



## Indoor Cycle Instructor PROfile **Ramp – Attack - Sustain**

Created by **Tom Scotto / Cycling Fusion**

Training Type: **Advanced**

Working HR Zones: **Zone 4 to Zone 5**

Cycling Specificity: **4**

Total Class Length: **60 minutes**

### **PROFILE DESCRIPTION**

This class targets the high-end fitness of your riders including their aerobic, anaerobic and muscular capacity – their upmost limits. Although all of their limits are challenged, the greater focus is placed on anaerobic endurance. Specifically, how long can a rider last at an intensity when a great amount of energy must be produced and sustained anaerobically (with insufficient oxygen supply).

### **OBJECTIVE AND INTENSITY**

The objective of this profile is to allow riders experience 2 approaches to anaerobic endurance efforts. The first approach will bring them to an perceived effort (PE) of 90% progressively (the Ramp) before asking them to Attack (full-out – nothing held back).

The second approach throws them into a full-out (110% PE) effort for a short time and then encourages them to sustain the highest intensity possible for 1+ minutes.

#### **A Good Self-Assessment Ride**

Many rides can contain qualities that provide feedback for us to assess our strengths or fitness. This profile is not exception. It is important to point out to your riders that this type of workout requires training. So if they have not done efforts like this before or it has been more than 2-3 months, they may not feel strong or able to complete them successfully.

#### **Periodization Guidelines**

This is a very strenuous profile requiring a solid base of aerobic fitness and muscular strength and endurance. It should not be attempted in the early months of the year (January to March) when riders are still developing their fitness and conditioning connective tissues.

#### **Risk Stratification**

This profile is not recommended for beginners or high-risk populations. Riders that are new to your class should be strongly encouraged to work at their own pace and focus on form as their priority over intensity.

**Training Zones / Intensity Levels**

Many cyclists use a training zone system from 1 to 5 (5a, 5b and 5c). The table below provides some suggested translations between these Training Zones, Perceived Efforts (PE) and Rate of Perceived Exertion (RPE).

TRAINING ZONE	PERCEIVED EFFORT (PE)	RPE (1-10)
<b>ZONE 5 – Capacity</b>	<b>&gt; 90%</b>	<b>9 - 10</b>
<b>ZONE 4 – Sub-Threshold</b>	<b>80 – 90%</b>	<b>7 - 8</b>
<b>ZONE 3 – Aerobic Fitness</b>	<b>70 – 80%</b>	<b>5 - 6</b>
<b>ZONE 2 – Endurance</b>	<b>60 – 70%</b>	<b>3 - 4</b>
<b>ZONE 1 – Active Recovery</b>	<b>50 – 60%</b>	<b>1 - 2</b>

**Warm-Up**

Take the time to prepare the body properly. These are high-intensity efforts that will require a combination of aerobic capacity (VO<sub>2</sub>max), anaerobic capacity and muscular strength. I suggest a 15 to 20-minute (structured) warm-up that allows the rider to increase heart rate and body temperature, while activating the muscles of the legs and priming aerobic and anaerobic energy systems.

**Intermediate Recovery**

It will be important to point out the importance of recovery to your riders. This profile provides both intermediate recovery between each effort and between each set (grouping of efforts). Letting riders know the amount of recovery they will have will free them to give all they have during the efforts removing the worry of not having the opportunity to pull it back together.

## THE PROFILE

### WARM-UP (Part 1)

Length: 8:00 Minutes

Intensity: 50-60% PE / Zone 1-2

Cadence: 90 RPM

Cover the standard safety banter and provide an overview of the ride's objective.

