

30 minute Rate 20 Test Administration

The purpose of the 30 minute rate 20 test is to assess and monitor changes in ergometer rowing aerobic strength endurance. The aim for the athlete is to cover as much distance as possible in 30 minutes at a maximum of stroke rate 20. Importantly, if any individual interval has a stroke rate average greater than 20, the test result will be deemed invalid. It is not sufficient for the average stroke rate across the entire test to be 20.

Equipment

- Stationary Concept IID or IIE rowing ergometer
- Fan
- Phone / camera to capture monitor screenshot

Test environment

- Ideally, the 30 minute rate 20 test should be completed in a thermoneutral environment (air temperature 20-23°C) for standardisation, however this may not always be possible. Importantly, a test environment with a high temperature and/or humidity may compromise performance.
- It is recommended that the athlete has substantial air flow throughout the test, ideally from a fan directed towards them. This will help reduce excessive elevation in core temperature and optimise performance. It is important that any fan is directed towards the athlete and not the ergometer fan as this would compromise the ergometer's performance. At minimum, the test should be conducted in a well ventilated area with some air flow.

The following list represents the order in which each test should be completed.

1. The athlete should weigh-in prior to the test wearing only their zootie and record their body weight for submission.
2. Adjust the ergometer drag factor to that appropriate for their category (see Drag Factor Settings table below).
3. Undertake individual self-selected warm-up. It is recommended that athletes warm-up for a minimum of 15 minutes, including intervals at their 30 minute rate 20 test intensity.
4. Program the Concept monitor for a 30 minute piece and ensure that the interval is set to 6 minutes.
5. Start rowing and complete as much distance as possible in 30 minutes at rate 20.
6. After completion of the test, take a photo of the Concept II monitor displaying the test data in time, meters, watts and stroke rate.
7. Email the test data photo, **on the day of the test**, to the following:
 - a) If you are an NTC athlete, your relevant coaching group and sport scientist for recording.
 - i) Women: John Keogh, Ellen Randell, Tom Westgarth, Erin McCleave
 - ii) Men: Ian Wright, Mark Prater, Andrew Randell, Nathan Versey
 - b) If you are a non-NTC athlete, to your State Head Coach **AND** to the relevant NTC coaching group.

Drag Factors

Athletes are to select their appropriate drag factor from the table below.

| Category | Concept II Drag Factor |
|-------------------|------------------------|
| Heavyweight men | 130 |
| Lightweight men | 125 |
| Heavyweight women | 110 |
| Lightweight women | 100 |