



NEW

Training with RowPro

A decorative graphic consisting of several overlapping, wavy blue lines that flow from left to right across the middle of the page.

Illustrated Guide



Illustrated guide to

Training with RowPro

Version 5

Digital Rowing Inc.

60 State Street, Suite 700
Boston, MA 02109
USA

www.digitalrowing.com

assist@digitalrowing.com

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1. Getting the results you want

What results do you want from your rowing?

By far the most common reason people row on Concept2 Indoor Rowers is to maintain or improve their health and fitness.

The big question everyone faces at the start is "What rowing do I need to do to get the results I want?" And soon after that comes the realization "I really need a plan."

Approaches to training plans

The four main approaches to training plans are:

1. **No plan** - You settle on a pattern of workouts you want to do without using a training plan created by a professional.

Pros: You're 100% in control of the rowing you do, and you can just do the workouts you like best.

Cons: You're likely to plateau quickly and not improve much further, and you're likely to be doing more work and getting less benefit, so it can be hard to stay motivated over the long term.

2. **Ready-made plan** - You get a ready-made plan from a book or by download, which means it's not tailored to you.

Pros: Likely to be free and readily available, and it's got to be better than rowing without a plan, right?

Cons: Even if you find the right plan to fit your training intentions, it's not tailored to you so is very likely to be suboptimal. Also you need to set up every workout on your Concept2 PM by hand and track your results manually.

3. **Personal plan** - You buy a training plan that's tailored to you by a coach or personal trainer.

Pros: Since the plan is tailored to you it's likely to be optimal, and you're likely to be doing less work and getting more benefit.

Cons: You'll spend quite some time and money getting each plan, and will still need to set up every workout by hand and track your results manually.

4. **RowPro plan** - You get a personalized training plan from RowPro.

Pros: The plan is tailored to you so will be optimal, so you'll be doing less work and getting more benefit. RowPro sets up the workouts automatically on the Concept2 PM and tracks your results and progress automatically. Also you get a lifetime supply of plans for less than the cost of one plan from a trainer.

Cons: You need to buy and use RowPro, and you need to put in a few minutes' time and effort in the training plan assistant to get each plan.

What to look for in a training plan

Training plans are not all born equal. But how do you spot a good training plan that will really help you get the results you want?

The first step is to make sure the plan meets the five core requirements:

1. Specific to rowing on a Concept2 Indoor Rower.
2. Specific to your training goals (e.g. weight control, fitness or competition).
3. Specific to your experience level (beginner to elite).
4. Tailored to your age, weight and fitness level.
5. Fits your annual calendar and weekly schedule.

The next step is to make sure the plan is technically sound, meaning it is based on exercise science. Look for the four tell-tale signs:

1. Manageable weekly volumes (total meters or minutes).
2. Multi-day cycles of directed effort, easy rowing and rest.
3. Multi-week cycles of strength, endurance and speed workouts.
4. Workouts based on heart rate and stroke rate targets, not pace targets.

Effective and safe training plans are based on exercise science and are prepared by experts. And unless a plan is specifically tailored to your physiological characteristics, it is almost certain to be sub-optimal and may not be safe for you.

The RowPro training system

Finding a training plan that's right for you can be quite a challenge, so to make it easy we've built a complete training system into RowPro. You just click to get a plan, then click to set up each row. It's the simple and effective way to structure your rowing so you'll get the results you want.

Digital Rowing has engaged training guru Jon Ackland of Performance Lab International to create a training system specifically for users of Concept2 Indoor Rowers, and each training plan has been fine-tuned by Olympic Rowing Coach Brian Hawthorne.

The result is a huge library of hundreds of training plan templates for weight control, fitness and competition, suitable for the full spectrum of users from beginner to elite.

It's driven by a state-of-the-art training plan assistant that makes it easy to choose a suitable plan and tailor it to your age, weight, fitness level, rowing experience and training purpose, so you know it's right for you.

RowPro sets up each training workout onto your Concept2 PM ready for you to row, and then records all your results directly into your RowPro online logbook. Later, you can review any training workout to see how you did, and compare that to other similar training workout to see how you're progressing towards your goals.

RowPro plans meet all the core requirements, and are 100% based on exercise science, so you can be confident each plan is right for you.

By bringing all this together into an integrated easy-to-use training system, RowPro plans take the guesswork out of your rowing and put you in control, so you can be confident you'll get the results you want from your rowing.

How RowPro tailors your training plans to you

If you went to a personal coach or trainer to get a plan from, here's what they'd do:

- Ask lots of questions about you: your physical state, your exercise, rowing and medical history, and your training intentions, timeline and goals.
- Possibly test you to measure your fitness and/or exercise response.
- Create a training plan that fits you and your rowing goals, based on your input, and using their standard templates based on exercise science.
- Explain your plan to you and help you get started.

Once you're underway, depending on your deal they might also:

- Monitor and assess your progress.
- Collect and analyze your results.
- Give you feedback and if necessary adjust your plan.

The RowPro training system does all this and more. RowPro:

- Uses its training plan assistant to collect all the info it needs about you and the type of training you want.
- Creates a training plan for you based on the choices you've made (purpose, duration, focus, level) in the training plan assistant, using Jon Ackland's templates that are based on exercise science and have been reviewed and fine-tuned by Olympic Rowing Coach Brian Hawthorne.
- Tailors the training plan to you based on your physical parameters (age, gender, height and weight), your training history, and for competition plans your racing history, that you enter in your RowPro user profile and confirm in the wizard.
- Sets targets for each training workout based on heart rate and stroke rate so the plan automatically adjusts the intensity to match your current fitness level.

The result is a training plan closely fitted to you and your training purpose. You would otherwise only be able to get such a plan by going to a personal trainer or coach with expertise in rowing and getting them to create a training plan specifically for you.

Once you start using your training plan, RowPro:

- Shows you the currently scheduled training workouts and lets you time-shift them a few days either way to fit them into the other activities in your life.
- Sets up each training workout directly onto your Concept2 Performance Monitor.

- Automatically collects your results, and provides you with analysis tools so you can easily track your progress.

So if you don't have a personal coach or trainer to guide your rowing, it's more or less certain that following a RowPro training plan will get you far better results than just rowing your own sequence of favorite workouts.

Also, when you row with a RowPro plan, you get some other very important benefits:

- Your focus changes from "will I row today" to "what am I scheduled to row today?" This simple and powerful mind-shift helps you do your daily rowing.
- The exercise science foundation ensures you get the right timing and mix of strength, endurance and speed workouts to deliver the results you want.
- The workout variety improves your motivation and avoids the boredom and 'muscle plateau' of doing the same workout over and over again.

