

INDOORSCULLER

Old Sport. New Technology.



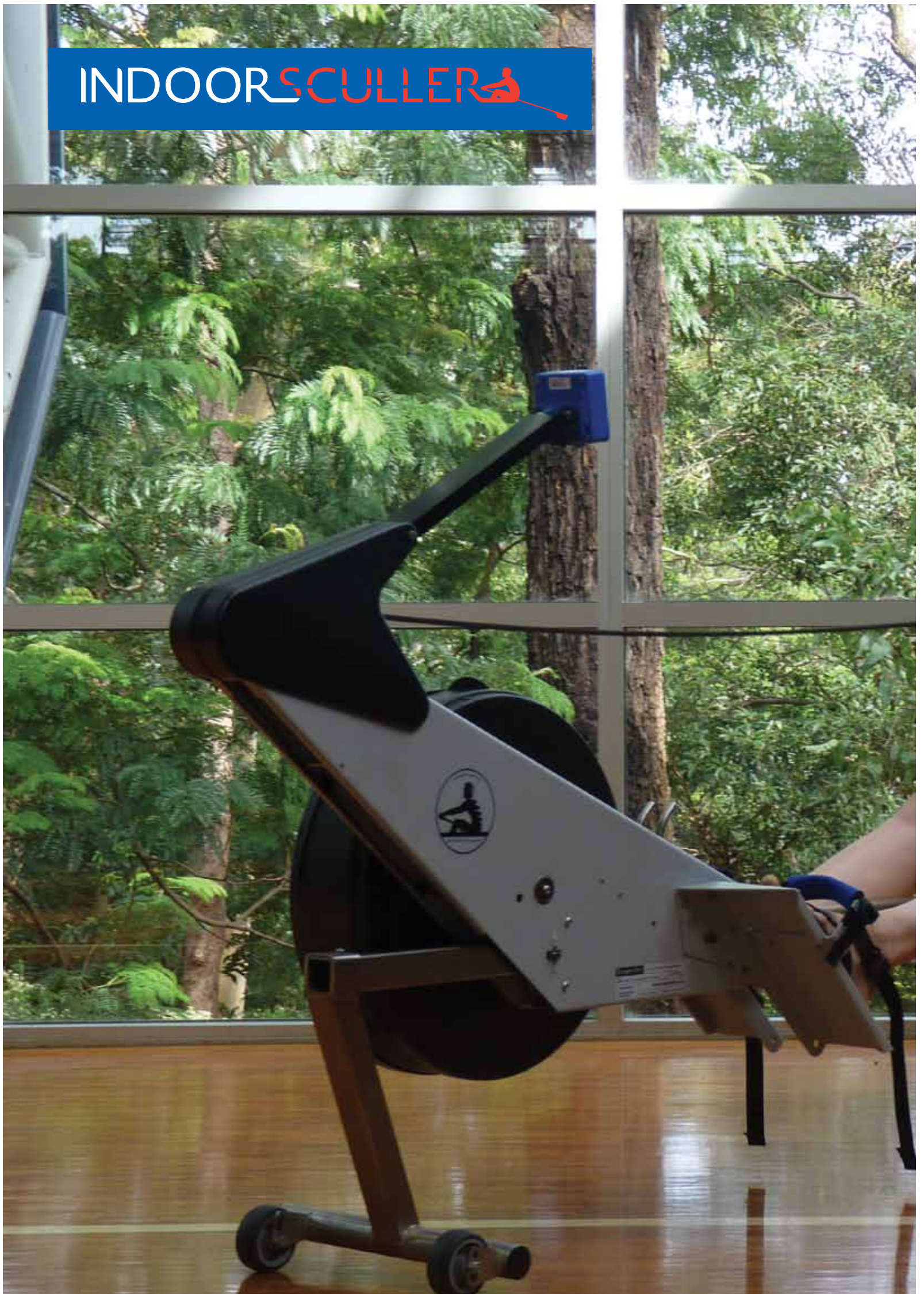
**“Sculling is the
most graceful
exercise a
man can do.”**

