



August 2005

Coach's Wheel – 5 W/K for 5 minutes

Five watts per kg for 5 minutes. This is a pretty good benchmark for local racing. If you can maintain five watts per kg for 5 minutes going uphill, you will have pretty good success staying in the category three or masters 35 plus field.

Over the last number of years, I have had the opportunity to gain enough data with power meters, from a few different riders, to determine what kind of climbing pace is needed locally. The best example of this comes at the Minnesota State Road Race near Zumbro. Climbing out of the valley takes about five minutes. If you are averaging 4.8 watts per kg up the climb, you will find yourself chasing over the top. If you average 4.8 watts per kg in the masters 4/5 race, you will be on the front of the field. I don't have any direct data for the category 1/2 race, but I'm sure about 5.2-5.4 w/k will keep you in the action.

Remember Zumbro is about a five-minute climb. When you race at Ken Wood's, the climb is shorter and not as steep. Plan on about six watts per kg for two minutes to keep up. Short, rolling hills that are often sprinted required 7-9 w/k.

Also of interest is the "neutral" first half of the climb at Zumbro. In two separate races, wattage required to keep up was the same with half the climb "neutral" as it was with the race full on. Now the wattage requirement tails off a little bit lap after lap. But, you will need to be close to this mark for four or five times up the hill to be competitive.

If you own a power meter, racing with it is critical! You truly learn the demands of racing by keeping track of wattage. The race is not going to wait for you. Racing brings out the highest level and demands the most of a rider. Training can prepare you for this, but almost never puts the same stress on your systems.

Floyd Landis rode almost the entire Tour de France this year with a power meter on his bicycle, with the expressed goal of learning what is needed to reach the top at this level of racing. (Bicycling magazine's web site had daily articles by Dr. Alan Lim reviewing Floyd's data.) Similar data is available for Jens Voigt from the 2004 tour when he was in a break all day.

Once you know the demands of racing, you can adapt your training to reach this level. I stated that 5 w/k for 5 minutes is needed to keep you in the race like Zumbro. How do I achieve this? Do you get a better average wattage with a high cadence, attacking hard at the bottom, being steady, or surging at the top? Should you stand while climbing or sit. Does the strategy change as the climb gets steeper? All this can be studied with a power meter. You can't do it with a heart rate monitor.

Don't just go out and ride at 5w/k for 5 min. Lets assume that you can do at least one climb at 5 w/k. Arrange your training to spend time above this mark and below it. Plan climbs that take 6 minutes at 4 w/k and repeat this 4-8 times. Then find shorter two and three minute climbs where you push 6 w/k repeatedly. About every third week, go back to a five-minute climb and try and get up five times at race pace. You should begin to see adaptation in about four to six weeks.

Now take your power meter and figure out what wattage you are producing for a time trial, in a paceline, or at the Saturday morning world championships. Once you examine the demands of your event, you can modify the training to meet the demands.

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