

For the boys. For our future.



CHRIST'S COLLEGE
CANTERBURY

Indoor Rowing Tank Training Facility



New Zealand's best indoor rowing tank

How does a tank work?

The design will cater for a single scull option up to an eight-oared “boat”, which sits in a specially designed tank. The Christ's College tank will be the latest concept, which is called an “athlete powered tank” rather than the traditional “mechanically powered tank”. With the athlete powered tank, the water motion that the tank relies upon to create a realistic rowing feel is generated entirely by the rowers, rather than the water pump mechanical versions.

The chosen version has two modes: static and dynamic. In dynamic mode, the boat glides up and down, mimicking the motion of a boat in the water, whilst in static mode it remains stationary, allowing



Rowing Tank (Example only)

rowers and coaches to concentrate on specific areas of the stroke without the added distraction of a moving shell.

What are tanks good for?

Rowing tanks have been used for more than a hundred years for teaching rowing and for indoor training. Moreover, they allow all year training regardless of weather conditions. They are very good for novice rowers, offering a quicker and safer learning option for practice rather than risking difficulties on the water. The latest designs provide exceptional technical rowing analysis. It allows coaches to be right alongside the rowers to get real time feedback and analysis without being on the water to do so.

How do you use them to teach rowing to novices?

One of the difficulties in teaching novice rowers is that the feelings and motions of rowing are not natural or necessarily intuitive. It is easy to develop bad habits early on. Putting eight novices in a narrow expensive shell on a river or lake can be challenging, disorienting for the kids, nerve-wracking for the coach, frustrating for both. The coach (from a separate boat) uses language which is new to the novices to teach them movements that are unfamiliar and subtle to learn. It is much easier if coaches can be physically next

to the athletes, in a tank, where they can guide the oar, demonstrate proper rowing technique, slow everything down, and talk without shouting.

How is it useful in coaching experienced rowers?

Tanks can help refine the skills of even the best rowers. Tanks provide all year round use regardless of weather conditions, thereby keeping programmes on course and up to date. They are sometimes used after an on-water practice, to drill technique without the various hassles and distractions of outdoor training.

How do tanks fit into winter training?

There are three main training tools when you can't be out on the water: ergs, weights, and tanks. Ergs are great for building aerobic capacity, but poor for water feel, do nothing for technique or timing, and used alone can result in boats full of fit athletes who have poor technique, and no idea how to row together. Weights are best for building strength and explosive drive. Tanks are best for technique, helping refine water feel, honing good “catches” and “finishes”, and working on timing throughout the stroke.

Can they be used for individual practice?

Tanks are also a place where individual athletes can work on their technique alone, with a partner, or one-on-one with a coach. This allows ambitious rowers to improve on their own. Coxswains can run a practice, teaching leadership and control.

Does video fit into tank training?

A key feature of the tank is live video coverage. The tank is fitted with several cameras, which film the rowers to the side and directly above. The footage can then be projected onto a screen at the front of the boat, allowing rowers and coaches to observe technique and make adjustments. Similarly, the video can film the whole crew, and analyse strokes either in real time, or later in slow motion.

Can you monitor performance with a tank?

The rowing tank contains a “force management system” which can speed up the mastering of efficient rowing technique and synergism. This force system consists of a portable electronic data logger with force transducers attached to the oarlock pins within the rowing tank. The data from the system can be displayed in real time, allowing athletes in the rowing tank to quickly improve and match their rowing stroke to other athletes. The data can be used to blend technique, select athletes that row in a similar style so as to predict the success of a particular line-up, and help the athlete reinforce good technique and identify bad technique. It goes way beyond even what the best rowing simulators offer, as it also focuses on those issues that occur from less than optimum blade work.

Tank monitoring systems offer the coach data from each oar sent directly to an iPad or laptop computer.

Can tanks help in recruiting College rowers?

No other school in New Zealand has a rowing tank. This new facility, combined with a state-of-the-art gymnasium, will keep College at the forefront of secondary school rowing in New Zealand. This desire for excellence combined with the best facilities will impress prospective student athletes and their parents.





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