*“Today we are going to experience the high-end of our fitness. This is a VERY challenging class that will target an effort of 90 to 100% of your perceived effort. We will take 2 approaches. First we will RAMP up our intensity over a period of time and then launch an ATTACK. An attack is an all-out, all you've got, 110%, no holding back effort. This will push you to your limit. The second approach will start with an ATTACK but then you will be asked to SUSTAIN the highest level of intensity you can for a period of time after the attack. You will not be able to SUSTAIN 110%, but the goal is as close to 90% as you can.”*

*“This is a high-intensity workout so it is important that you monitor your body throughout. There will be adequate recovery provide not only between each set or section, but recovery between each individual effort – so there will be no excuse for you not to give it your all.”*

*“Also, remember that form is more important than performance. It is better to use less resistance or less leg speed if trying to do more will cause you to lose your form. If you find your form wavering at any point, reduce your effort and focus on your form until you can recapture it.*

### Intensity Ramps (Warm-up Part 2)

Length: 7:00 Minutes

Intensity: 60-75% PE / Zone 2-4

Cadence: 95 RPM

Riders will start by performing and practicing a 1-minute effort where they ramp their intensity progressively from 60% to 80% of their perceived effort. The end of each ramp should feel uncomfortable.

*“We are still in the warm-up but are going to progressively increase our intensity as we bring the body into the workout.”*

*“We are going to perform 6 one-minute Intensity Ramps. First let's make sure we are on a noticeable flat road (and can feel resistance). Each ramp will start here and then build as we add resistance every 15 seconds WITHOUT changing or slowing down our cadence. The last 15 seconds should force you out of the saddle (Optional). After the 1-minute ramp is over, we will return to our noticeable flat road and start again.”*

*“If you are going to choose to come out of the saddle for the last 15 seconds, make sure you have enough resistance on the bike to support your body weight and keep you in control. Remember, when you stand, the cadence must remain the same.”*

*“These Intensity Ramps will not only help us warm-up, but will get us used to how much resistance we will need as we figure out how our bikes AND body responds.”*

**Recovery**

Length: 2:00 Minutes

Intensity: 50 - 60% PE / Zone 1

Cadence: 90 RPM

*“OK, you have 2 minutes to recover. I want you to remember how each of those Intensity Ramps felt and how much resistance you were able to add each time.”*

*“Next we will approach our first set of efforts – Ramp-Attacks!”*

*“You will ramp up your intensity for 45 to 75 seconds and then attack for 30 to 50 seconds. This is brutal. After each attack you will get 30 to 60 seconds to recovery. It will not be enough and you will know it and feel it.”*

*“After we complete the 3 efforts, you will get 3 minutes to recovery before the next set.”*

**Ramp-Attack (3x)**

Length: 8:30 Minutes

Intensity: 90 - 100% PE / Zone 5

Cadence: 100 RPM

**Ramp-Attack 1:**

*“First let’s start on that noticeable flat road. This is where we are going to return to between each effort. Now match your cadence to the tempo of the music or my leg speed. If you are having difficulty getting 100 RPM, just find a cadence that is challenging to you AND a speed you can maintain.”*

*“Our first ramp is 1 minute and 15 seconds. Let’s begin....add resistance (add more resistance every 15 seconds). Now you should be pushing the upper levels of your ability and fitness and it is now that I want you to attack for 30 seconds! Hit it! All-Out! Hold Nothing Back!”*

*“You’ve got 20 seconds.....15....10....4..3..2..1.. Excellent!”*

*“You now have only 30 seconds to pull it back together and we’ll do it again.”*

**Ramp-Attack 2 & 3:**

The next ramp is another 1 minute and 15 seconds followed by a 40-second attack. Riders are then given 60 seconds to recovery before the last one which is only a 40-second RAMP followed by a 40-second attack.

**Recovery**

Length: 3:00 Minutes

Intensity: 50 - 60% PE / Zone 1

Cadence: 90 RPM

*“OK, you have 3 minutes to recover. The goal is to get as close to Zone 1 as you can during this time.”*

*“If you can recover if less than 2 minutes, you are most-likely not challenging yourself enough. If you can – UP the level of intensity on this next set.”*

*“Next we flip the script and Attack first THEN sustain what we started!”*

*“We are going to perform two 30-second Attacks and then try to Sustain the highest intensity we can for another minute.”*

*“After we complete the 2 efforts, you will get another 3 minutes to recovery.”*

**Attack-Sustain (2x)**

Length: 6:00 Minutes

Intensity: 90 - 100% PE / Zone 5

Cadence: 100 RPM

**Attack-Sustain 1:**

*“Get Ready. I’m going to count you into your first Attack. While I’m counting, I want you to set up your attack by adding the resistance you need.”*

