

Merida Scultura Disc Team £6,500

Tested by: Oliver Bridgewood | Miles ridden: 822
| Size tested: M/L 54cm | Weight: 7.5kg

The non-disc equipped version of the Merida Scultura was launched last year, ahead of the Giro d'Italia, and set out its stall as the 'lightest production bike' in the world. Disc brakes and their mountings undoubtedly add weight to a bike, so how has this affected the

Scultura's credentials as a bike for the mountains?

Frame

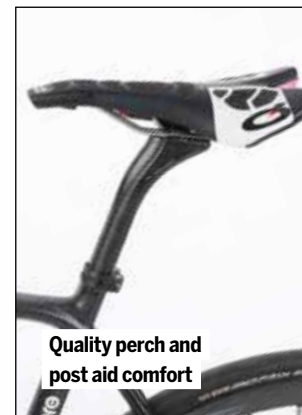
This is the same spec frame as the pros ride with the designation CF4. Although Merida calls it a size 54, it is more like 56 with respect to the top tube, stack and reach. The geometry is designed for racing.

At a glance the frame may look very similar to the non-disc equipped Scultura, but Merida has completely re-engineered the carbon layup to cope with the significantly different forces that disc brakes exert.

A stronger fork and beefed-up stays are required to cope with the additional asymmetric forces and torque steer generated by discs, something which Merida says results in a 150g increase over the non-disc frame.

There are neat touches too. The internally routed hydraulic lines are guided, so as not to create annoying rattling sounds while riding. There is also an innovative heat sink on the rear brake that is said to cool it 50 per cent faster than a normal disc. According to Merida, this is only needed on the rear, because it is not in a direct airflow like the front brake.

To accommodate the discs, Merida has had to lengthen the chainstays from 400mm



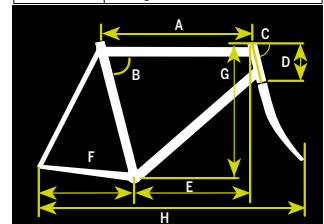
Quality perch and post aid comfort



Heat sink stops rear disc overheating

Merida Scultura Disc Team	
£6,500	
Frame	8/10
Specification	9/10
Ride	9/10
Value	7/10

Distributor	www.merida-bikes.com
Frame	Scultura Disc CF4
Fork	Scultura Carbon CF4 Disc 12
Size range	44, 47, 50, 52, 54, 56, 59
Weight	7.6kg (without pedals)
Groupset	Dura-Ace Di2 (rotor chain set)
Alterations	None
Gear ratios	11-28, 52-36
Wheels	Bontrager Race Tubeless Ready
Tyres	Continental GP4000s 28mm
Bar	FSA K-Force compact OS
Stem	FSA OS99-6 (110mm)
Seatpost	Merida EGM-light-27.2 SB15[E]
Saddle	Prologo Scratch 2 T2.0



SIZE TESTED: M							
A	B	C	D	E	F	G	H
56cm	73.5"	73.5"	15cm	39.4cm	40.8cm	55.7cm	99.3cm

to 408mm. Despite this, the wheelbase is still only 993mm to keep the handling agile and the steering responsive.

Specification

Being team spec, components are high end, with Dura-Ace Di2, flat mount hydraulic calipers, Shimano Ice tech rotors and a Rotor 3D chainset.

Wheels are disc-brake specific Fulcrum Racing Quattros, with no brake track on the rim. Our test bike also came with broad 28mm

Continental GP4000S II tyres, which boosted comfort, but also helped maximise disc brake efficiency with their slightly larger contact patch.

Riding

I attended the launch of the Scultura Disc and rode it on the cobbles of Roubaix and Flanders. While it performed well, I didn't really need to brake much and felt that the increase in weight resulted in a bike that had lost some of the zip and rapid acceleration of the non-disc version.

Climbing is slightly harder going than on the lighter non-disc version — it is heavier after all. However, the first time I encountered a long descent, it all made sense. I took the Scultura Disc to the Pyrenees to put the brakes through their paces under more extreme conditions than we'd encountered on the launch. I was quickly won over not only by the Scultura's neutral handling, but by the reassurance offered by the disc brakes.

This bike is not just good on descents because it has hydraulic discs. Usually on frames without proper revisions to cope with the extra braking forces, torque steer can manifest itself as a disconcerting shuddering through the fork. However, by redesigning and beefing up the fork, Merida has created a bike that feels solid and planted under braking, and

160mm rotors and the heat sink work well at dissipating heat. The thru-axles are important for stiffness too and when you bank the Scultura Disc into corners it tracks the road precisely.

I was able to descend faster than I had ever done before with a level of confidence

I had never experienced before. Modulation and feel through the brake levers is superb with a level of power that encourages late braking. Crucially, being able to descend

with more control not only made me faster, it gave me a greater thrill and was far more enjoyable. I am not a fan of the RAT thru-axles though. I accept they may afford faster wheel changes in pro racing, but when subjected to continued use and grime, they can become stiff and harder to adjust than a bolt-thru axle.

Value

Considering the performance and high quality of the product, the Merida Scultura Disc justifies its price tag and offers decent value. It may be more expensive than a Canyon sold direct off the internet, but it is considerably lighter on your wallet than a Cervélo, Colnago or Pinarello.

Verdict

It has taken me a while to come round to the idea of disc brakes on road bikes, but this is the bike that has done it. With the impending arrival of Shimano's new disc brake groupsets, we will see a further reduction in weight, but for now disc brakes still represent a significant weight penalty on the climbs and the Scultura is a prime example. However, descending on the Scultura Disc was the most fun I

have had on a road bike. I ride bikes to put a smile on my face and the Scultura Disc certainly did that.

For

- Looks
- Excellent braking
- Corners very well

Against

- Heavy for the price
- RAT thru-axles

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