The experts behind RowPro training plans

Jon Ackland, director of specialist training company Performance Lab and creator of the RowPro training system, is a true guru when it comes to training. He has over 25 years' experience in helping people achieve their fitness and performance goals.

A former rowing national champion and international Ironman triathlete, Jon has a deep personal understanding of what's needed to achieve your rowing goals.

Jon is the author of nine books on sports performance, including the best-selling books *Power to Perform* and *The Complete Guide to Endurance Training*.

Jon has used his winning formulas and his considerable experience in delivering training *without a trainer present* to create the RowPro training system for all kinds of people who row on Concept2 Indoor Rowers from beginners to elite athletes.

Brian Hawthorne, rowing coach extraordinaire, is the man who 'trained' the 3D Oarsman in RowPro to row with excellent stroke technique.

A former Olympic Rowing Coach, Brian has a vast understanding of everything from the correct stroke technique to the most effective training patterns and workloads.

Brian has used his coaching experience to review and fine-tune the RowPro training plans to make sure they are fully effective in delivering the required results.

Brian also provides coaching on excellent stroke technique in the RowPro 3D Coaching Clinic. His easy-to-follow technique advice is effective for both beginners and athletes.

Core training concepts

Your training will go better and make more sense once you understand the following core training concepts from exercise science:

- **Performance components** – The three main components of your ability to perform in rowing are your Endurance, Strength and Speed. Good training plans focus on improving your ability in each of these three components.
- **Exercise adaptation** – When you train, you push your body beyond its current Endurance, Strength or Speed ability, and that triggers an exercise adaptation.
- **Work and rest** – Your body *doesn't* adapt to exercise while you are exercising; it adapts *afterwards when you are resting*. The proper spacing of work and rest is core to making progress.
- **Cycles** – Multi-day cycles of work and rest, and multi-week cycles of easy and hard, are both key ingredients in the work/rest patterns for effective training.
- **Ramp up and down** – When you train effectively, your Endurance, Strength and Speed gradually ramp up, and when you stop training for extended periods, your Endurance, Strength and Speed gradually ramp down.
- **Diversity** – If you repetitively do the same workout, you will quickly reach a plateau and not progress much further. To continue to develop your Endurance, Strength and Speed, you need to cycle through workouts that stimulate each one in a series of overlapping cycles.

OK, so that's the intro taken care of, now it's time to learn how to get your first RowPro training plan.

2. Steps to get a training plan

RowPro has a training plan assistant that helps you get a training plan in 4 easy steps.

To use the training plan assistant, click Training | Training plans on the RowPro main menu. The four steps for getting a RowPro training plan are:

1. Set-up or update your training profile.
2. Choose the plan you want.
3. Tailor the plan to you.
4. Download the plan into RowPro.

Step 1: Set-up or update your training profile

Your training profile has three sections:

1. Rowing class and BMI
2. Rowing history
3. Racing history (only needed for competition plans)

Rowing class and BMI

Birth date

Gender M F

Weight kg

Height cm

Units kg/cm lbs/in

CLASS: MENS 30-39 LWT BMI: 24

These are your core physical characteristics that RowPro needs to take into account when you get a training plan.

It's important that you check and update your weight every time you get a new plan, and for teens who are still growing you may need to update your height.

Rowing history

Which of these activities have you done most over the years?

Choose

How many years have you been actively doing that activity?

Choose

What's the maximum amount of that activity you've done?

	Ever	Last 12 mo
Max workout	Choose	Choose
Max week	Choose	Choose
Max month	Choose	Choose

If you have a rowing logbook you should use it to review your rowing history. The training plan assistant needs to know what you've been doing the last 12 months and what you've ever done.

Note: If you haven't done much or any rowing, but you have a significant history in another activity or sport, use your history related to that instead.

Read the items on this form carefully and take a bit of time to get them as accurate as you can. If you don't have a rowing logbook, just use your best recollection.

But do not exaggerate!

Racing history

Please record here only your racing history in indoor and on-water rowing.

How many years have you been actively rowing?

Choose

How many races have you competed in?

Choose

Highest race result?

Choose

Event distance of that result?

Choose

Note: You must enter a value in all fields before you can get a training plan.

Get new plan

Strictly speaking you only need to enter your racing history if you're wanting a competition plan. Again, do not exaggerate!

Note: Even if you're not wanting a completion plan, it's a good idea to complete this section when you first set-up your training profile so it's there if you decide to do a competition plan at some point in future.

Once you've completed all 3 sections of your training profile, click Get new plan to go to the next step.

Step 2: Choose the plan you want




RowPro has training plans for fitness, weight and competition:

- **Fitness and weight plans** – Choose one of these plans if main intention is to get fit, stay fit, lose weight, control weight, maintain form off-season, or cross-train for another sport or activity, or any mix of these.
- **Competition plans** – Choose one of these plans if your main intention is to maximize your speed for peak racing performance.

Note: If you want a plan that covers both fitness and weight, pick the one you feel most strongly about and make that your primary focus, and the plan will also provide considerable benefit for the other one.







Fitness and weight plans

Training to lose weight or for fitness? Choose a plan below:

 Weight	 Fitness	 Fitness
Primary goal is weight loss	Beginner fitness or light maintenance	Advanced fitness or maintenance

Competition plans

Training to compete? Choose the race distance you want to peak for:

 Competition	 Competition	 Competition	 Competition	 Competition	 Competition
500m, 1000m	2000m	5000m, 6000m	30 minutes	10,000m 60 minutes Half marathon	Full marathon

The fitness and weight plans are graduated so the further to the right you go in the list, the more intense the training becomes. Some guidelines:

- Choose Weight if your primary goal is weight loss, medical rehab, or recovery from injury or illness.
- Choose Beginner Fitness if you're a beginner wanting to get fitter or you want a light maintenance plan to maintain your fitness.
- Choose Advanced Fitness if you're wanting to achieve or maintain a high level of fitness or you're cross-training for another high-activity sport.

Note: RowPro fitness and weight plans are based on time rows, i.e. you row for say 20 or 30 minutes rather than 5,000 or 6,000 meters.

The competition plans are graduated according to the competition distance you're training for, ranging from 500m sprints to full marathons. For peak performance on race day you obviously need to choose the plan that matches your race distance.