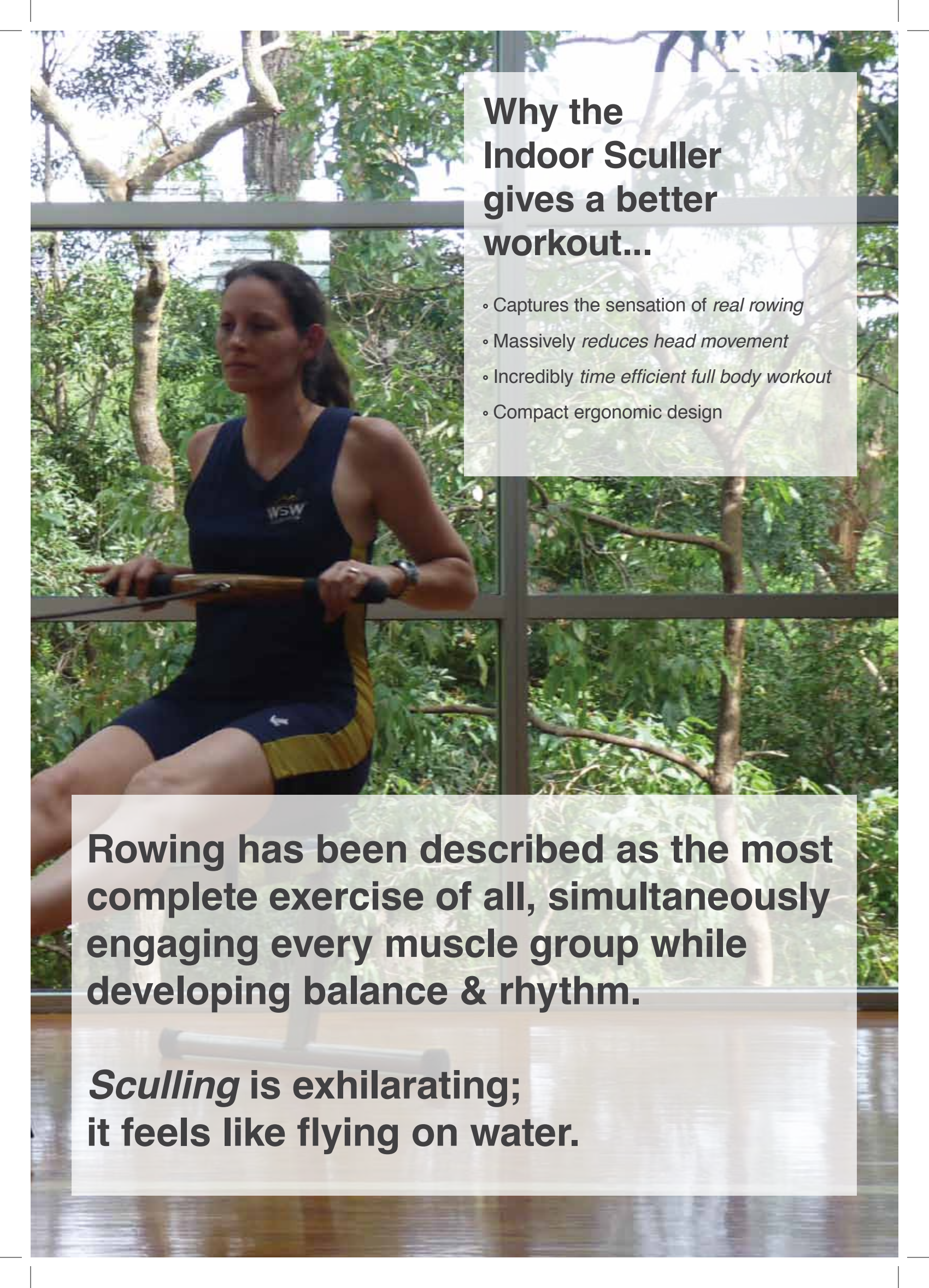
*Baron Pierre De Coubertin,
Founder of the Modern Olympics*

INDOORSCULLERS



INDOOR SCULLER





Why the Indoor Sculler gives a better workout...

- Captures the sensation of *real rowing*
- Massively *reduces head movement*
- Incredibly *time efficient full body workout*
- Compact ergonomic design

Rowing has been described as the most complete exercise of all, simultaneously engaging every muscle group while developing balance & rhythm.

***Sculling* is exhilarating; it feels like flying on water.**

Benefits

Why are the dynamic action and lightweight main frame so important? Exactly what are the benefits of this dynamic system—the sliding main frame, the Lamiflow Flywheel Cage, and the Limited-Tilt Seat?

