

Rowing Australia 2000m and 5000m Ergometer Test Protocols

The purpose of the 2000m and 5000m ergometer tests is to assess and monitor changes in ergometer rowing performance. The aim for the athlete is to cover the required distance in the shortest time possible.

Equipment

- Stationary Concept IID or IIE rowing ergometer
- Fan or air conditioner
- Scales
- Air temperature monitor
- PR1 and PR2 Para Rowing athletes are to complete testing on machines that have a fixed seat.
- Para Rowing athletes with a visual impairment are able to use additional software/equipment aides that provide the athlete with basic performance data during the test.

Test Environment

- Indoor well ventilated venue.
- Air temperature 18-23°C (ideal), this must be logged.
- Relative humidity less than 90%.
- Air conditioners and fans are allowed but must not be directly blowing on the resistance fans of the ergometer as it can compromise performance.
- Ergometer should be adequately spaced to ensure sufficient air flow around each athlete.
- Ergometer braces (i.e. weights, dumbbells etc) are suggested to ensure ergometer does not move during the test.

Test Procedure

- Record all required information using the electronic data submission sheet (i.e. time of test, laboratory environmental conditions etc – Please see Notes and Appendix below).
- Measure and record athlete's body mass wearing light clothing (e.g. zootie), this must be verified by the venue coordinator.
- At test time, information may be captured and handwritten on the supplied "Handwritten Data Sheet" but must be transferred to a single electronic sheet prior to submission to RA.
- Attach a heart rate monitor (if being used) and ensure it is working correctly.
- Ask the athlete to adjust positioning of foot stretchers.

- Instruct the athlete to take a few strokes to set the appropriate drag factor (see drag factor settings below).
- Allow athlete to complete an individualised warm up.
- Set the monitor on the Concept II Rowing ergometer for appropriate test distance (i.e. 2000m or 5000m).
- Fully explain the test procedure ensuring that the rower understands that they are required to complete the set distance in the shortest possible time.
- Ensure that the flywheel is completely stopped before commencing the test.
- Instruct the athlete to commence the test when instructed to do so.
- It is strongly encouraged that the tests be conducted with no external coaching.
- At the end of the test, record the following data from the work monitor memory (not the final image from the test:
 - Total time (mm:ss.0)
 - Average 500-m pace (mm:ss.0)
 - Average power output (W)
 - Average stroke rate (strokes·min⁻¹)
 - Split data can also be recalled for various intervals if desired (usually average pace and stroke rate over each 500m interval).
- Alternatively, save each test effort using appropriate PM4/5 interface software and or LogCards.

Appendix | Ergometer Drag Factor Settings

Category	Drag Factor
Junior Female	100
Lightweight Female	100
Heavyweight Female	110
Junior Male	125
Lightweight Male	125
Heavyweight Male	130
Para Rowing	Unrestricted

Appendix | Data Templates

[Electronic Data Submission Sheet](#)

