

DISC-BRAKED ROAD BIKES

BIKE TEST



WHYTE SUFFOLK

£1200-£1500 ALL-PURPOSE ROAD BIKES

Disc-braked road bikes

Disc brakes recently made the leap to road bikes. Was it worth it? Journalist **Steve Worland** tests Genesis's Equilibrium Disc and Whyte's Suffolk to find out

▶ **DISC-EQUIPPED ROAD** bikes are a growing breed, having emerged over the last year or two. At first they were cyclo-cross inspired on/off-road all-rounders, but there are plenty of mainstream brands now offering regular road-going machines.

With brake manufacturers working hard on creating reliable, and presumably more affordable, hydraulic disc brakes for road bikes, the trend is set to grow. Cable disc brake-equipped road bikes are already offered at lots of different price points and for lots of different rider types. They're a bit heavier than rim brake-equipped bikes at the same prices, partly because the brake and rotor add some weight and partly because the frame and fork

1 The Suffolk is Whyte's top-of-the-range disc-road bike. There's also the Tiagra-equipped Dorset (£999) and the alloy-forked, Sora-g geared Sussex (£799)

2 The Equilibrium Disc is the only Equilibrium without rim brakes, but Genesis also produce the Day One 'urban cross' and Croix de Fer 'multisport' ranges with disc brakes

need to be beefed up to resist extra forces. But we may see some heft-trimming moves in rim designs, where braking surfaces are no longer needed.

Disc drivers

So what's the big deal with disc brakes? They're not just about extra braking power; rim brakes are good enough for most riders. But a bike with good disc brakes should need less grip strength to achieve consistent stopping power in all conditions. Discs are barely affected by weather or dirt, and they don't grab if your rims are buckled. Also, the rims aren't subjected to wear, and you get a little more room for fatter tyres and mudguards as there's no calliper reaching over the

tyre. On the other hand, they add about 500g to overall bike weight, factoring in the heavier brakes and frame/fork reinforcements. And there's no escaping the fact that some riders just don't like the way they look.

I've been testing two disc-equipped road bikes from UK brands Whyte and Genesis. They offer similar gearing and a similar level of components, but the all steel Genesis Equilibrium costs £300 more than the aluminium-framed, carbon-forked Whyte Suffolk.

Frame and fork

The weight difference between the Whyte and the Genesis is accounted for mainly by the differences in the frames and forks. The Whyte, with its



GENESIS EQUILIBRIUM DISC

fat-fronted 6061 aluminium frame and straight-bladed carbon fork, is 650g lighter. But the Equilibrium's skinny Reynolds 631 butted steel frame and lugged fork suggests a slightly more forgiving ride.

The Genesis is a neatly TIG-welded, relatively traditional construction, with a slightly dropped top-tube, flared into the seat-tube juncture in order to achieve a bigger weld area. The cowled dropout juncture of the seat and chain-stays is bridge-tube-reinforced on the disc brake side, and there's enough space for up to 32mm tyres plus mudguards. There are threaded mudguard eyelets on the dropouts and seat- and chain-stay bridges but no rack eyelets on the seat-stays. There are two sets of bottle bosses, down-tube gear cables have threaded adjusters, and there are full outer cables to the brake callipers.

The fork has a chunky-lugged crown and the 1.125in steerer has a generous stack of washers and a 7 degree either-way-up stem for bar height adjustment. The head tube is ring-reinforced with external headset cups. Geometry varies with sizing: our 56cm test bike had a 72 degree head angle, 73.5 at the seat, and a horizontal top-

tube reach of just under 56cm.

The Whyte frameset is not that dissimilar in terms of geometry, although the head-tube is slightly taller and the fine details make some minor differences to ride feel. But it's been built very differently. The tapered head-tube, straight-bladed carbon composite fork, and oversized hydroformed top- and down-tubes make for radically different aesthetics. Integral headset cups help stop the long head-tube from feeling unduly tall, and there's loads of bar height adjustment.