Simulation

The Indoor Sculler truly simulates the complex movements required to row a lightweight scull skimming across the water. Sculling is unique—it uses almost every muscle in the body (in most cases through the full range of movement) with

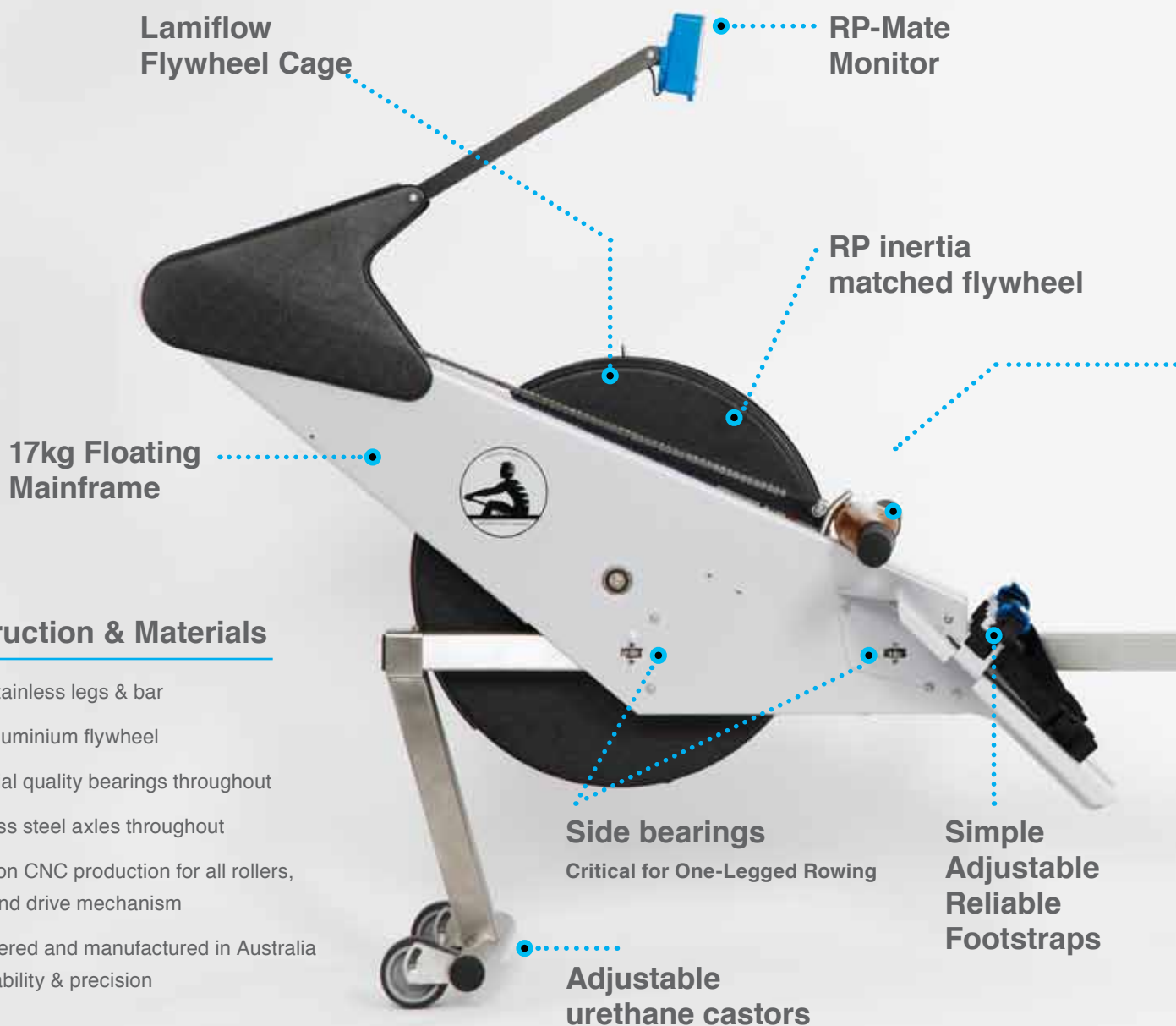
equal loading on both sides of the body. It does so with less cyclic movements per minute than virtually any other aerobic exercise, resulting in less wear-and-tear on the body.

Although the muscle contractions are often at or near maximal, no gravity shocks the spine, hips, knees or ankles.

The inertial properties of a racing boat and the water resistance it overcomes, produce an optimal load for our muscles. The Lamiflow Flywheel Cage is the result

of a major engineering project enabling your Indoor Sculler to reproduce that load—so it feels the same as sculling as well as giving your muscles the perfect workout.

Numerous studies have shown that learning a complex skill has enormous and far-reaching benefits for people of all ages—better health, including mental health & mental acuity, are proven results. The **Limited-Tilt Seat** enhances the coordination benefits of the sculling action by adding the element of balance as well as increasing safety.