Note: RowPro competition plans are based on distance rows, i.e. you row for say 5,000 or 6,000 meters rather than 20 or 30 minutes.

Step 3: Tailor the plan to you

There are three main factors you can tailor to fit the plan to your needs:

1. Overall plan length
2. Individual workout length
3. Training level

Selected Plan: Advanced Fitness

Now tailor this plan to fit your training needs:

Overall plan length

Choose

Individual workout length

Choose

Training Level

Choose

Details

Start date start date must be monday.

Plan name

Get new plan

To get the fullest benefit of your training plan, you should choose the longest plan length available - typically 14 weeks, which includes 2 technique weeks at the start.

Note: If your time is constrained, for example you need to fit the plan into a 10-week school term or do your best before an upcoming race date, then choose the plan length that fits your situation.

To get the fullest benefit of your training plan, you should choose standard workouts. With standard workouts, some workouts - particularly in the more challenging plans - will be over 20 minutes.

Note: If your time is constrained, for example you need to fit workouts into fixed schedules like lunch breaks or after-school training schedules, then choose short workouts. Segment workouts are even shorter, used for example where rowing is only part of a wider training regimen.

At this point the training plan assistant uses your training profile and your rowing and racing history to determine the levels of training challenge you are cleared to use.

Based on the information you have given to training plan assistant, the training levels you are cleared to use have a green check mark. The assistant takes into account many factors when assessing this, and uses different assessment schemes for fitness, weight and competition plans.

Within the levels the training plan assistant clears you to use, you can choose whether to go for the highest level you are cleared for, or you can choose a level further down that matches your training profile, history, intentions and availability.

Note: The main difference between levels is the weekly volume (total weekly meters or minutes) of rowing in the plan. The higher levels tend to have larger weekly volumes and fewer rest days per week.

The following typical rower profiles will help you choose the right level.

Typical rower profile for each weight plan level

- **Burn baby burn** – Have rowed > 30 minute workouts, have rowed 3 hours per week and 12 hours per month, have been rowing 4 years or more.
- **Moderate burn** - Have rowed > 20 minute workouts, have rowed 3 hours per week and 12 hours per month, have been rowing 2 years.
- **Light burn** - Have rowed > 10 minute workouts, have rowed 1 hour per week and 5 hours per month, have been rowing 2 years.
- **Beginner** - Have never rowed before on-water or indoors.

Typical rower profile for each fitness plan level

- **Very fit** - Have rowed > 40 minute workouts, have rowed 5 hours per week and 18 hours per month, have been rowing 6 years or more, BMI is < 24 (male) or < 22 (female).
- **Fit** - Have rowed > 30 minute workouts, have rowed 3 hours per week and 12 hours per month, have been rowing 4 years, BMI is < 26 (male) or < 25 (female).
- **Moderately fit** - Have rowed > 20 minute workouts, have rowed 3 hours per week and 12 hours per month, have been rowing 2 years, BMI is < 28 (male) or < 27 (female).
- **Casual** - Have rowed > 10 minute workouts, have rowed 1 hour per week and 5 hours per month, have been rowing 2 years.
- **Beginner** - Have never rowed before on-water or indoors.

Typical rower profile for each competition plan level

- **Elite** - Have rowed > 60 minute workouts, have rowed 6 hours per week and 40 hours per month, have been rowing 6 years or more, have raced 7 times over 5 years and placed in the top 10, BMI is < 24 (male) or < 22 (female).
- **Competitive** - Have rowed > 60 minute workouts, have rowed 5 hours per week and 20 hours per month, have been rowing 4 years, have raced 7 times over 5 years and placed in the top 10, BMI is < 24 (male) or < 22 (female).
- **Semi-competitive** - Have rowed > 30 minute workouts, have rowed 5 hours per week and 20 hours per month, have been rowing 2 years, have raced 3 times over 3 years and placed in the top 50%, BMI is < 26 (male) or < 25 (female).
- **Lite competitive** - Have rowed > 20 minute workouts, have rowed 1 hour per week and 5 hours per month, have been rowing 2 years, have never raced before, BMI is < 28 (male) or < 27 (female).
- **Beginner** – Have never rowed before on-water or indoors.

The final step in tailoring your plan is setting the start date and naming the plan.

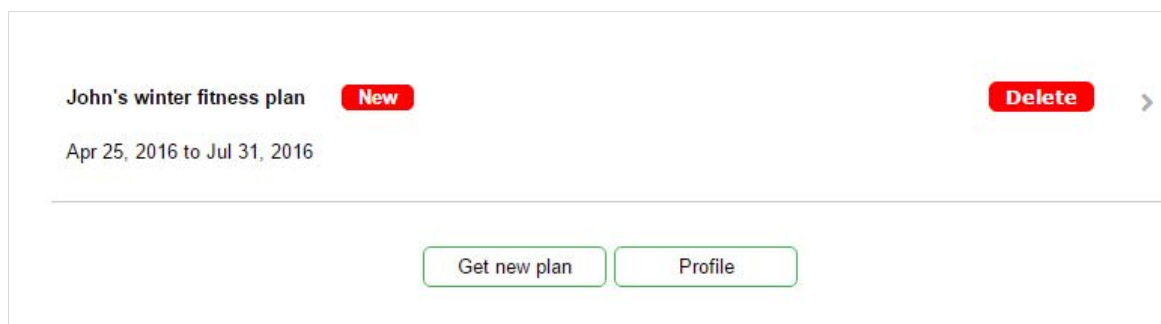
Note: The first two weeks of each RowPro training plan are technique weeks where you row slowly and focus on your stroke technique. If you've already done enough rowing so you want to skip the technique weeks, just set the start date 2 weeks earlier than you would otherwise have set it.

All RowPro training plans start on a Monday. If it's not currently Monday and you want to start your plan today, just choose the previous Monday as the start date.

Note: If you don't want your plan to start on a Monday, choose the nearest Monday and then when you set up each training workout, use the +/- 3 day selector in Set up a Row | Training to 'time-shift' each training workout.

Name the plan in a way that will remind you what the plan is when you later see it listed in your plan library. For example, don't name it John's plan, rather name it John's winter fitness plan.

