

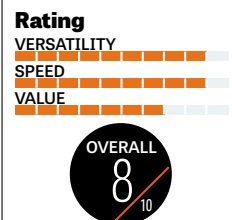


### Halo Devaura Disc

£460

770g/890g

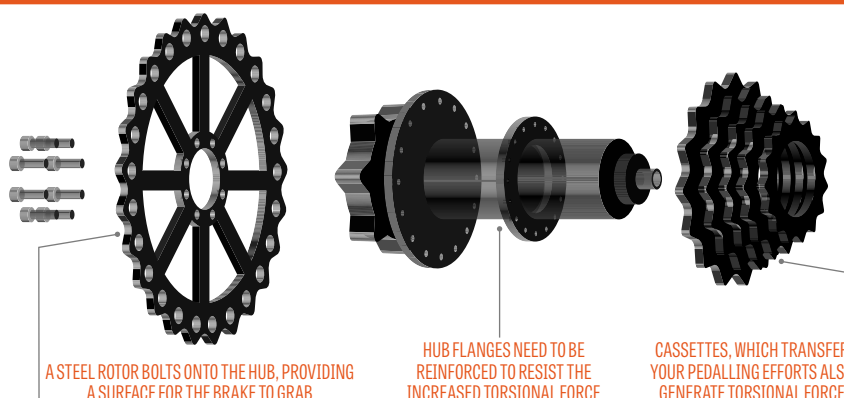
Halo has brought its Devaura bang up to date by making the rims wider, deeper and tubeless-ready. The hubs are Halo's own design and come with some of the smoothest bearings we've ever felt out of the box. They're laced together by 28 straight-pull bladed spokes, which are supposedly stronger than traditional spokes, though you can't feel a difference in use; it can also be more difficult to find replacements if you snap one. If you have one of the few frames with 130mm rear spacing, you'll appreciate the adaptor to reduce the rear hub width from the standard 135mm. They're no flyweights, so it takes a bit of effort to get them going, but once up to speed, it's effortless to maintain, thanks to the super smooth hubs and deep rim. A decent pair of mid-section aero wheels, but we'd keep them on the road to be on the safe side. [ison-distribution.com](http://ison-distribution.com)



## DESIGNING FOR DISCS

Tom Marchment of new British brand [huntbikewheels.com](http://huntbikewheels.com) explains the challenges of designing for discs...

'The forces handled by disc brake wheels are unique. You have to take the braking force from the rotor, apply it to the hub and then transmit it to the rim via the spokes. That's opposed to a conventional wheel, where the braking force is applied to the rim and then to the road. With the rotor being attached to it, the hub deals with a far greater degree of braking force than on a traditional wheel. Therefore we start by increasing the strength of the flanges, as these will transmit braking forces from the



hub to the spokes. On disc-brake wheels, spokes are usually laced in a two-cross pattern, as a radial pattern (emanating directly from the hub without overlapping each other) can't deal with the twisting forces generated by the rotor. We'll also use more robust spokes. As both wheels are

subject to torsional forces, either through pedalling or braking, we'll match the spoke count front and rear – typically at least 24 per wheel. This can increase weight, but because the rims are no longer subject to wear from brakes, we can make them lighter, potentially improving acceleration.'