Construction & Materials

- Solid stainless legs & bar
- Solid aluminium flywheel
- Industrial quality bearings throughout
- Stainless steel axles throughout
- Precision CNC production for all rollers, axles and drive mechanism
- Engineered and manufactured in Australia for durability & precision

The end result of all these improvements is **Rhythm**—and once you've felt that rhythm, nothing else compares! We believe the results are clear—you are able to train Strength, Endurance, Coordination and Balance simultaneously. Develop TRUE fitness and strength **Faster & Smarter**.

Safety

The Indoor Sculler's design **increases safety** for the user: The **Limited-Tilt Seat** requires the rower to sit symmetrically, equalising the load on

the spine thus promoting correct spinal position whilst exercising.

The **17kg Floating Mainframe** reduces the inertial forces at the beginning and end of the stroke because the rower's body speed is six times slower than on a fixed rowing machine. The result is a smoother action—**600%** less shock absorbed by the rower's tendons, ligaments and cartilage. Now, the rower can concentrate on applying real power rather than losing energy stopping & starting the body at each

end of the stroke; the workout is safer and more efficient.

Core Strength

We hear a lot about the importance of Core Strength—for good reason. The core muscles are a major key to performance in virtually all sports, as well as being central in daily life, injury avoidance & rehabilitation. The Indoor Sculler provides the ultimate core exercise. In sculling the core is engaged **dynamically**—used exactly as it should be, as a link between the arms and legs.

Usage Zone 2.5m x 1m
Reduced Footprint < 2m

Total Weight = 35kg

Ergonomic hardwood handle incorporates Oarflex
Oarflex absorbs shock by replicating elasticity of an oar

Limited-Tilt Seat

Stainless steel bar and legs

Angled legs
For safety & stability



“One thing ... about using a Rowperfect is that it’s actually enjoyable. I’m sure it’s because it keeps you thinking, and so the boredom factor is greatly reduced. I’ve never heard anyone say that about the (other rowing machine). Cheers.”

Sam M. – Hobart TAS 2010



◦ Details of Grosskopf Ergonomic handle & Lamiflow variable resistance cage.



The Real Deal

Both major components of the Indoor Sculler, the flywheel and the seat, are in motion. The result is a true cloning of the rowing experience, a state-of-the-art replication of on-water rowing.

You'll notice when you row on an Indoor Sculler that your head gently rocks one sixth of the distance of that of a "Fixed" rowing machine.

Before the Indoor Sculler all rowing machines—the fixed flywheel design—mimicked rowing a boat which refused to move. The discomfort of straining against a fixed object, rocking your head and upper body back-and-forth 2m every 2-3 seconds, sends excessive force and strain through your skeletal structure and brain.

Imagine how uncomfortable it would be if your head bounced back-and-forth two metres every two to three seconds. That's exactly what occurs on a fixed rowing machine.

The Indoor Sculler is categorically better for you, short term and long term. As a training tool, the Indoor Sculler will maximise your training results by optimising your personal inputs.

The Science

“When changing direction at each end of the stroke, the energy involved (kinetic energy) has to reduce to zero. This energy is about 6 times higher with the fly wheel fixed compared to floating, which means the distance required to reverse direction at each end of the stroke will be further. The analogy is that the braking distance for a heavier car will be further than that for a lighter car using the same braking force.... the longer stroke length with the flywheel fixed is a risk factor for injury to the body structures absorbing kinetic energy”

*Dr I. Berstein, Mr. O. Webber,
Prof. R. Woledge, Institute of
Human Performance, University
College, London.*

The RP-Mate Monitor

A fair comparison of rowers of different weight

Power-to-weight ratio is the basis of rowing speed. The RP-Mate is the only monitor which allows the user to enter body weight for a fair and accurate assessment of boat moving ability.

Built in Heart Rate Sensor

All you need is a chest strap!

Variable Boat Types

Do you want to test your speed in a single scull, pair-oar, coxless four – or fly along in an eight? With an RP-Mate the choice is yours.

Multi-option Window

Choice of up to 9 different factors in the bottom left screen including distance per stroke, average power, average speed, number of strokes, heart rate – even calories burned during a workout! Now with Power per Heartbeat and Stroke Length.

Choice of Speed or Power

Your choice of speed expressed as time per 500 metres, metres per second, or power expressed as Watts.

Strokes per minute

Power or Speed

Multi-option window

Setup option window

Distance or Time

Mode window



• Pymble Ladies' College — Australian National Champions 2000. "Practice doesn't make perfect. Perfect practice makes perfect."