Once you're all done, click Get new plan. This will take you to your plan library where you'll see the new plan listed:



Step 4: Download the plan into RowPro

At this point you can click on the plan or click the right arrow next to the plan to see an outline of the plan and download it into RowPro:

John's winter fitness plan
Apr 25, 2016 to Jul 31, 2016

Duration	14 weeks
Purpose	Fitness
Created By	peterl
Workouts	Standard
Focus	Advanced Fitness
Level	Beginner
Rowed	0 of 49, 49 to go

TREF: 18 PREF: 5439

[View plan](#) [Download plan into RowPro](#)

Note: When you download the plan into RowPro, it is imported directly into the RowPro database as your current plan. At any given time, RowPro has only one plan in its database – you can change that plan at any time by downloading a different plan from your training plan library.

Once you've downloaded the plan into RowPro, if you go back to your training plan library you'll see that the status of that plan has now been set to Current:

John's winter fitness plan **Current** **Delete** >

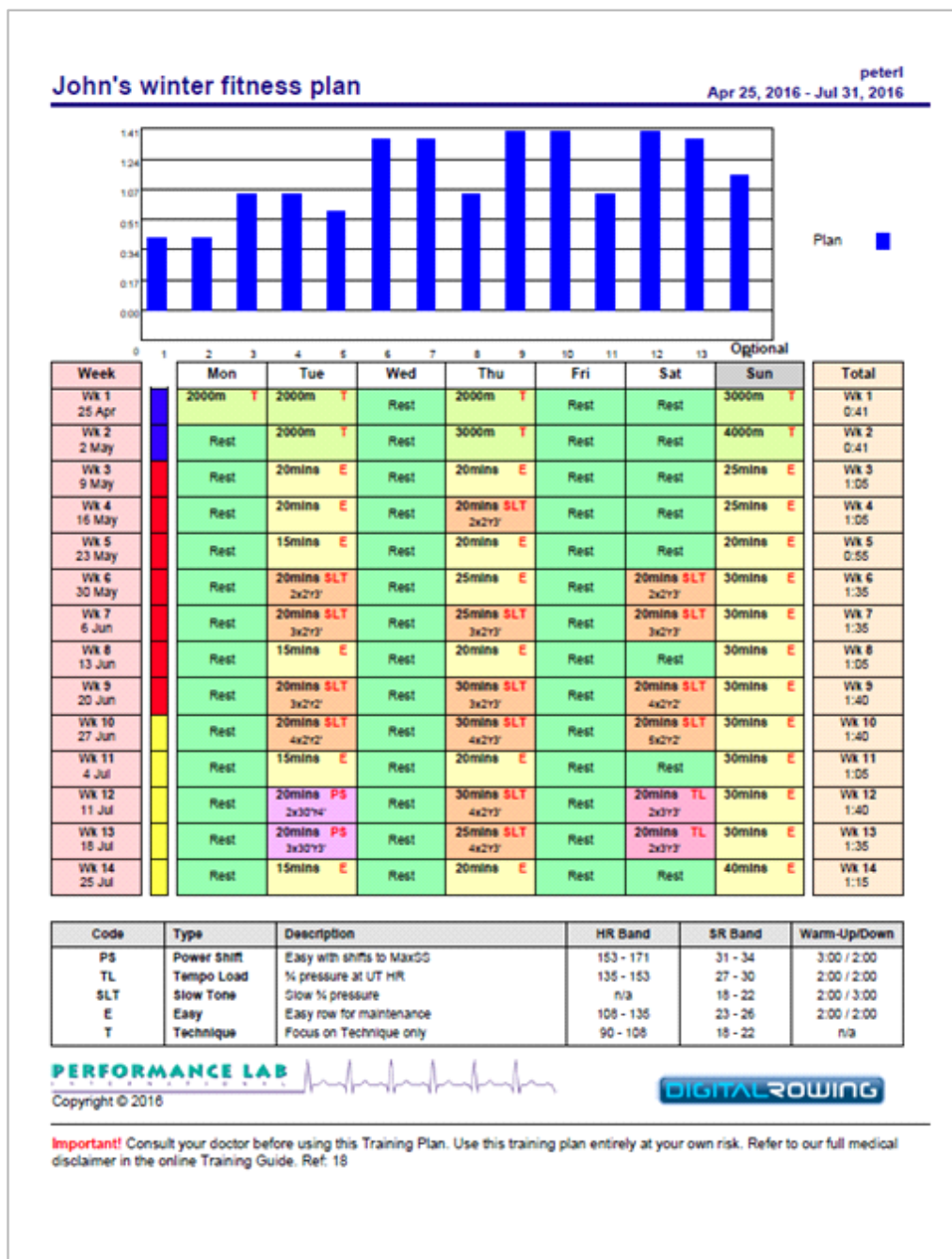
Apr 25, 2016 to Jul 31, 2016

[Get new plan](#) [Profile](#)

3. Understanding your training plan

What a RowPro training plan looks like

If you print out your RowPro training plan it looks like this:



Weekly volume chart

Daily training workouts

Training types & targets

Each area of the training plan printout above is described in the sections below.

How the plan is organized

Technique, base and speed weeks

RowPro training plans are made up of three phases:

- **Technique weeks** – There are two optional weeks at the start of each training plan where you row slowly and for small durations with your entire focus on optimizing your stroke technique.

Note: If you're not an experienced rower, we recommend you row the two technique weeks at the start of your first RowPro training plan. If you want to skip the technique weeks in subsequent plans, you can set the training plan start date two weeks earlier than you intend to start the plan.

- **Base weeks** – Most of the training plan is base weeks, where you do the core strength and endurance training to establish your fitness base for the final part of your plan. The weekly training volumes build progressively in this phase.
- **Speed weeks** – Once you have the base training under your belt, you move onto the final speed phase of the plan where training volumes ramps back down and training intensity ramps up.

Weekly volume chart

The weekly volume chart shows at-a-glance the amount of training you'll do each week. You can see that the volumes start low, ramp up to a peak at the end of the base phase, and then ramp down again as the intensity peaks in the speed phase.

This pattern is important to the effectiveness of your training - it's important to cycle your body through endurance, strength and speed training, *even for fitness and weight plans*. This stops your body from reaching a plateau due to overly-repetitive workouts.