There's plenty of room and threaded eyelets for mudguards and a rack, and the seat clamp faces forward – out of the rear wheel spray if you don't use mudguards. There are two sets of bottle bosses, and we like the way the rear brake calliper is tucked in the rear triangle between the seat- and chain-stays, leaving clearance for a rack and panniers. Full-outer brake and gear cables go through the down-tube, a neat weather-proof solution but more fiddly to replace than external cabling.

Components

Almost all road disc brakes use steel 160mm rotors. All cable-pull callipers

will be compatible with dual gear/brake levers, but the Whyte gets the braking power benefit of TRP's HyRd hydraulically-operated pistons. I've had these fitted to another test bike for about six months and am happy to say they provide the easiest and most consistent braking output of any cable-pull disc brakes I've tried. The only downside is that the hydraulic cylinder means they're a bit heavier and more clumpy-looking than the neater Hayes CX Experts of the Genesis. Both options are easy to adjust, and easy to replace the pads in, >>>

Also available



1) Specialized Secteur Elite Disc £1200

There are two disc bikes in the Secteur range: this and a £1000 Sport. The Elite has a carbon fork and Tiagra gears. specialized.com



2) Cannondale Synapse Disc 5 £1099

One of two Synapse 'endurance' bikes with discs, this one has a carbon fork and a mix of Tiagra and Tiagra gears. cannondale.com



3



4

but the HyRds need more lever movement when they're working at their best.

Both bikes use largely Shimano 105 10-speed gearing with a compact double chainset – FSA on the Whyte, Shimano on the Genesis. The Whyte gets 'only' a Tiagra mech up front, but has a wider range of gears due to an 11-30 cassette, compared to the Equilibrium's 12-28.

Wheel-wise, both bikes have black aero-style rims – eyeleted and spoked 28 front, 32 rear on the Whyte, 32/32 non-eyeleted on the Genesis. The Shimano Deore XT hubs of the Genesis have a great reputation for durability, but I had no problems on test with the Whyte-branded hubs either. Security skewers on the Whyte are a nice touch for a bike that might get used as a commuter. Both bikes get robust all-rounder tyres: 28mm Maxxis Detonators on the Whyte; faster-rolling 25mm Continental Grand Sport Race on the Genesis.

Finishing kit on both bikes is quality own-brand stuff. Both bikes use slimline but reasonable comfortable saddles and twin-bolted seatposts.

Ride

The ride-feel differences between the Whyte and the Genesis relate partly to the obvious differences in frame and fork construction, but more significantly to small differences in geometry and components. I tested nominally 56cm models in both bikes. The Whyte has a slightly longer top tube and wheelbase but a shorter stem. With a bit more trail and wider tyres, handling is nice and



5

- 3 The Whyte has fittings for a rear rack
- 4 The Suffolk uses a tapered head tube, shorter stem and longer top tube, like Whyte's off-road bikes
- 5 Conventional brake cable operates hydraulic pistons, which are mounted on the chain-stay – preventing pannier rack interference

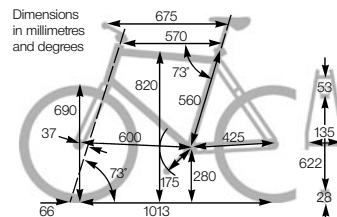
stable but without the steering inertia of a slack-angled bike. The Genesis, despite its higher weight, has a taut and more nimble ride feel than the Whyte. It's a little less chattery over the bumps, notwithstanding thinner tyres.

Neither bike is uncomfortable, however. The Whyte's 28mm treads absorb vibration well and take comfort up to the level I expected from the steel frame/forked Genesis. The compact drops of both bikes provide plenty of easily accessible hand positions; the flatted-oval bar tops of the Whyte are particularly good.

The Whyte's lower weight is noticeable on climbs and when starting off, and the 30-tooth cassette sprocket is welcome when you prefer to stay seated on steep climbs. Braking is smoother too, and with a lighter lever feel than the Genesis. The Genesis brakes needed more grip strength and the fork would flutter occasionally on sudden stops.