A Universal Training Tool

As a total-body, full range-of-movement exercise, rowing is an exceptional cross training tool producing multiple physical benefits. By combining those benefits with the elimination of gravity shocks it becomes almost unique.

There are many key benefits of dynamic rowing:

Core

The core is utilised correctly—you simply cannot row dynamically without the core engaged.

Hamstrings and Glutes

On the Indoor Sculler, just as in on-water rowing, the gluteal muscles (“glutes”) are the key power producers—on a fixed machine the glutes, hamstrings and hips are under-utilised in comparison to the quads and knees.

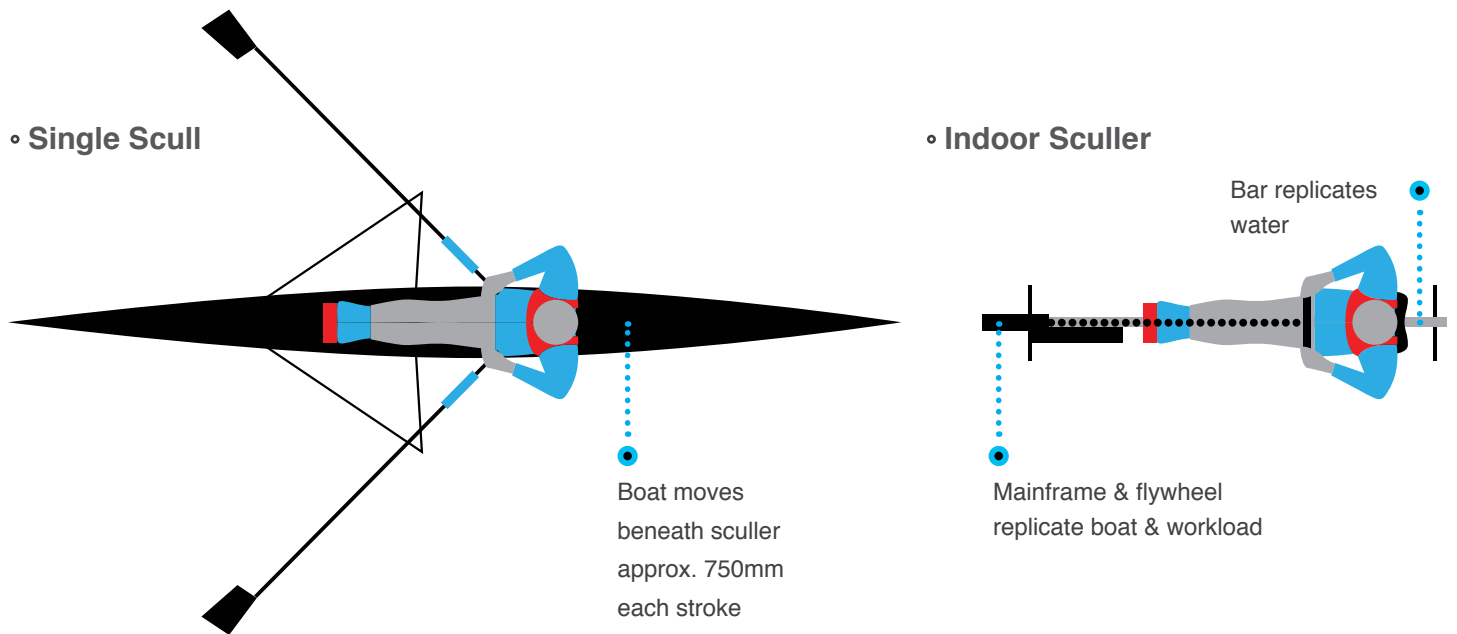
Intensity and Aerobic Fitness

By varying the stroke rate, the **intensity** of a workout can be adjusted easily—just fifteen minutes of high intensity rowing will give even the fittest athlete a great workout. If you’re time-poor, maximise your time efficiency by **combining** a total body exercise with a great aerobic workout.

