

Reviews

Gear up

COMPONENTS, KIT, AND MEDIA SELECTED
AND REVIEWED BY BIKE JOURNALISTS AND CYCLING UK STAFF

Middleburn

RO1 chainset

Superbly engineered square-taper chainset with lots of options

£329.50 (as tested) mountainbikecomponents.co.uk

Perhaps the only hurdle when considering the purchase of a Middleburn chainset is getting to grips with the generous selection of crank formats, of which there are at least five (excluding ones for tandems). In part a legacy of the brand's early involvement in mountain bike components, the range includes external bottom bracket and square-taper options in wide and narrow tread styles. There is something for everyone from fat bike riders to old-school cycle tourists.

If you're after a narrow Q-factor (pedal tread) and a square-taper axle, the RO1 is the one you want. Like all Middleburn parts the cranks are offered in silver or black finishes, making it easy to assemble a chainset to suit a bike build. Available in 160, 165, 170, 172.5 and 175mm lengths, the cranks are hot-forged in 7075 T6 aluminium alloy to a shape determined using advanced stress analysis and then CNC-machined where necessary before being hand-polished and anodised. The result is not only visually pleasing but, going by ride feel rather than scientific measurement, commendably stiff when mounted on the recommended 113mm square-taper axle. This gives the standard road double chainline of 44mm. The 148mm pedal tread is



Pros & cons
+ Wide range of size options
+ Silver or black finishes
+ Superb fit and finish

also close to the road convention of 150mm.

Choosing a chainring spider is almost as much fun. All the Staffordshire firm's spiders and right-hand cranks share the same 12-lobed interface with a threaded lockring, so there are near-endless chainring possibilities – including 130mm and 110mm BCD doubles and a four-arm triple option. I choose the RO1 94BCD Double Road spider, which will take a usefully-low 30t inner ring.

There's a wide range of fittings for this spider, including the specifically-paired 11-speed 46-30 rings tested, which run and shift perfectly well with a 10-speed

chain. Also available are 8/9- and 9/10-speed rings, some with a hard coat finish. The Staffordshire firm's own black aluminium chainring bolts and self-extractor crank bolts complete the chainset.

Along with Middleburn's precision engineering, the RO1 has two particularly attractive features: the vast range of chainring sizes, making it ideal for a customised transmission; and the square-taper axle interface. Suitable JIS square-taper, cartridge-bearing bottom bracket assemblies are inexpensive and readily available and offer greater durability than many external bearing designs. ●

Richard Hallett

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✉ editor@cyclingsuk.org

Other options



PRAXIS ALBA DM-X CHAINSET £185.00

Price includes a Praxis BB M30 bottom bracket. It's a versatile, sturdy design with a specific bottom bracket assembly. Reviewed last issue. praxiscycles.com



SHIMANO GRX £104.99

Gravel-specific chainset with 46-30 rings and four crank lengths. Also available in a 1x format. shimano.com

Verdict

An exhaustive choice of options including, importantly, a square-taper axle fitting, plus engineering and manufacturing excellence make Middleburn chainsets a compelling proposition – albeit at a price.



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