

Warming Up in Slalom

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During this past Senior and Junior Team Trials I observed how the athletes were preparing for the races. I noticed that not many had a complete and well-structured warm-up. Warming up is not hard and does not take a lot of energy. By not warming up properly, the athlete risks performing below his/her potential, and wasting a lot of hard training.

Why warm up?

- better performance at the race or workout;
- more efficient workout;
- injury prevention.

1. Competition warm-up:

The competition warm-up should include mental, physical and technical warming up.

All 3 parts can be partially separated and partially happen at the same time. The goal of the mental warm-up is for the athlete to bring him/herself to the optimal mental state. This is a state that gives the athlete the best chance for high performance. It is different for every athlete. The best athletes often discover what this is through past experience of better and worse race performances. A Sports Psychologist can also help an athlete find out what the optimal mental state is, and develop methods to reach the optimal mental state for the most important competitions. It means being excited or relaxed to the right level, having the right focus, thinking positively, having a well-memorized plan for the whole course, etc. A good way of mental warming up is to visualize the race run, including all the feelings and thoughts that the athlete wants to have during the run. This can be done very efficiently during a paddling warm up, by simulating a race run on whatever water is available, using imaginary gates, and simulating all the race moves. All the emotional part of the race should be included, not just technical execution of moves. Physical warming up should include warming up all the systems that are involved in providing energy for the race. These are Aerobic, Anaerobic Lactic, and Anaerobic Alactic or ATP-CP. I normally recommend athletes to set a warming up protocol and stick to it all the time. This way you do not forget anything and you know exactly how much time to plan for warming up. Here is one example of a race warm-up:

1. 5' general mobility out of the boat (light flexibility and stretching exercises -light dynamic stretching is better than static stretching at this time.)
2. 7'-10' aerobic paddling-continuous, start easy and gradually increase pace to reach HR about 170 to 180 by the end of it.
3. 3' specific stretching in the boat. Just enough to reach optimum flexibility. Do not over do it. Too much stretching can lower your power.
4. 5' stroke drills and boat control drills
5. 7' ATP-CP sprints. 3-5 x 6" -10" sprints with 60"-90" rest.

6. 7'-10' Technique warm up. Ideally in the gates, if they are available and executed at race pace. Short courses (10"-20") to include all basic slalom moves - upstreams, offsets, reverses, etc. If possible simulate moves that are in the race. Look for similar up's or reverses or offsets.

7. 2'-3' Simulated race run. On flat water, execute a race run at or just slightly below race pace using imaginary gates and simulate all critical strokes. The pace for this run depends on how much time you have till your race run. If there is 30' or more time till your run, than you can do it at race pace. If it is less, than you need to do it at slower pace so that it does not get too lactic.

8. 5'-10' Warming up Anaerobic Lactic system. It is recommended to do this only if you are doing a double warm up. You need 30' to 45' rest after this to be ready for the race run. It consists of 1-3x 30" to 45" all out straight sprint and 3'-5' active rest in between.

If this was a first part of a double warm up, the remaining time should be spent by light stretching and moderate activity, so that the effects of warming up do not get lost too much. This is also a perfect time for mental preparation and final confirmation of a race plan and strategy. The final pre-start warm up can be short, just enough to do a couple of short sprints and stroke drills and to get the HR a little higher. 10' to 12' is normally enough.

In case of a single warm up, you can use similar protocol, just spend a little less time on each step and be careful with the Anaerobic Lactic part. You need to move it earlier into the warm-up, so that you have enough recovery time before the start. If the race situation permits, I always recommend a double warm-up. Exceptions should be made if the weather is extremely cold, or if you cannot have one hour after the warm up.

2. Warm-up for Endurance Workouts:

For Endurance Workouts the main thing is to get the HR gradually up to the optimum level. What the optimum level is depends on the type of Endurance Workout. For below threshold intensity there is no real need for a special warm up since the HR will be relatively low during the whole workout. For Threshold intensity workout, where the HR is normally between 170 and 180, I recommend spending at least 5' to 7', to get gradually up to targeted HR. Trying to get up to the right HR too fast will cause significant involvement of Anaerobic Lactic metabolism and the efficiency of the endurance workout will be compromised. The same thing is even more important for VO2 Max (HR 180-Max.) workouts. I recommend to take 5' to 7' to get up to Threshold level and than do at least 2-3x 3'-4' at threshold HR, before switching to VO2 Max HR.

Even if it is not very important for the efficiency of the endurance workout to do the flexibility and stroke drills exercises, I always recommend doing them, especially if the Endurance workout is in the gates.

3. Warming up for High Intensity Workout:

For any high intensity workout the warm-up is very important. It should start out of the boat with mobility and flexibility exercises, continue in the boat with aerobic paddling for 5'-10' (get HR up to 170), than go to basic stroke drills, stretching in the boat, and finish with some short sprints. During this time it is also important to mentally prepare for the workout. Set goals and objectives for the workout. Visualize ideal technical execution, etc.

A few general guidelines about Warming Up:

- The older you are, the longer it takes to warm up.
- The better shape you're in, the longer it takes to warm up.
- The higher the intensity and technical requirement of the workout, the better the warm-up needed.
- Earlier in the morning, the better the warm-up needed.
- The colder the weather, the more warming up.
- When recovering from an injury, a more complete warm-up is needed.