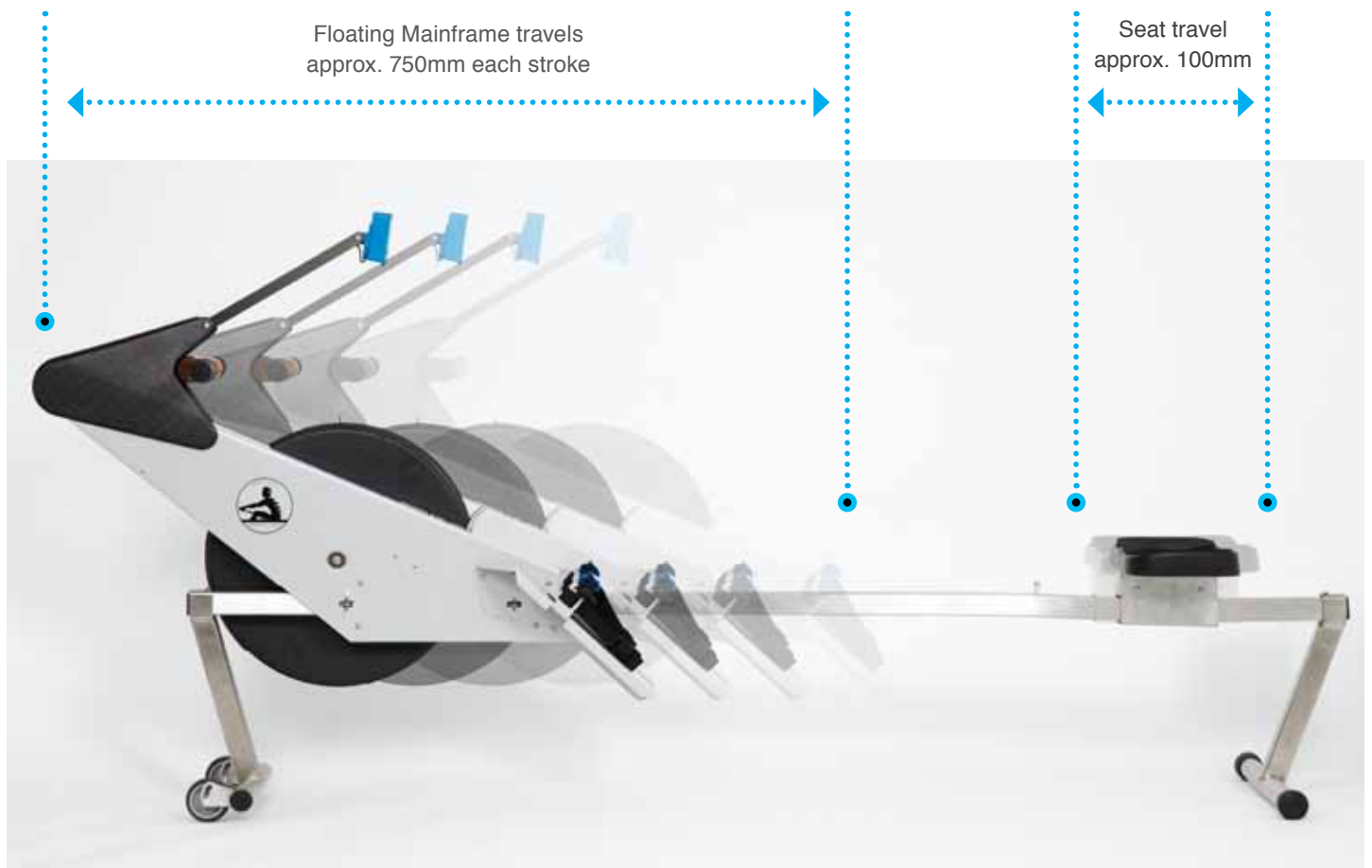


On-water Simulation

How the Indoor Sculler replicates the movements and interactions of the user and the boat/floating mainframe.



• Indoor Sculler



Limited-Tilt Seat

One of the great benefits of on-water rowing is the development of balance skills. These skills enhance the development of the core strength muscles of the spine and abdomen & their refinement forms an essential part of the challenge of on-water rowing.

Rowperfect's labile (moveable) **Limited-Tilt Seat** increases safety for the user. The labile seat encourages the rower to sit symmetrically, which helps to equalise the loading on each side of the spine. Balance can only be achieved when loading on each side of the seat is equal.

The very first Rowperfect had a non-tilting seat like standard rowing machines. However following a discussion with a physiotherapist, it became clear that a seat which required balance would be of potential benefit to users; and the Limited-Tilt Seat was born.

