

Where are we? As a coach, I hear this question a lot. Athletes are in need of knowing, "is the work and time I am investing in my training paying off?" It has been my contention for years that athletes that use a Periodized approach to training in association with a power meter can answer this question.

I use a Tempo Pace Test to mark increments of Rate of Work Ability. In other words, I ask athletes to ride at a certain exertion level or heart rate for certain durations of time to establish the rate of work (or Power) that can be produced at that exertion. Since we use this test at the same time of each training mesocycle (the end of each 3 or 4 week block) I find it is a good test in that its results are reproducible. I know hydration status, sleep and other things will influence these results and after talking with the athlete after each test we can determine if the data is truthful and useable or an outlier and needs to be discarded.

This past week was another opportunity for an athlete to get such a glimpse of "Where we are?" This test was a big one because this athlete just went through a traumatic experience both mentally and physically. You see, he crashed and fractured his pelvis in July. Because of his injury it meant time off the bike. This usually means a drop in fitness and mentally leaves the athlete with questions like, Can they reach the same levels again, if so how much and many others. I assured this athlete from my professional and personal experience he would be able to overcome it in time.

This latest test helped put all the questions to rest and we both felt the big exhale after we got a look. This Tempo Pace Test was done at 158 bpm for 20 minutes. This intensity represents an exertion of about 10 beats below what can be considered his Maximum Lactate Steady State, Onset of Blood Lactate Accumulation, Lactate Threshold or a Sustainable 80-90 minute effort. I have found with great reliability that it represents 91-93% of the person's Functional Threshold Power.

After returning from the USA Cycling 2008 Coaching Summit I feel even more confident in this test. More than one presenter mentioned that maximum tests, like full blown ramp tests and or VO2max tests take a lot of the athlete. Tests at sub-max levels can be done more often to monitor progress.

This test was very impressive and taught me this athlete might never have been as fresh as we might like for optimal performance. After some forced time off, focusing on flexibility, recovery and maintaining as much aerobic fitness as the injury and recovery process allowed he trained in a low-moderate steady state for just seven and half weeks before performing this test. Over the past 4 years, at this same time of the year (which is the beginning of the Base Period) we have done this test. For his 2006 season at the beginning of base he produced 244 watts at this intensity, at the start of the 2007 base building he did 288 watts, at the beginning of his 2008 he did 304 watts and last week at the beginning of his 2009 Base building campaign he did **323 watts**. This was a great improvement. While he has reached these levels while building his base in the 2007 and 2008 seasons never has he reached it this early. In the 2007 season he reached it in March (which was actually just after completing Base) and in the 2008 season he reached this level in February, which was just at the end of Base. Heading into Base and hitting this number is very exciting since all 3 of the previous seasons have produced State Masters Time Trial Championships. So, if you are not using a Periodized Training Plan and a power meter I guess my question to you might be "So, Where are you?"