Daily training workouts

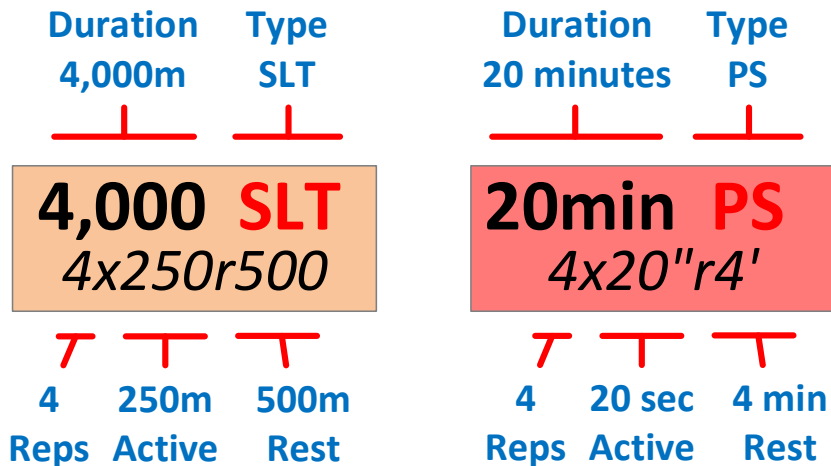
The main body of the training plan shows the set of daily training workouts that make up the plan, organized into weeks.

The individual workouts are color-coded to indicate the training type. This makes the plans easier to read and understand.

In some plans, one or more days of the week are optional, as shown above that day in the table. Optional means if you want to extend yourself a little you can row that day, or if you want to take it a bit easier you can skip that day some or all weeks.

The question we get asked by far the most about training workouts is what the shorthand codes mean. An example of these is shown below with detailed explanations of what each of the shorthand codes means.

Understanding the abbreviations used with training workouts



Here's how to read each of the examples above:

The distance workout shown on the left

- Row **4,000 meters** in total.
- The overall workout consists of **4 intervals**.
- Each interval consists of an Active part and a Rest part.
- The Active parts are **250 meters** to be rowed as **SLT** (Slow Tone).
- The Rest parts are **500 meters** to be rowed as Easy (unsaid but standard).

If you listed the intervals one after another, the sequence would look like this:

- **250m Active** – Row to the SLT Heart Rate and Stroke Rate targets.
- **500m Rest** - Row to the Easy Heart Rate and Stroke Rate targets.
- **250m Active** – Row to the SLT Heart Rate and Stroke Rate targets.
- **500m Rest** - Row to the Easy Heart Rate and Stroke Rate targets.
- **250m Active** – Row to the SLT Heart Rate and Stroke Rate targets.
- **500m Rest** - Row to the Easy Heart Rate and Stroke Rate targets.
- **250m Active** – Row to the SLT Heart Rate and Stroke Rate targets.
- **1,500m Rest** - Row to the Easy Heart Rate and Stroke Rate targets.

Note: The final Rest interval is 1,500m because that's the remainder after all the other intervals that makes up the total 4,000 meters.

The time workout shown on the right

- Row **20 minutes** in total.
- The overall workout consists of **4 intervals**.
- Each interval consists of an Active part and a Rest part.
- The Active parts are **20 seconds** to be rowed as **PS** (Power Shift).
- The Rest parts are **4 minutes** to be rowed as Easy (unsaid but standard).

Note: The symbol 20" means 20 seconds, and 4' means 4 minutes. We know these shorthand notations are not so commonly used nowadays, but the extreme shortage of typing space on plan printouts meant we needed to use them.

If you listed the intervals one after another, the sequence would look like this:

- **20 sec Active** – Row to the PS Heart Rate and Stroke Rate targets
- **4 min Rest** - Row to the Easy Heart Rate and Stroke Rate targets
- **20 sec Active** – Row to the PS Heart Rate and Stroke Rate targets
- **4 min Rest** - Row to the Easy Heart Rate and Stroke Rate targets
- **20 sec Active** – Row to the PS Heart Rate and Stroke Rate targets
- **4 min Rest** - Row to the Easy Heart Rate and Stroke Rate targets
- **20 sec Active** – Row to the PS Heart Rate and Stroke Rate targets
- **6 min 40 sec Rest** - Row to the Easy Heart Rate and Stroke Rate targets

Note: The final Rest interval is 6 min 40 sec because that's the remainder after all the other intervals that makes up the total 20 minutes.

In both examples above you will notice there is an **r**, meaning Rest. This is your cue to **row Easy** during that part. You will occasionally see an **s** there instead of an **r**, which means you **Stop** rather than rowing Easy during that part.

Understanding training types and targets

Each workout has a **training type** associated with it. This gives you the all-important information about how to row the workout.

In RowPro training workouts you row to two targets: Heart Rate and Stroke Rate.

Note: You are not rowing to a Pace target in any RowPro training workouts, and this is deliberate. It means as you get fitter your body automatically makes you work harder to get to the same Heart Rate, so the targets effectively self-adjust.

- The **Heart Rate** targets in the HR Band column in the training types table are derived from your training profile, so they are specific to you.
- The **Stroke Rate** targets in the SR Band column in the training types table are derived from the training plan template and are the same for everyone.

Note: The fact you're not rowing to Pace targets means it's not appropriate to have a pace boat when you're rowing a training workout. Some people find this a little disconcerting and want a pace boat alongside, but if so you quickly get used to rowing to your Heart Rate, not to a Pace.

The heart rate bands used in RowPro

Heart rate is used as one of the targets in RowPro training workouts because your heart rate is a good measure of the intensity of your training while you row. RowPro uses five heart rate bands to express training intensities, as follows:

1. **AN** – Above the Anaerobic Threshold, up to your Maximum HR.
2. **AT** – Around the Anaerobic Threshold, your max HR over a long period.
3. **UT** - Up Tempo, an intermediate intensity.
4. **LS** – Long Slow, a low intensity.
5. **AR** – Active Recovery, a very low intensity.

RowPro uses your training profile to map each of these bands to heart rate numbers in beats per minute (BPM) that are specific to you. This is critical to tailoring the training plan to match your physiology.

RowPro has two methods for mapping the heart rate bands to your physiology:

- **Standard method** – RowPro uses an industry-standard calculation that takes into account your age and gender to calculate your maximum heart rate, and uses percentages of that to set the heart rate bands.
- **Test-based method** – If you know your anaerobic threshold heart rate (AT), for example by doing a Conconi test, you can enter this into your training profile. This enables RowPro to set more accurate heart rate bands for you.

The training types used in RowPro

Each RowPro training workout is a specific training type that has a specific focus on endurance, strength, speed, or a combination of these. Because of the extreme shortage of typing space on plan printouts, we use short-hand codes.