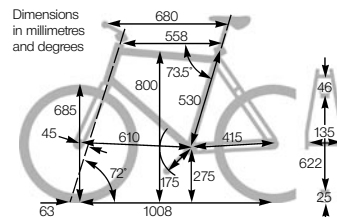
I didn't notice initially that the chainstays are quite wide on the Whyte. But

Tech specs



WHYTE SUFFOLK

- Price:** £1199
- Sizes:** 50, 52, 54, 56, 58cm (56 tested)
- Weight:** 10.1kg (22.4lb)
- Frame & fork:** 6061 hydroformed T6 butted aluminium frame. Carbon fork
- Wheels:** Whyte R7 28/32 wheels, Maxxis Detonator 28C tyres
- Transmission:** FSA Gossamer 50-34 cranks, Shimano
- 105/Tiagra gearing, 11-30 10-speed cassette.**
- 20-speed, 31-123 inches**
- Braking:** TRP HyRd cable-pull hydraulic disc callipers, 160mm rotors
- Steering & seating:** Whyte 44cm compact bar, Whyte stem, saddle, seat post
- Contact:** whytebikes.com



GENESIS EQUILIBRIUM DISC

- Price:** £1499
- Sizes:** 50, 52, 54, 56, 58, 60cm (56 tested)
- Weight:** 10.75kg (23.9lb)
- Frame & fork:** Reynolds 631 butted steel frame and fork
- Wheels:** Shimano XT hubs, H Plus Son rims, 32/32, Continental GS 25C tyres
- Transmission:** Shimano 50-34 cranks, Shimano
- 105 gearing, 12-28 10-speed cassette.**
- 20-speed, 33-112 inches**
- Braking:** Hayes CX Expert cable pull disc callipers, 160mm rotors
- Steering & seating:** Genesis 40cm compact bar, Genesis stem, seat post and saddle
- Contact:** genesisbikes.co.uk

when I lent the bike to a friend with big feet (size 47), he kept brushing his heel against the right-hand chain-stay.

Summary

Disc-braked road bikes like these might become the new 'everyman/'

OXFORD BIKE WORKS



Illustrated:
MODEL 1

MODEL 1E: £900	MODEL 1: £1100
MODEL 2: £1600	ROHLOFF TOUR: £2100

For full specifications, visit our website at
www.oxfordbikeworks.co.uk

- Custom built bikes at fair prices
- Friendly service
- Top quality steel frames
- Wide range of upgrade options, including hand-built wheels
- Personal delivery and home-fitting service available

Station Yard, Steventon, Oxfordshire OX13 6RX
1 hour from London, Birmingham and Bristol
South of Oxford, just off the A34 (Milton interchange)

 **01235 831992**



6



7



8

everywoman' road bikes. Whatever riding you do, disc brakes won't eat your rims. Weekend riders, credit-card tourists and commuters can all benefit from a road bike that will take mudguards, a rear rack and slightly fatter tyres. Bigger tyres also mean more rough-roads comfort.

We can probably be thankful that the road disc-brake trend is coinciding with a trend for fatter road bike tyres, as the reinforced frames and forks of disc-equipped bikes might detract from comfort with skinnier tyres fitted. (It's hard to make an objective assessment without a head-to-head comparison of otherwise identical bikes.)

As for the Genesis Equilibrium Disc and the Whyte Suffolk: despite the differences in price, weight, and aesthetics, both are excellent bikes. The wider gear range, interesting frame features, lighter braking action, and lower price of the Whyte appealed to me, but the blend of traditional and modern on the Genesis will win over many riders.

6 The Genesis's beefed up rear triangle has eyelets for a mudguard, but a rack would be awkward

7 The steel fork has a small amount of flex. It helps with the vibration from rougher tarmac but can 'flutter' if you brake hard

8 Disc brakes aside, the steel Genesis is a more traditional-looking road bike