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News

☺ Intensive testing of the National Team members was undertaken in June. From 29/05 until 27/06 total number of 64 athletes were tested in 13 boat types and 44 testing sessions.

After biomech. testing of LM2x in Penrith.

Facts. Did You Know That…

✓ …having "prognostic" times and an equation of dependence of the stroke rate on boat speed (1), "prognostic" stroke rates could be estimated for different boat types. Here they are (in Str./min):

W1x	M1x	W2-	M2-	W2x	M2x	M4-
35.2	37.3	36.2	38.3	37.0	39.0	40.0
LW2x	LM2x	LM4-	W4x	M4x	W8+	M8+
36.6	38.5	39.8	38.8	40.6	39.5	41.4

These rates could be used as targets in training or as average values for evaluation of races.

✓ …for different boat speeds you should adjust proportionally both stroke rate and distance-per-stroke. If the boat speed is in a range 80-120% of the "prognostic" speed, then for stroke rate simply take an average of the speed percentage and 100%. For example, if the boat speed is 94% then the stroke rate should be 97% of the "prognostic" from the above table. For lower speeds use square the root of their percentage.

✓ …our measurements showed that new "vortex" blades has a position of the center of pressure closer to the edge than normal blades. This makes them look like an oar with a longer outboard, though geometrically it is the same. Longer outboard decreases relative pressure on the blade at the same torque applied by the rower and makes the blades a bit more efficient.

Ideas. What if…

? …you reverse the direction of a pitch adjustment, when you use it for blade depth correction? For example, usually, you try to increase pitch if the rower puts the blade deeply. However, if the reason is a technical fault (non-horizontal pull), then you just help the rower to practice wrong technique! May be you should reverse the adjustment and decrease pitch for a while. This could make the rower very uncomfortable, but this would push him/her to change the technique in the right direction. After you see some positive changes, you can set up normal pitch again;

? …you use light rowing as a tool for technique improvement. Why do we even use a different word "paddling" for light rowing? Does that assume a different technique? However, swimming coach Gennadi Touretski widely uses light swimming in training of Olympic champions Popov and Klim. He says that maintenance of proper rhythm and movement structure at a low rate and force application is very important for the development of the efficient racing technique. Try to achieve proper stroke length and segment sequence, better muscle relaxation and "boat feeling" at light rowing. It is much harder to do during full pressure rowing, because strong muscle innervations partly block signals from proprioceptors (sensors that detect muscle stretching) and increase the muscle relaxation time.

References

📖 1. Kleshnev V., 2001. Racing Strategy in Rowing During Sydney Olympic Games. www.sportscoach-sci.com

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