Here in alphabetic order is what each of those cryptic codes means:

- **BMIB** – [Body Mass Index Burn](#) - Very easy row at low intensity to improve your fitness and burn body fat.
- **BPB** – [Blood Pressure Bumps](#) – Very easy BMIB rowing with brief shifts to MSS rowed at a high Stroke Rate to stimulate your cardiovascular system.

- **E - Easy** - Easy rowing for maintenance and resting between more intense intervals. This is mainly aimed at low intensity fitness and recovery.
- **MSS – Maximum Steady State** - Fast rowing for long periods to improve your speed endurance.
- **PS – Power Shift** - Easy rowing with shifts to short MSS bursts at high levels of effort to develop your muscle power.
- **SLT – Slow Tone** - Slow $\frac{3}{4}$ muscle pressure rowed at a low Stroke Rate to develop your strength endurance.
- **SP – Slow Pressure** – Slow 75-85% muscle pressure rowed at a low Stroke Rate to develop your strength endurance.
- **ST - Starts** - A series of practice starts to improve your racing performance from the starting line.
- **T - Technique** - Focus on technique only to improve your technique and optimize your stroke efficiency.
- **TL – Tempo Load** - $\frac{3}{4}$ muscle pressure rowing strongly at an intermediate tempo.
- **TT – Time Trial** - A trial race to improve your racing power, technique, efficiency and endurance.

Each training type has Heart Rate and Stroke Rate targets associated with it, so when you are rowing a training workout you can just focus on staying in the target bands.

When you're rowing an interval training workout, you shift from the targets for the Active part of each interval to the targets for the Rest part of each interval and back again throughout the workout.

4. Rowing your training plan workouts

Important medical warning about training plans

Digital Rowing training plans are based on statistical norms in demographic data.

You are not a statistical norm! No two human beings are alike. Digital Rowing doesn't know your personal medical history nor fitness level. There is no way for Digital Rowing to know whether any particular training plan is suitable for you. Only you can make that determination in consultation with your doctor.

Digital Rowing does not warrant that any specific training plan is fit for you or suitable for your particular purpose.

Digital Rowing is a computer software company. It is not licensed to give medical advice. Digital Rowing would never give such advice, even if so qualified, purely on the basis of information furnished in response to a questionnaire.

RowPro training plans should only be used in conjunction with a comprehensive program involving professional advice, nutritional advice and exercise appropriate to your age, fitness level and medical history.

Consult your Doctor before rowing any RowPro training plans.

Disclaimer

Digital Rowing is not liable for any personal injuries that you may sustain as a consequence of using a RowPro training plan. Digital Rowing is not liable for any personal injuries that you may sustain as a consequence of using RowPro and/or an Indoor Rower, including your selection of various exercise options.

Remember: Physical exertion is healthy. Too much physical exertion is unhealthy. It's a fine line that only you can draw after seeking appropriate professional advice. Use RowPro entirely at your own risk.

Use of RowPro training plans constitutes your acceptance of the foregoing disclaimer.

Setting the current plan

Each time you use the training plan assistant to get a training plan, it appears in your training plan library and can be downloaded into RowPro.

Downloading a plan into RowPro makes it your current plan. To change your current plan, just download a different plan from your training plan library into RowPro.

Selecting a training workout to row

When you're ready to row a training workout, open RowPro Set up a Row and click Training. Points to note about the training workouts listed there are:

- The list is always centered on 'today' and training workouts due to be rowed within +/- three days of today are also listed.
- The training workouts listed are from your current plan. If there is no current plan or there are no training workouts in the current plan scheduled for today +/- 3 days, then you will see a message saying no workouts are available.
- A Rest Day means you don't row that day. Rest Days are an important part of your training plan, because believe it or not, your body develops while you rest, not while you're rowing!
- Workouts marked Opt are optional - you can row them if you want extra workouts, or you can skip them.
- Workouts marked Done have been rowed already, and you would not normally row them again unless something went wrong the first time. If you select a Done training workout and click Row, a warning message will appear.

When selecting a training workout to row, ideally you select the workout due today. There are some situations where you'd choose to row one of the other workouts:

- Due to life pressures, you can't always row a planned workout on the scheduled day, so RowPro gives you some flexibility to choose workouts scheduled within +/- three days of today. You can't choose workouts scheduled further away than 3 days from today, because that would seriously compromise your training.
- If you want to shift your entire plan up to 3 days earlier or later, for example to accommodate your weekly work pattern, you can just choose the same offset workout each day. So for example instead of choosing the Today workout, you might consistently choose the +2 workout to shift the whole plan 2 days.

Note: Being able to select workouts from +/- three days means you could end up rowing the training workouts out of their planned sequence. Even though you can do this, it's important not to change the order in which you row the workouts, because that would compromise your training.

Rowing each training workout

To get the correct training effect when you row a RowPro training workout, it is essential that you row within the target Heart Rate range.

While it is possible to estimate your heart rate range from physical cues, by far the best way to track your heart rate while rowing is to wear a heart rate monitor, and this is strongly recommended.

Ideally your heart rate monitor will be one that can send its signals direct to your Concept2 Performance Monitor, where RowPro can pick it up to display and record it.

Rowing the warm-up and warm-down

Apart from Technique workouts, all RowPro training plan workouts include a warm-up and a warm-down, and these must be rowed.

You can make these longer in Set up a Row, but you can't make them shorter than the minimum settings. Typically, the warm-up and warm-down are either 2min or 500m; for some of the more demanding training workouts they are 3 min or 750m.

There are no Heart Rate, Stroke Rate or Pace targets for the warm-up and warm-down, and you should make a point of rowing them gently.

For the warm-up, start slowly and towards the end of the warm-up, if the training workout has intervals, do one or two brief bursts at the Pace and Stroke Rate of the first interval.

Rowing the training workout

Keep your Stroke Rate in the green target range on the SPM Indicator on the top frame of the RowPro PM twin just above the SPM panel.

Keep your Heart Rate in the pink band shown on the Heart Rate chart in RowPro.

Note: If your heart rate monitor is connected to a watch, keep your heart rate between the upper and lower limits shown in place of the Heart Rate chart in RowPro. If you have no heart rate monitor, follow the cues that are shown in place of the Heart Rate chart.

When you row an Interval training workout, the Heart Rate and Stroke Rate targets for the Active periods are different from the targets for the Rest periods. As you move from Active to Rest and from Rest to Active, RowPro automatically moves the targets to their correct settings for the Active or Rest period you are rowing, so all you need to do is keep rowing and adjust your rowing to the new targets.

