## **Tech Briefs**

## **Sports Tops Come with Heart Monitor Sensors**

WILMINGTON, DE-Numetrex has come up with a solution for riders tired

of adjusting heart monitor chest straps or those worried about the slow buildup of abrasion scars. The company offers a sports bra, a men's sleeveless top and a women's tank top that incorporate heart rate monitor technology. "Quite a few long distance runners say repeated chafing by the chest strap leads to scarring. Since our sensors are in the garment, there is no need to pull up on the chest strap," said Anette Barba, a Numetrex spokesperson. The company has fielded requests for a cycling-specific top, which it may offer in the future. The three Numetrex tops integrate with most analog heart rate monitors that work at a 5.4 kilohertz frequency from Polar, Oregon



Numetrex's sports bra with heart rate sensors.

Scientific, New Balance, Nike, High Gear, analog Suunto, Sigma, Ekho, some Timex and others. The tops will not work with digital signals. The system was designed around Polar's Wearlink sender unit, which slides into a pocket and picks up the signal from woven-in sensors. Numetrex also can supply a generic analog sender that works with many non-Polar monitors. Once the transmitter is removed, the tops can be washed in warm water and tumbled dry on medium setting. The sports bra sells for \$50, the men's sleeveless top for \$59, and the women's tank top for \$56. Retailers can contact the company through its Web site, www.numetrex.com.

## California Retailer Develops New Stem Design

PASADENA, CA—Steve Lubanski's Pasadena Bicycle Manufacturing Company is just a few feet away from his Open Road Bicycle Shop. When not on the floor he is busy at work on a range of new component designs. Currently, Lubanski is in the



final prototyping stage of a new stem design. "Most stems have at least four bolts showing—some have six. It's like driving around in a BMW with all sorts of bolts popping up through the hood," Lubanski said. "On my wedge design all the bolts are hidden, and even if a bolt breaks, the wedge keeps everything secure," he added. The stem features a continuous wrap-around

strap to clamp the steerer, as well as a wrap-around front plate. Both are tightened with lockable wedges. "The design is ideal for carbon as there is no pinching at all," he said. In the standard 200-gram form, Lubanski adds a collet that fits around the steerer. This allows plus or minus 1 centimeter of fore/aft adjustment and the rider can vary rise or drop angles. A colletless lightweight version weighs 150 grams. Lubanski hopes to license the design to a larger manufacturer.

## **Sew-Up Tape Replaces Glue for Mounting Tires**

NELSON, British Columbia—According to Tufo North America's Vladimir Juhas, Tufo is producing more tubular tape than ever before but demand keeps over stripping supply. "Demand has grown quickly in road, cyclocross, track, triathlete and mountain bikes, though mountain bike use is still limited to racing," Juhas said. He thinks Tufo tape's popularity is due to its quick turnaround—just tape and go—as well as its proven reliability. "Using glue it takes two days to mount the tire and another day to dry. With tape as soon as the tire is mounted it is ready to use," Juhas said. Tufo now offers tape in three widths. Its 25-millimeter-wide tape is for 26-inch mountain bike tubulars; its 19-millimeter-wide Extreme tape is for road tires; and its Standard 16-millimeter-wide tape is popular with cyclocross racers. The tapes sell for \$13, \$10 and \$6, respectively, and are enough for one tire. Juhas said the tape is for single use only. When a rider removes a tire the tape remains on it, leaving the rim clean and ready to mount a new tire.