike at this price, apart from adding class they really improve performance. A well built, evenly tensioned pair are less likely to go out of true and should last longer than a set of machine built wheels.

Mavic 231CDs have a good reputation for durability and long life. Certainly, the plain grey finish looks good and doesn't scuff up or scratch like anodised rims. Although they are thicker and slightly heavier than, for example, Araya RM17s, another plus point in favour of 231CDs is that they are eyeleted, so the spokes slot into a reinforced steel plug rather than directly into the rim itself. This means spokes are less likely to stretch or, worse, pull through the weaker rim material.

The Ride

One of our test riders said this was one of the best bikes in its price range he'd ever ridden. We pretty much agreed with him. The Diabolo is a really exceptional frame, and was well complemented by Mend-A-Bike's choice of components.



The whole package not only looked good, it felt good too.

The bike was easy to move around on tight trails and roller coaster single track. Climbing really steep stuff was less strenuous than usual. The bike felt a lot shorter at the back than the 16.75ins stays suggested.

Downhilling the bike took off. Unweighting the frame to clear ruts and rocks in the trail was simple and required little effort. The bike floated round corners, the Z-Max tyres digging in and holding their line with ease. The wheels felt stiff and responsive and accelerated quickly with the minimum of sideways flex. The forks enhanced the positive feel and immediacy of the steering.

On our 18ins test bike, the 23ins top tube was spot on (23.1/4ins on a 20ins frame and 22.3/4ins on the 16ins frame). It felt long enough to move around comfortably, necessary on steep climbs where traction is at a minimum, and short enough to be lively and responsive on single track.

The short 135mm stem proved ideal, it meant the handling was quick but secure. A longer stem would have made it slow and ponderous, while a shorter stem would also flex more, sapping valuable rider energy.

The Diabolo did all the things we wanted but had a freshness and life that you rarely meet on other bikes in this price range.

So What Are We Saying?

The forks are light, the wheels are light, the tyres are light, the groupset is light and so is the

price. At under £750, the Diabolo is a really good value for money race bike, decked out in this package with some of the best components around. The only things missing are suspension and possibly SPDs but you can add those later.

We were very impressed with the quality of both the build and the ride. We also liked the overall versatility of the bike. The colour was one thing we would change if we bought one. But as Dave Yates says, 'You can have what you want, even a hand painted custom job but you have to pay for it.'

This bike is aimed at the sort of rider who has gradually climbed up the ladder. Dave explained to us, 'He's bought a cheap entry level bike first, then a more expensive budget racer and now he wants a custom job but can't afford the £1000 price tag.' This bike appeals to a much wider audience than this and, of course, Dave can tailor a frame to an individual rider's needs. He can shorten it for tall riders. Phone him for a chat.

The thing we most liked about the Diabolo was its 'Made in Britain' tag. With people looking abroad for custom frames, this is a custom bike that has everything and won't have to be smuggled back through customs.

Thanks a lot to the people at Mend-A-Bike (Cyclesport) who put this bike together and who distribute Dave Yates frames in the South East. Contact them on 071-371 5867