5. Tracking your training progress

Note: The tools mentioned throughout this section are not yet available for use with RowPro 5 or RowPro online logbooks. They will be added progressively.

Using RowPro analysis tools

The most important tool for tracking your training progress is the RowPro Analyze tool. This enables you to compare two similar rows and see directly what has changed.

To use the RowPro Analyze tool, select two similar rows in your RowPro online logbook, right-click and click Analyze.

This will show a report in table and chart form that compares the two rows in terms of your performance and heart rate.

The Analyze report also interprets the comparison between the two selected rows to tell you in plain language whether you've improved and by how much.

Tracking your progress

There are several methods for tracking your progress:

Performance vs. heart rate

The core method for determining if you have improved is to compare your performance and your heart rate between two similar rows.

You have improved if:

- Your performance has gone up for the same or lower heart rate, or
- Your performance is the same for a lower heart rate, or
- Your heart rate has gone down more than your performance, or
- Your performance has gone up more than your heart rate.

Improved outcomes

Based on your training purpose and goals, you have improved if:

- You were training to maintain or reduce weight and you have achieved that.
- You were training to improve your racing performance and you have done that.
- You notice a distinct improvement in your endurance, strength or speed.

Dealing with the unexpected

It pays to know what to do when the unexpected happens. Here are some common issues and methods for dealing with them:

Interruptions to your training schedule

We all know life just gets in the way sometimes and the result is you can't train for a while. This can be a minor issue if the interruption is short or a major issue if the interruption is extended. The best way to deal with that depends how long your training schedule is interrupted. Here are some simple guidelines:

- **If the interruption is just a day or two** – You can use the +/- 3 days listed in Set up a Row | Training to time-shift any training day by up to +/- 3 days. Note if you do this, take care to maintain the Easy rows between the harder rows in the plan, i.e. don't do a hard row one day and another hard row the next day.
- **If the interruption is less than a week** – You can push on with the plan, but skip the days you missed. Just restart your training at the new 'today'.
- **If the interruption is more than a week** – You should stop rowing your plan and start a new plan. This may be hard to accept, but your body is moving through training cycles, and those cycles are broken if you're off-plan for more than a week. If you just push on with the plan at the new 'today', you'll lose a lot of the benefit of the plan. In the circumstances, shifting to a new plan is a better strategy.

Illness and injury

Apart from the considerations relating to the interruption as noted above, in times of illness or injury you also need to deal with the fact that you're not at full capability:

- **Post-injury**, the first consideration is whether you are fit to row at all, and you should be guided by your doctor. Don't train while injured without clearance from your doctor. Assuming you're cleared to row, then you should probably start with a Weight plan or a Fitness plan with a Tone Up focus, taking care not to over-extend yourself past the set targets in each training workout.
- **If your injury is due to over-training**, you need a different approach. You can tell if you're overtraining by monitoring your progress. If you're training a lot but *steadily measuring negative improvement*, then you're overtraining. As a first step you should stop training completely for 3-5 weeks and then start training lightly again. If problems persist, you may need a longer break.
- **Post-illness**, the first consideration is to make sure the illness is over before you restart training. Don't train during illness without clearance from your doctor. Restart your training based on the amount of time you've been off-plan as discussed above. If it was anything more than a minor illness, then you should probably start with a Fitness plan with a Tone Up focus, taking care not to over-extend yourself past the set targets in each training workout.

Progressing through the training levels

When you get a new training plan, you build on the previous plan in two ways:

1. RowPro training plans require you to row within Heart Rate and Stroke Rate targets. If the training plan assistant gives you the same level of clearance as last time, and therefore the same plan as last time, you will still need to row at a faster pace to have the same heart rate as last time, because you are fitter than you were before. This means each new training plan automatically builds on the previous one, even if it's the same plan again.
2. When you go through the training plan assistant, you enter information about your rowing history that includes your longest workouts and maximum hours of training per week and per month, plus for competition plans you enter your racing history. Often one or more of these numbers has changed because of the training plan(s) you have already completed, and these changes will eventually stimulate the training plan assistant to clear you for a higher level of training.

Note: You can easily prove to yourself that each plan has built on the previous one by comparing your performance at the end of the plan with your performance at the end of the previous plan. Unless you're already supremely fit, it's extremely likely your performance has improved.

6. Troubleshooting your training

Rowing frequency

When you got your indoor rower you might have intended to just row on the weekend, and certainly that's better than not rowing. However, you really need to row at least three times a week to achieve and maintain healthy fitness if rowing is your main or only form of exercise. All RowPro training plans have at least 3 rows per week, and up to 7 rows per week in top-end plans.

At the other end of the scale, you can also over-train. Sadly, over-training injuries are becoming more common as more people over-train. If you intend to row more than 7 times per week you probably need to get expert advice to avoid the real risk of over-training problems.

Workout duration

Most people who row at a gym are completely exhausted after 5 minutes on the machine and can't even imagine how anyone could row for 20 minutes or even an hour or more. It just seems impossible.

However, it's just a matter of backing off the pace to a level where you can row aerobically, meaning your heart rate stays below your Anaerobic Threshold or AT.

If rowing is your main or only form of exercise, you really need to row a minimum of 20 minutes in any workout to get a useful training effect that carries forward to your next workout to produce and maintain healthy fitness.

Virtually all the workouts in RowPro training plans are at least 20 minutes long, and can be a lot longer depending on the type and level of training plan.

At the other end of the scale, once you're rowing workouts longer than an hour you need to take measures to keep hydrated, plus most people rowing marathon distances also need to use special seat padding arrangements and possibly hand protection to avoid problems from excessive rubbing. Ask around the online rowing forums for advice from seasoned veterans of longer rows.

Workout type

A very common pitfall is to find a workout type that suits you, like say 30 minutes' hard rowing, and just repetitively do that workout whenever you row.

The reality is your body needs a combination of strength, speed and endurance work to maintain healthy fitness, and this means you need to mix it up a bit.

The workouts in RowPro training plans are a professionally-designed mix that cycle your body through a series of strength, speed and endurance phases to produce the training effect you are working towards.

So if you've never done an Interval workout and are hesitant to start, just go with what the training plan says and you'll quickly start enjoying the variety.

Damper setting

The damper setting is possibly the most poorly understood variable.

There's a popular gym cult that "you're not a real man unless you row with the damper on 10", but this is rubbish. Think of a 10-speed bike. Who in their right mind would say (or believe if told) "you're not a real man unless you ride in 10th gear"?

