

Tech Briefs

Quick-Release Skewer Is Light, Works Right



TUCSON, AZ—Lightweight quick-release skewers promise to shed grams in a relatively simple way, but they can be fiddly and slow down wheel removal. To remove weight many manufacturers cut down quick-release cam and washers so much that they can fall out of alignment when the lever is open. To keep its quick release light and easy to use, KCNC developed a ball-and-socket design that always remains in alignment when the skewer

is open. A pair of skewers weighs only 46 grams. “Light skewers slow down wheel removal so much that many racers will not use them in competition. Usually the cam and washer need to be realigned before the QR lever can be closed,” said Jason Woznick, general manager of Fair Wheel Bikes. “The cup design on the KCNC is so deep that everything remains in alignment when the lever is opened. It is as quick to use as a Shimano lever but much lighter,” he added. Woznick noted that the design’s larger surface area makes it immune to dirt and sand. The \$60 road and \$65 mountain bike KCNC quick releases use titanium skewers and anodized aluminum cup and socket. They are available in a variety of colors.

Tool Speeds Up Nipple Insertion in Deep Rims

SANTA FE, NM—Getting spoke nipples threaded onto spokes in deep section rims can be a trying experience. Some wheel builders thread the nipple backwards onto another spoke and then reach down and spin it on, only to have the nipple fall off and get lost rattling around somewhere inside. Alchemy Bicycle Works owner Jeremy Parfitt has dealt with this issue for years and developed a simple tool to make the process less painful.



“Working with deep-section rims can be such a nightmare and nothing out there really helps. So I came up with this simple tool and it really works great,” Parfitt said. The \$24 Nippler allows adjustable thread depth and works with any standard or internal 14-gauge nipple. The ability to set thread depth allows each nipple to be threaded to exactly the same point on each spoke, which speeds building. The tool has a rotating finger bezel for easy turning and stable use. This is the first in a line of wheel-building tools Alchemy hopes to develop over the next few years.

Zipp Tunes Up Rim, Tire System Aerodynamics

INDIANAPOLIS, IN—Zipp’s new Tangente clincher and tubular tires complete the aerodynamic engineering the company has put into its rim profiles. The tires and Zipp’s latest generation of rims were developed as a system over months of design revisions and wind-tunnel testing. Not surprisingly, both use dimpling. “By adding dimples to the sidewalls of the Tangente tires the air slips easier over the transition between the rim and tire. And we chose tire sizes, like the 21-millimeter clincher, that transition smoothly into our toroidal rim designs,” said Andy Paskins, Zipp’s marketing manager. While Zipp’s tires work on any rim and its rims work with any tire, they both work best together. Zipp also improved rolling resistance by switching to a cotton base tape on its tubular and using a 290 tpi Corespan fabric casing on both tires. In addition to improving aerodynamics, Zipp learned that the dimples resisted the development of sidewall cracks. This allowed the company to use a faster-rolling tread compound. The company estimates its new tire and wheel systems can save up to eight watts over competing tire and wheel systems.