

## BMC

WORDS: ROB RIXON



The offer to review a bike after recently moving on from being a full-time staff member was unexpected but by no means unwelcome. I simply assumed there was an extra bike that no one really wanted to test. You know the one I mean. You flick past it on your first glance through the issue and end up reading it last. I anticipated something mundane, something alloy, maybe even with a low-end groupset... gasp! I couldn't have been more wrong.

The courier nearly threw the BMC into the roof when he lifted it from his truck. A structure capable of supporting more than 100kg has no right to be this light. A bike of this weight shouldn't be this cheap either but I'll come back to that...

I was fortunate to travel to Switzerland in May 2008 to sample the first SLX01 Racemaster frames at the official launch of what was, at the time, BMC's latest offering (*RIDE #41*). The SLX01 is aimed at serious riders who place a premium on innovative design, build quality and individuality, if not the lowest possible weight. The underlying design concept is to divide the frame according to function. The 'backbone' is constructed from triple-butted aluminium and connects the head tube to the dropouts by way of the bottom bracket. A top tube, seat tube and seatstays in carbon-fibre suspend the rider above the super stiff bottom end, insulating him or her from road noise.

That was the theory. In practice I found the frame's success to be the result of carefully considered geometry as much as the material combination.

It was stiff, and the proprietary Streampost kept things comfortable, but there was no escaping the weight of the burly alloy sections. That didn't stop me from recommending the bike. It would relish the rough and tumble of racing without reducing the rider to a nervous wreck on training rides where an impetuous thoroughbred can quickly become tiresome. A selection of BMC Racing team riders chose the SLX01 for the 2008 and 2009 seasons and new recruit George Hincapie has already been spotted aboard a custom-painted example.

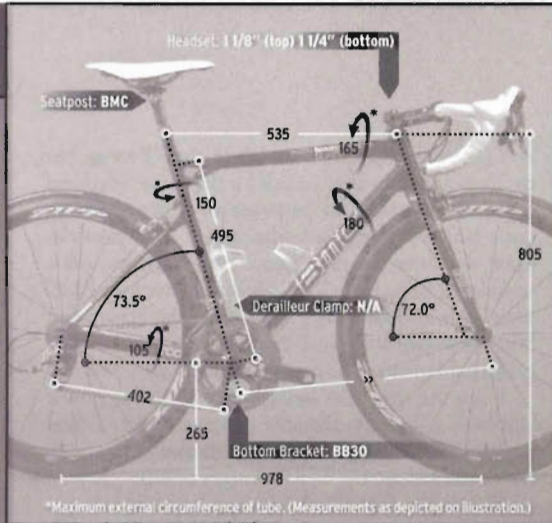
If someone offered me an SLX01 frameset that had somehow been stripped of more than half a kilogram I would be intrigued. The Swiss company has brought all of its composite expertise to bear to create just such a bike. The Racemaster and the new Team Machine featured here share the same basic silhouette: a straight fork, semi-sloping top tube, tall chainstays, truncated seatstays and a seatpost that emerges smoothly from a shapely seat tube.

Examining the SLR01 in person throws the differences into stark relief – there's a lot going on here – but further comparisons are a stretch; it's simply unlike anything else out there. The back end is what grabs your attention first. Yes, the seatstays

are slim in a Cervélo R3-sort-of-way but the intricacy of their profiling makes the Canadian design look unsophisticated. You might be predicting a basic rectangular profile but running a finger along the length of this slender span reveals a rhombus section that is mirrored about the centreline of the tyre. Braking performance is bolstered by an enlarged section that ties the stays together before the seat tube is introduced. Note the corresponding bulge in the fork legs just south of the crown? I couldn't help but admire the attention to detail.

As I've already made reference to Cervélo, I'll invoke an infamous piece of its marketing lexicon to describe the seat tube. 'Squoval' was used to describe a fingernail shape long before the R3 arrived on the scene but in cycling industry parlance it means a tube with a square profile and soft edges. Sharp corners create weak points in carbon-fibre tubing so you'll be hard-pressed to find a true polygon profile anywhere on a bicycle. Like many frames in the BMC range the Team Machine down tube is eight-sided. Does that make it 'octoval'?

The complex Crosslock seat tube/top tube junction seen on the previous Team Machines has been replaced by a simple triangulating member. I love the way the top tube dips down at the head tube to provide visual balance to that element. You could own this frame for years and still be surprised by



little features and details. I imagine the poor fellow charged with the task of machining the moulds for this frame broke down in tears when the CAD drawings were presented to him.

Readers may have noticed a change to the RIDE team. Alex Malone's capable hands stripped and rebuilt this bike before it was shot, jig tested and couriered to me for ride testing. In between the bike leaving Sydney and arriving with me, Rob Arnold sent up his impressions from a quick ride. I made a point of avoiding his comments – at least not reading them until I had sampled the bike for myself.

With my first ride over, I read his quick evaluation while I waited for the memory card on my camera to download. On nearly every point, I concurred.

*The 'sharp' bumps could be felt through the pedals but the feedback from the same piece of road reached the saddle more as a dull 'thud'.*

I've never ridden a frame with the same anti-climatic response to serious road imperfections. The seatpost undoubtedly plays a major role here, inhibiting the egress of shudders from the back end. Trace the path an impact must take from the hub to the saddle: through a pair of carbon dropouts, up the spindly stays, through every tube configuration imaginable before making the final run up the sculpted post to your posterior. Rob went on to describe a pronounced swaying effect when his cadence synchronised with the influence of a particularly severe rise. You can flex the Tuned Compliance Concept post fore and aft but I couldn't pick the regular oscillations when on the bike itself: they were lost in my pedalling action.