The bike gear lever and the rowing damper are very similar. Concept2 has cleverly arranged the math inside the PM to ensure this is the case. You can easily prove this to yourself by monitoring your heart rate and rowing with different damper settings. Provided you stay at the same SPM and Pace, your heart rate will be the same regardless what damper setting you choose.

The reality is that like higher gears, higher damper settings require more muscular strength, but you go further with each push / pull. On a bike, you quickly work out which is the optimum for you – too high and your muscles get really tired, too low and you're wasting too much energy just moving your legs round the pedal circuit.

People rowing soon work out their own optimum damper setting. On Concept2 Indoor Rowers, women and lightweight men tend to row with a damper setting between 3 and 5, and heavyweight men tend to row between 3 and 7.

Heart rate

Your heart rate is like a meter telling you how hard you're working, which is why it's so important to monitor your heart rate while you row, particularly when you're rowing to a plan, and to keep your heart rate within the target band for your workout.

The first thing to realize is that rowing for more than a few minutes is only possible if you keep your heart rate below your Anaerobic Threshold or AT, otherwise your muscle cells simply run out of the energy that fuels Anaerobic work, with the result that your muscles suddenly feel dead - it's called "hitting the wall".

The question is how to tell what your AT is. To avoid you having to do a test, RowPro uses a simple age-based formula, however this is conservative, so if you're already quite fit you may find this results in your heart rate target ranges feeling too low when you do a RowPro training plan.

The 'correct' solution is to do a test to determine your AT and then plug that into your training profile in RowPro. Ideally this test should be done while rowing on a Concept2 Indoor Rower. Testing to find your AT is commonly done either by Lactate testing involving pinpricks to take blood samples, or by a Conconi test involving ramping up intervals and monitoring your heart rate until you physically have to stop.

CAUTION: Either way, testing requires maximal effort, so if you plan to do a test you should work with a professional who knows what to do and you should get clearance from your doctor first.

There are other heart rate ranges below your AT, and it's important to stay in these ranges to get the intended training effect. For example, if you're wanting to do a fat-

burning row, you need to keep your heart rate well down in the appropriate range for most of the row, otherwise you'll get a good cardio workout but won't burn much fat.

Stroke rate

Stroke rate is one of the most important variables in your rowing, as it has a major effect on the type of workout your muscles get. A medium stroke rate would be around 22-26 SPM. When you go lower than that, say 18-22 SPM, this is more demanding on your muscles and is basically a strength workout. When you go higher, say 26-30 SPM, you're moving more into cardio-respiratory work, and over 30 SPM you're doing speed work.

All of these are important types of work you need to cycle your body through for effective training. It's important not to just settle on one stroke rate and always do that for all your workouts, because you'll be missing out on the other workout types and your training will be less effective in delivering the results you want.

CAUTION: Take care when rowing under 20 SPM, because the load on your lower back muscles in particular is substantial. If your lower back gets sore, increase your stroke rate a little and ease off the pace until you can row without any soreness or pain, then gradually come back down to lower stroke rates.

Stroke technique is also critical at lower stroke rates. A common problem in stroke technique is 'shooting the slide', and doing this while rowing under 20 SPM is really bad for your lower back muscles and can lead to injury. To explain:

At the catch your trunk is leaning slightly forward and your knees are folded up. At the finish your trunk is leaning slightly rearward and your knees are straight. As you move from the catch to the finish, you need to progressively tip your trunk from the forward tilt at the catch to the rearward tilt at the finish.

The thing not to do is leave your trunk tipped forward while you drive with your legs, and only begin tipping your truck rearward when your legs are more or less straight - that's what 'shooting the slide' means, and that's what overloads your lower back muscles. For guidance, match the way the Oarsman rows in the Coaching Clinic.

One other common pitfall is that at first it seems completely counter-intuitive to pull a lower Stroke Rate at a higher Pace, but it's definitely possible and an important skill to master. RowPro can train you in this. Follow the timing of the Oarsman on-screen to get your drive and recovery timing right. The Oarsman does the correct drive to recovery timing when you row at any given Stroke Rate. Basically you do a slower recovery, rather than pausing anywhere in the stroke.

Also, click Training | Coaching Clinic on the RowPro main menu, and click the Stroke Rhythm button beside the coaching notes. You'll see the drive to recovery ratio changes with slower Stroke Rate. It's this changing ratio you need to learn to do, so your drive to recovery timing is optimized for your Stroke Rate at any given time. It feels very odd at first, but as you get more skillful at it you'll find it eventually becomes second nature.

Pace

For many people, pace is the first thing on their mind, whereas it probably should be the last. You may have noticed that when you row workouts from a RowPro training plan, a) there is no pace target, and b) you can't use a pace boat.

Both of these are deliberate. To get a given training effect from a workout, you need to row for a specific time at a specific Stroke Rate and in a specific Heart Rate range. When you do that, the resulting pace is just that - a result. When you row in a preset Heart Rate range, then the pace is what it is. When you get fitter, your pace will be faster at the same heart rate as when you were less fit. In this way your training automatically adapts - you row at a faster pace when you're fitter.

The key point is that it's your Heart Rate and Stroke Rate that determine the training effect you get, not your Pace. This is also why you should not train with a pace boat unless you're specifically needing to train at a specific pace.

The math for pace is that $\text{Pace} = \text{SPM} \times \text{DPS}$, where DPS is the Distance per Stroke. This means that to go faster, you need to either increase SPM without conceding DPS, or vice-versa. This is easier said than done! Interestingly, there is a slight HR advantage if you row the same pace at a lower SPM, hence if you're training for competition it's a good idea to include plenty of low stroke rate strength workouts.

RowPro competition plans include lots of strength workouts. They deliver a performance peak at a defined date to optimize race results, while recognizing that achieving high peaks on race day requires dropping off those peaks in between, hence the training varies. The bottom line is that always doing the same training and seeking to just incrementally get faster has in-built limits that are lower than proper peaking, and you can readily prove this to yourself by trying it each way.

7. Help, assistance & troubleshooting

RowPro help

Your first port of call is RowPro Help Online at www.digitalrowing.com/help. This covers all the common problems you may encounter and how to resolve them.

RowPro support

Next stop is RowPro Support at www.digitalrowing.com/support where you'll find all the RowPro documentation, guides and mini-guides, plus FAQs on all common topics.

Information and assistance

If all else fails, for free and friendly personal assistance by the people who know RowPro inside out, just email assist@digitalrowing.com.