The seat is balanced on rollers running on the main bar. If the seat is unevenly loaded—a tilt of up to 7 degrees is possible to each side—the user is alerted to that uneven load and makes appropriate changes to his posture and balance to correct it. In a very short time

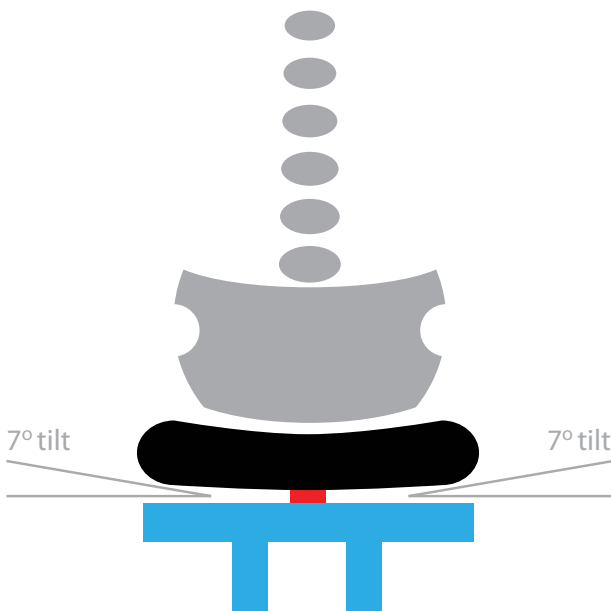
this correction becomes automatic and subconscious: a skill has been acquired.

Experience with a wide variety of athletes of various abilities, from Olympic rowing medalists to intellectually disabled athletes, has confirmed the value of the Limited-Tilt Seat. We at Rowperfect strongly believe that the long-term benefits of our tilting seat are another clear reason for you to choose the Indoor Sculler.

Comparison between Rowing Machine Seats

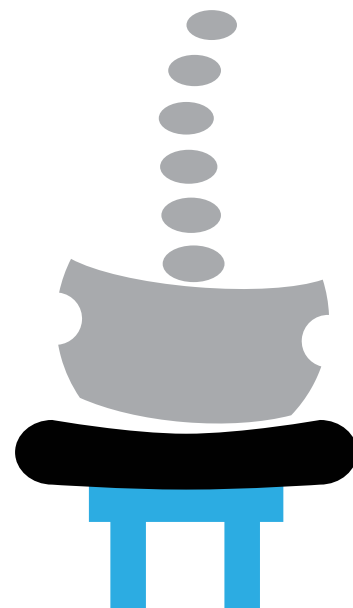
Differences between Indoor Sculler Limited-Tilt Seat and other Rowing Machine Seats.

Indoor Sculler (Limited-Tilt Seat)



*Correct spinal
position promoted*

Other Rowing Machines (Fixed Seat)



*Poor spinal
position tolerated*

“The machine works really well, bit like floating when I get it right. Only had it for a day, but I think I’ve definitely made the right decision! Brilliant! Cheers.”

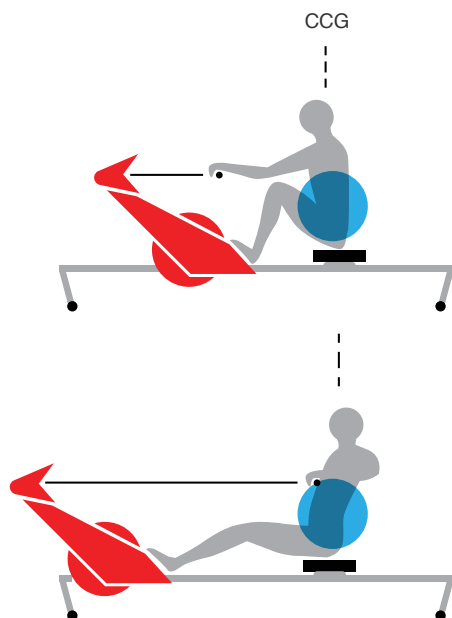
Chris T. – Greenfields, WA , 2010

Comparison of Rowing Machine Dynamics

Differences between Indoor Sculler and Fixed Rowing Machines (ergometer).

* CCG = common centre of gravity

Indoor Sculler Rowing (Or On-water)

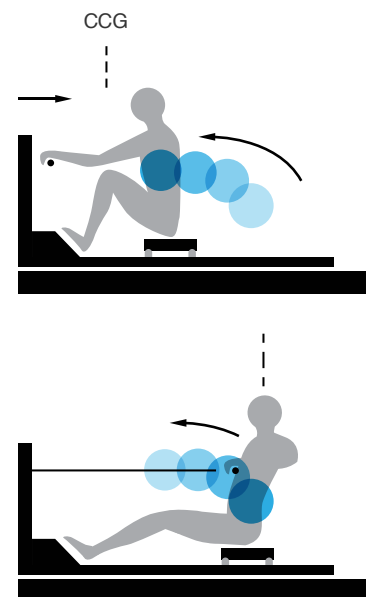


Rower interacts with a light mass.

“Boat” moves far more than the rower, the head and torso of the rower remain almost still.

