

January 06, 2016



FREE

Training Zones		
1	ACTIVE RECOVERY	> 9.53 min/mi
2	ENDURANCE	8.91 - 9.39 min/mi
3	TEMPO	8.37 - 8.81 min/mi
4	LACTATE THRESHOLD	7.89 - 7.92 min/mi
5	ANAEROBIC	< 7.91 min/mi



BSXinsight Muscle Oxygenation and Lactate Monitor

bsxinsight.com

Want the competitive advantage professional athletes gain from expensive and uncomfortable lab testing in an affordable, wearable device that syncs to a really slick smartphone app without the expense and painful finger sticks at the lab? That's the promise of the BSXinsight. I'm a geek for data, so this sounded like something worth testing.

My test model arrived right after Christmas. Out of the box, through a quick charging cycle and off to the gym I went in search of a treadmill on which to do the app-driven running endurance test. *Suggestion: don't forget to grab your heart rate monitor if you want that data to track along with what the device provides.*

The Test

After inputting some personal information and training and racing data (conversational pace/mile, estimated 10K pace/mile, consecutive months of training, days/week and weekly mileage), I was underway. After a three-minute walking warm-up, the app directed me through increases in running pace every three minutes until I'd had enough. Recommended minimum test time is seven stages (21 minutes). I went 33 minutes just to be safe.

The Output

I hit 'Stop' and as I cooled down, the app directed me to save the test so it could crunch the numbers. For me, the visual display of my estimated anaerobic capacity and the training zones corresponding to it were both interesting and useful. I was motivated immediately to train, improve and test again.

The BSXinsight app also includes an endurance test for cyclists. It is ANT+ compatible, which means it can send data to the display on your GPS watch, your bike computer and/or power meter during workouts. Battery time is about 10 hours. It is sweat resistant, but not waterproof, so swimmers will have to wait for the next generation.

Beyond testing, it can be worn for all training sessions to track similar data.

Conclusion

I loved this thing! Prices range from \$299 for the running only model to \$419 for the multisport model tested (free shipping included). The value here is in being able to test, train, re-test, adjust your training and test again. If you're motivated by the measurable and repeatable aspects of training, this is a great tool for your competitive toolbox.



Stridalyzer Smart Insoles

retisense.com

Ever had a running coach, orthopedic doctor or shoe salesperson recommend that you stop pronating, supinating, overstriding, heel-striking or running on your toes? Stridalyzer smart insoles close the loop between trying to apply the tips you've been given and knowing what your body is actually doing when you run. They provide real-time feedback on stride rate, stride length and ground contact time, and give graphical and audible running form feedback and foot and knee stress alerts via the free smartphone app (Apple, Android compatible).

Setup is simple. Charge them with the included mini-USB cable, insert them in place of your stock insoles, pair them via Bluetooth with your phone's Stridalyzer app, and you're ready to run.

Running on a treadmill with the app open and in direct line of sight worked well for our first time. The graphical foot and knee stress display was interesting and somewhat useful (green contact zones are good, red ones are bad). Starting the app after a thorough warm-up was completed and my running form had settled into normal mode provided more valid feedback than a pre-warmup start did.

Post-run analytics and guidance on the website were helpful and easy to navigate. Repeated use will allow you and/or your running coach to analyze the hard data, make form adjustments, and track improvements from one training session to the next. Though there's no substitute for listening to your body when you train, but having some hard data from these insoles to go along with it is a smart play.

Conclusion

With the ongoing debate about heel striking versus mid-foot striking and which works best for performance and injury prevention, Stridalyzers are a tool with potential to help both competitive and recreational runners. The entry level Marathon version (\$99) and Performance version (\$129) will set you back less than a pair of running shoes. Just prior to press time the Stridalyzer pod (\$39), an under-insole or laces-mounted mini-version with some of the same measures, was added to the product lineup.

