

Tech Briefs

Custom Wheel Builder Crafts His Dream Hub

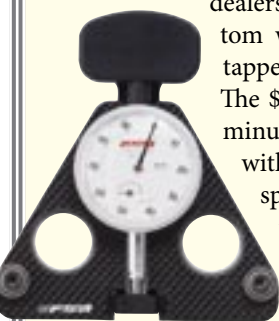
SANTA FE, NM—Jeremy Parfitt of Alchemy Bicycle Works has teamed up with Dave Batka at Wheels Manufacturing to produce a line of hubs that incorporate the features he wished for as a custom wheel builder. “Bracing angle is so important to wheel stiffness that I moved the flanges out as far as possible. In general, you can drop four spokes over traditional hubs for big weight and aero savings,” Parfitt said. He along with wife Sarah



own Alchemy Bike Works, a custom wheel parts distributor. With an 82-millimeter flange width, about 10 millimeters wider than normal, the front hubs will weigh 64 grams and be available in drillings from 16 to 32 holes. In addition to being widely spaced, the flanges are angled six degrees inward. “Other lightweight hubs reduce bearing size to save weight, but the smaller balls do not take as much load and are more sensitive to debris. I opted to use large 6900 series bearings, so this hub will work for mountain bikes,” Parfitt said. Even so, Parfitt is developing slightly beefier mountain bike-specific hubs. Parfitt wanted the bigger, heavier bearing, so to save weight he moved the bearing outboard as far as possible—94.5 millimeters from outside edge to outside edge. “Any space between the bearing and dropout is a lever arm that can cause bowing of the axle internally. Moving the bearings out lessens this leverage so I could take weight out of the axle and still keep it stiff,” he said.

FSA Taps Jobst Brandt to Design Wheel Tool

KENMORE, WA—Pre-built wheel prices have skyrocketed to a point that some dealers are re-entering the wheel-building business. To serve custom wheel builders and help maintain high-end wheels, FSA tapped wheel guru Jobst Brandt to design its spoke tension gauge. The \$250 gauge can go from steel butted to steel bladed to aluminum round or blade to titanium and to carbon fiber spokes without complicated charts or calculations. It’s unaffected by spoke thickness and allows dealers to check composite spoke tension on Mavic R-Sys, Lightweight or Topolino wheelsets.



“With ready-made wheelsets costing from \$100 to \$15,000, a dealer can deliver competitive custom wheelsets in the \$500 to \$2,500 range,” said Ric Hjertberg, new technology manager at FSA. Hjertberg said a dealer can set up a wheel-

building center—stand, dish tool, tension gauge and spoke wrench—for about \$500. “Our gauge uses the weakest spring in the business, and therefore makes the smallest spoke deflections. This means the mass and stiffness of the spoke material is nearly removed from the equation,” Hjertberg said. This low-tension spring allows the gauge to be used on carbon spokes.

American Classic Revamps Flagship Seatpost

TAMPA, FL—American Classic is celebrating its 25th anniversary by redesigning its flagship seatpost clamp, which just received a U.S. patent. “Our original seatpost was a signature product of American Classic. I enjoy a challenge and it was time for a new concept unlike anything else available,” said Bill Shook, American Classic’s founder. The company’s new seatpost features a single clamping bolt and a head that follows the curvature of the top of the post. The design is simple to set up and adjust. A unique feature of the head is that it can be tipped slightly to the side to correct leg length or hip problems without shimming shoes. “The tubing is 2014 aluminum for those who are tired of the problems associated with carbon posts. It is as light as carbon. The 27.2 diameter post weighs in at 150 grams for a 235 millimeter road version, and 200 grams for a 350 millimeter mountain bike length,” Shook said. Overseas patents are pending. American Classic’s road post will sell for \$120; its mountain version will sell for \$125.