Tech Briefs

Rear Hub Device Enables Resistance Training

LAFAYETTE, CO—Riders looking to get a high intensity workout while riding with a much slower rider now can. Nathan Womack has invented a rear resistance device that he packages as part of a complete rear wheel called Slow Wheel. "A simple Allen wrench adjustment allows you to go from virtually no additional resistance to very hard," Womack said. And he notes it also allows cyclists to train for long climbs or mountain races or tours while living miles from the nearest mountain. Since Slow Wheel is a complete replacement rear wheel, it's easy to swap in and out. The machined aluminum resistance device mounts on the non-drive hub side and uses oil-impregnated nylon washers between its two halves to provide the resistance brake. Closing the quick release is enough to compress the mechanism against the dropout to keep one side from turning. Slow Wheel packages, which integrate with Shimano or Campagnolo drivetrains, start at $195 depending on rear-wheel spec.

Machines Satisfy New EU Test Requirements

PORTLAND, OR—Bikes sold into the European market must comply with new European safety standards. While suppliers say they do not expect current models will have problems meeting the new standards, they will have to satisfy new test requirements. Marchetti is offering two new testing machines, the ML 401 XPC Complete Bicycle Testing and ML 501 XPR Bicycle Wheel Testing, to carry out the safety tests required for compliance with the new European standards. "Given the weak dollar I don't expect these machines will be cheap, but they are something that might appeal to a large manufacturer," said Andy Newlands. Newlands, who owns Strawberry Cyclesport, distributes Marchetti tools and other framebuilding supplies through his distribution business Terra Nova Cycles. Marchetti is still determining pricing on the machines.

Industry Nine Delivers Light, Stiff 29er Wheel

ASHEVILLE, NC—Industry Nine has carved out a growing niche for its proprietary wheel designs, especially among 29er riders. Using its trademark straight-pull aluminum spokes, which are threaded into the hub shell, in combination with Stan's lightest ZTR 355 rim, the company delivers a 29er wheelset weighing 1,600 grams (56 ounces), lighter than many 26-inch wheelsets. "Stiffness is the issue for the larger 29er wheel, especially with these light 410-gram Stan's rims. Our aluminum spokes are lighter than steel, but they are much larger in diameter and this really adds to the lateral strength of the wheel," said Brandi Goff, Industry Nine sales rep. And reports from the field say the company hit its mark: a light and stiff wheel. The company recommends the ZTR 355 wheelset for racing only; for general trail riding it steers riders toward Stan's beefier Arch and Flow rims—all of which are tubeless ready. It also builds 29ers with DT Swiss' rims. Industry Nine 29er wheelsets start at $890 and go up in price depending on rim choice.

Hope's Super Disc Brake Has Pair of Pistons

MONTGOMERY, TX—Hope Technologies has been adding pairs of pistons to its disc calipers to give extreme riders more braking power. Its latest extreme riding disc system, Moto V2, is back to two cylinders, but with big one-inch pistons. And for the first time Hope is offering a vented rotor with about a two-millimeter gap between braking surfaces for cooling. "The larger pad and the vented rotor should keep things cool, and reports are it is noticeably better braking than the six-piston Mono Six," said William Dean, Hope USA's vice president. Dropping back to a two-piston caliper also stiffened the caliper, something that could have been reduced by adding pistons to the Mono Six. The inch-wide piston means the rotor's brake track is an inch wide as well, making it more like a motorcycle brake than a bike brake. The increased size of the system adds weight, but that size also dumps heat better so fade should not be an issue. Riders purchasing the $325 Moto V2 can choose a vented or a floating rotor.