*It is very stable at speed but steers beautifully. It was easy to avoid a cateye reflector on the road with the front wheel but find it with the rear...*

Sometimes, with a build this light, it's no surprise to find a front end with a tendency to wander but the SLR01 tracks very well. The 3T handlebar and stem, SRAM levers, custom BMC fork and 303 front wheel may have the combined weight of a finger-less glove but this isn't a bike that requires constant corrections. I could choose to which side of a tiny stone I wanted the Zipp tubulars to pass or casually loft the front wheel over it and feel confirmation of its departure via the merest blip in the rear end.

The reach on the 50cm example was ideal but the head tube felt low. Even with what was (for me) an extreme position my lower back stayed quiet. Seatpost, take a bow. The next size up may have been a better fit but at the time of writing there were only a handful of SLR01 frames in existence. »

The rectangle profiled chainstay continues into the dropout very neatly. SRAM derailleurs require an exact set-up in position and quiet running of the chain.

All 3T Team bars have a white gripper interface – reducing the need for torque paste. The cables were wrapped on the fore of the bar, personal choice.

The shapes on BMC bikes are no mere regurgitation of preconceived notions of frame design: unique, beautiful and effective, the SLR01 is an impressive package.



SRAM's BB30 cranksets have a flatter profile from central axle to the pedal compared with traditional configurations. It offers more clearance for your ankle and less chance of buffing away the gloss coating like you see on many well-used bikes.



The seatpost offers a unique fastening mechanism. Instead of an actual clamp, BMC employs a plug wedge which sits inside the frame and is activated by a one-quarter turn of the allen bolt you see at the top. There are micro-adjust options on the internal unit.



The stainless steel headset races sit in carbon cups which are part of the frame. The lower housing accommodates one-and-a-quarter-inch bearing cartridges.



The shape of the seatpost and the low position of the seatstays gives the frame a plush quality. What can be felt through the pedals doesn't transfer to the saddle.



The forks have a straight blade but the lower section has significantly less bulk than up high. Not even the highly effective Red brakes could cause these to shudder...



Another angle of the low seatstay junction and the clamp-free area of the seat tube. By not having a round profile, the frame provides a degree of flex which is intentional.



The drop-outs are a continuation of the rectangular profile of the chainstays. BMC has really isolated the driving forces through the rear end by doing this...



Don't underestimate the clever configuration of the seatpost on this bike. It won't be long before other manufacturers try to mimic this cammed fastening.



Cables are sent to their respective regions with the most direct path possible – unlike the Pinarello for example, where there was a degree of compromise. With BB30 cranksets the spacers must be absolutely correct to achieve the right bearing compression.



BMC has included an aluminium reinforcement for the clamp area of the rear brake. The seatstays are thin and contribute to the ride quality and this insert (which goes through to the other side) means the calliper won't affect the frame's strength.

» I prefer the Rotundo models in the 3T range but the Ergosum is an ideal match for the longer platform of SRAM's levers. The drops get all of their bending done before doing much 'dropping'. This provides more usable real estate than a two-stage anatomic or a classic alloy bar. (The new distributors for BMC are also responsible for 3T and they plan to sell this bike as a kit, with you being able to select your preferred bar shape and/or stem size.)

I can see this bike being a favourite for power climbers and high-cadence gazelles alike. I find myself in the former camp more often than not and, out of the saddle, the SLR01 lunges uphill.

This is the first BB30 bike I've had a significant length of time with and I can see what all the fuss is about. This Red crankset is a true BB30 item (not a standard crank with an adapted bottom bracket) so the Q-factor is lower and heel clearance is improved. The little red highlights just so happen to match those on the frame and components too.

My list of quibbles is short. Chainstay clearance to a fat rim like that found on the 303 wheelset is minimal. I had this pegged as a source of trouble but, such is the stiffness in this area, there were no issues. Integrated cable guides are standard fare on leading frames but it makes adjusting the front derailleur more difficult in the workshop and adjusting both derailleurs impossible on the fly. An in-line adjuster is your only option here.

Domestically, 2010 is going to be a big year for this brand. The BMC team will show its wares at the Tour Down Under and Cadel Evans has taken a shine to the SLC01 Pro Machine for the moment.

The frame takes the concepts used in the Racemaster to their limit, in terms of both weight and performance. I would like to hang on to this bike until well into the year but I expect its rightful owner will be beating the door down any moment now. I would be. I think I'll borrow the closing thought from this particular bike's first pilot.

*Up hills, in the big ring, with the wind at your back, she sings. Wonderful. Indeed.*

(FOR PRICE, WEIGHT AND SPECIFICATION DETAILS OF BMC SLR01 TEAM MACHINE, SEE P.230)

WEIGHT: THE SUM OF ALL PARTS

Frame (bare, no fittings)	899g
Fork (with crown race)	304g
Headset (integrated)	133g
Stem	130g
Bar (no tape)	200g
Levers (pair)	290g
Wheelset (including skewers)	1,257g
Pedals	N/A
Crankset (excluding BB bearings)	641g
Bottom bracket (bearings)	46g
Front derailleur	70g
Rear derailleur	144g
Brakes (pair)	256g
Seatpost	240g
Saddle	238g
Cassette	152g
Chain	243g
Tyres	564g
Frame parts/sundry (33g/216g)	249g

WHERE IS THE WEIGHT?



What weight? This is a seriously light bike! It's even more impressive when you consider that there's nothing too extraordinary about the component spec. Yes, all very nice equipment and all of it well considered but at under \$10K, you get a lot of bike without any excess. A little contender for the 'Best Buy' category...!



**TEST JIG DATA**  
 ■ Bottom bracket.....0.28mm  
 ■ Head tube.....0.25mm  
 ■ Seat tube.....0.60mm  
 (40kg on crank)

[PS]



PHOTO: Sport - The Library