Labile seat optimises balance and promotes equal loading of the spinal column.

Fixed Rowing Machine (Ergometer)



Rower moves relative to an immovable point.

Body acceleration at the catch & finish are approximately six times greater than in a boat or Indoor Sculler.

Head oscillates up to 2 meters per stroke.



Testimonials from World Class Rowers

“The Rowperfect rowing simulator has been an integral part of our training since 1997. With the ability to link machines together and also connect them to PCs we’ve had the opportunity to achieve so much more in our training off the water. Over the period we’ve made tremendous technical progress. The live feedback from the PCs has enabled the athletes to make changes and see the outcome instantly.

The importance of the machines can be gauged by the fact that we bought two machines in Australia and used them right up to our final race in the Olympic final. I’d be quite happy to use the Rowperfect as our training machine all the time.

It’s the closest thing to rowing we’ve got and you don’t even have to carry it down to the water.”

Martin McElroy, Coach Great Britain Eight, gold medallists Sydney 2000 Olympic Games.

“I have always been a fan of Rowperfect. Not only does it provide immediate feedback from the visual data but it also gives the rowers a clear message that they can transfer easily to the boat.

Using it, from the early development right up to the Olympic final, was a major factor in the success of our Gold Medal Eight.”

Harry Mahon-Cambridge University Boat Club and Great Britain Olympic Coach.

“What do I think of Rowperfect? It brought me three World Championships!”

Peter Haining, Mens 1/wt Single Scull 1993-1994-1995

“First of all I would like to say that the RowPerfect is a great training tool and the few days I have it, it earned its’ money. The information and feedback for the rower is really good. You can see how they change and adapt. I am very impressed.”

Cristian Felkel, Head Coach South African Rowing Union

“Cambridge have used the Rowperfect Rowing Simulator for some years now and it has been an invaluable coaching and training tool. It closely reproduces the feel of the boat and is kinder on the lower back than fixed head ergometers.”

Robin Williams, Cambridge University, Head Coach

One-Legged Rowing

One-Legged Rowing is beneficial for Rehabilitation, Strength Development, Coordination.

Developing the side bearings on the Indoor Sculler required several prototypes and many hours of hard work—Why are they there?

The principal benefit of having side bearings, as opposed to simple guided rollers, is the ability to row using just one leg at a time. Why is that important?

Bilateral Deficits—A Story of Unequal Halves

A Bilateral Deficit is simply unequal strength or coordination of opposite limbs. We nearly all have one arm that is stronger and more coordinated than

the other. What we often don’t realise is that the same is usually true for our legs. We tend to use our legs unequally and often stand and move with uneven weight distribution. The result can be lower back pain and other postural problems over time.

By rowing using one leg at a time (with the other foot resting on the floor) in combination with the RP-Mate Monitor, Bilateral Deficits can be identified and corrected. Many users discover a significant strength difference within 5-10 strokes. Bilateral Deficits are implicated in the development

of chronic back pain and certainly eliminating them is of great benefit; both for general health and athletic performance.

Recovery After Injury/Surgery

This same unique Rowperfect feature—the ability to row one-legged—has been successfully used by those recovering after injury or surgery to one leg, keeping the uninjured leg strong. Remarkably, even the *injured* leg benefits—maintaining strength in one limb actually results in nerve stimulation of its pair, a phenomenon known as cross-lateralisation.



Training in Crews

Crew training is the ultimate group exercise experience. Many of our common metaphors revolve around the image of individuals working “as a crew” towards a common goal. Experience the unique synchronised rhythm of a crew member in a racing shell – indoors!



“I really love this machine, it is night and day compared to the (other brand rowing machine) I was using before, my body will get tired but not sore.

It’s fantastic because you can push yourself further without getting a bad back and neck!”

Sam P. - Neutral Bay, NSW 2009





INDOORSCULLER 



“It feels like a boat. We used it a lot in training and it was the last thing we did before going to the Olympic final.”

Simon Dennis, Great Britain Olympic 8+, Sydney 2000



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The Indoor Sculler is the product of a major development project undertaken to introduce the great benefits of sculling to a wider audience. The result is a great training tool for rowers and non-rowers alike with proven results.

The critical change from a fixed to a dynamic system is revolutionary. It represents as great a development for human exercise as the step between the Penny Farthing & the chain-driven bicycle.

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INDOORSCULLER 

For more information
please contact Head Office:

Rowperfect PL
2/4 Moore Road
Freshwater NSW 2096

Tel: +61 2 9939 9777
admin@rowperfect.com.au

For your local agent visit:

rowperfect.com