

Indoor Cycle Trainers

During winter, many cyclists, triathletes, and duathletes use indoor cycle trainers to beat the weather and darkness. Although you need a fair amount of discipline to bike inside, going nowhere, it certainly beats the wet and cold outside.

In the past, 'accumulating kilometres' was the main point for cyclists. Today, training is more varied and frequently results in improved match performance. The intensity of the various types of training is often referred to as recovery training, easy endurance training, solid endurance, and interval training. Recovery training, during which you cycle 60 km for 2 hours at an easy constant tempo, is totally different from intensive interval training for the same time and distance. One way to compare the intensities of various types of training is by measuring the heart rate.

To work out your maximum heart rate, do a 5-minute time trial and sprint during the last 30 seconds. Just before you flake out, look on your heart monitor and record your heart rate. This is your maximum heart rate. You can then use your maximum heart rate to decide on your heart rate intensities in the 5 zones of easy, steady, moderately hard, hard, and very hard (Table 1).

Table 1. Heart rate intensity.

Easy	Maximum heart rate minus > 50 beats
Steady	Maximum heart rate minus 30 to 50 beats
Moderately hard	Maximum heart rate minus 20 to 40 beats
Hard	Maximum heart rate minus 10 to 30 beats
Very hard	Maximum heart rate minus < 10 beats

Choosing your Indoor Cycle

TACX is an innovative manufacturer who carefully monitors new developments. The company is known for its innovative products that are high quality, have a powerful design, and have absolute functionality. Throughout the cycling world, TACX is a household name, and many professional cyclists train on a TACX Cycle or Ergotrainer. The following are some products that may be of interest:

- The TACX Swing is a no-nonsense, high-resistance power trainer. It is the original bike trainer used by professional teams.

Price \$ 499.00



- The CycleForce Flow is the first of a new generation of ergotrainers. Heart rate, power, speed, and pedalling frequency are measured and visualised on the Flow computer display, providing an important instrument for improving physical fitness. You can adjust your programme to suit your needs while training.

Price \$ 999.00



- The Cosmos is a high-end ergotrainer for professional cyclists and amateurs who want to get the most from their training. Using the Cosmos, you can adjust your programmes according to power, gradient, and heart rate.

Price \$ 1999.00



- The i-Magic Fortius is a virtual reality trainer that gives you a choice of interactive virtual cycling conditions. It has a powerful motor brake that simulates descents and arduous climbs. The resistance corresponds closely with anything encountered on the road.

Price \$ 2200.00



Updates and further information can be obtained from the TACX website: www.tacx.com

Do not attempt the maximum heart rate test without medical advice if you are inexperienced or older than 35 years. In general, 1 hour of a structured workout is as good as 2 hours on the road because the power output is continuous and there is no freewheeling, tailwinds, or downhills in which you can rest. By changing gears or the resistance, you can adjust the workload.

The Box shows 5 examples of workouts: a time trial session, ladder repetitions, long repetitions, a steady workout with alternating 5-minute intensities, and short repetitions. There are many variations on these themes, including the number of repetitions and the intensity, as indicated by the brackets and intensity options. Usually, a maximum of 2 sessions a week will be an excellent complement to another 2 or 3 sessions on the road.

TIPS FOR CYCLING INDOORS

Cycling indoors is different from cycling outdoors, as there is no wind for cooling. (You feel cooler outdoors when riding in the wind because your perspiration evaporates more quickly.) Ventilate the room in which you ride — using a big fan can help keep you cool. As you will probably lose a lot of sweat when riding indoors, use plenty of towelling over your bike and on the carpet around the bike. Make sure you drink plenty of liquids. Drink a minimum of 500 ml of water or a thirst-quencher per 1 hour of training. Boredom can be a problem, but ways to relieve the boredom when using an indoor trainer include watching television or a good video, or listening to your favourite music with the volume knob turned on full. This helps you to focus on the job.

Stationary Bike Training Sessions

The following sessions are examples only, and can be adjusted in duration and intensity to suit individual requirements:

Time Trial Session

1. 5 minutes of warm-up, easy pace
2. 3 x 2 minutes at moderately hard pace (1 minute easy recovery in between repetitions)
3. 10 minutes, alternate legs every minute (1-legged cycling)
4. 20 minutes (between 10 and 40 minutes) time trial continuous, at steady, moderately hard, or hard pace
5. 10 minutes of cool-down

Ladder Repetitions

1. 5 minutes of warm-up
2. Ladder: 1, 2, 4, (6, 8, 6,) 4, 2, 1 minutes at moderately hard to hard pace, 1 or 2 minutes easy recovery in between repetitions
3. 5 minutes at easy pace
4. 5 minutes of fast spinning (cadence, 100 to 120 pedal revolutions per minute)
5. 10 minutes at steady pace

Long Repetitions

1. 5 minutes of warm-up
2. 12 minutes alternate legs for 2 or 3 minutes
3. 4 to 6 x 3 (or 4) minutes at moderately hard to hard pace (1 or 2 minutes easy in between)
4. 3 minutes of easy spinning
5. 6 x 1-minute accelerations in big gear, 1 minute easy in between
6. 5 minutes at easy pace

Alternating 5-minute Intensities

1. 5 minutes at easy/5 minutes at steady/5 minutes at moderately hard
2. Repeat this 15-minute cycle 2 to 4 times (choose intensities depending on periodisation, etc)

Short Repetitions

1. 5 minutes of warm-up
2. Alternate 30 seconds at hard pace (or moderately hard) with 30 seconds of easy spinning for 10 to 20 minutes
3. 15 minutes at steady continuous
4. 6 to 10 x 1-minute hard to very hard with 1 minute easy in between repetitions
5. 5 minutes at easy pace

Some athletes find that the winter training sessions give them an improvement over what they usually achieve by just training on the road. These athletes

use the indoor cycle trainer all year round. So, there are no more excuses of not being able to go out cycling. Give it a go! Happy training.