*“We are Attacking in 4....3....2....1.... HIT IT!! Come-on, all-out, give it all you’ve got. You’ve got to be willing to fail in order to success. Let it GO!”*

*“NOW, what can you Sustain for the next 60 seconds? You can’t sustain 100%, but can you sustain 90%? That is the goal. Keep the pressure on. Don’t give in.”*

*“You’ve got 20 seconds.....15....10....4..3..2..1.. Excellent!”*

*“You now have only 2 minutes and 30 seconds to pull it back together before we do it again. And trust me, you should need every second.”*

**Attack-Sustain 2:**

Repeat the above, but let riders know that they may already be feeling the cumulative affects of the workout and should skip the next Attack-Sustain if they don’t believe they can give their all OR they are concerned about how they feel.

## Recovery

Length: 4:45 Minutes

Intensity: 50 - 60% PE / Zone 1

Cadence: 90 RPM

*“OK, you have 4:45 minutes to recover. The goal again is to get as close to Zone 1 as you can during this time.”*

*“Next we leave the world of training structure and enter the REAL WORLD where there is little to no structure and we are often pushed beyond our abilities.”*

*“Next we are going to perform only 1 Ramp-Attack. However, this time we will ramp for 1 minute and 30 seconds and then ATTACK for 1 minute and 15 seconds!!!”*

*“What are you capable of doing? Don’t hold back and you will have your answer.”*

*“After we complete this one effort, you will get another 3 minutes to recovery.”*

## OPTION: Rolling Hills

After 3 minutes of recovery, it can be helpful to provide 1 or 2 rolling hills to keep the leg muscles engaged. The hills should be gentle and not last more than 30 seconds. Provide this as an option. If riders are approaching this class properly, they will welcome the extra recovery since the efforts are going to get harder and longer.

## Ramp-Attack (1x)

Length: 3:15 Minutes

Intensity: 90 - 100% PE / Zone 5

Cadence: 100 RPM

*“First let’s start on that noticeable flat road. Now match your cadence to the tempo of the music or my leg speed. Remember, if you are having difficult getting 100 RPM, just find a cadence that is challenging to you AND a speed you can maintain.”*

*“Let’s begin....add resistance (add more resistance every 15 seconds). Now you should be pushing the upper levels of your ability and becoming breathless and it is now that I want you to attack for 1 minute and 15 seconds! Hit it! All-Out! Go For It!”*

*“You’ve got 1 minute...45 seconds....30 seconds....20....15....10....4..3..2..1.. You Nailed it!”*

*“You now have 3 minutes to pull yourself back together before our last effort of class – and you know exactly what that will be. Also, you may be noticing that the 3-minute recovery that seemed adequate (and maybe even long) is starting to not feel close to enough as we get to towards the end.”*

**Recovery**

Length: 3:00 Minutes

Intensity: 50 - 60% PE / Zone 1

Cadence: 90 RPM

*“OK, you have 3 minutes to recover. The goal again is to get as close to Zone 1 as you can during this time.”*

*“The question of the hour....What do you have left?”*

*“We are going to go for our last effort of class - 1 Attack-Sustain. Your final challenge – Attack for 30 seconds and then try to sustain 90+% of your ability for 2 MINUTES!!”*

*“I believe you can crush this, but you’ve got to be willing to go deep. Deep into your reserves. Deep into your pain locker.”*

*“Let’s do it!”*

**Attack-Sustain (1x)**

Length: 3:00 Minutes

Intensity: 90 - 100% PE / Zone 5

Cadence: 90 RPM

*“Set it Up! I’m going to count you in. While I’m counting, you know what to do – add that resistance and prepare both your mind and body to unleash.”*

*“We are Attacking in 4....3....2....1.... HIT IT!! Come-on, all-out, give it all you’ve got. This is it! Dig down DEEP!”*

*“NOW, what can you Sustain for the next 2 Minutes? Settle in. Level off and keep the intensity. Imagine you are 2 minutes away from home and you’ve just taken your friends surprise with that vicious attack. They are now chasing you. Can you fend them off til the end?”*

*“1 Minute and 30 seconds to go! That’s right, this hurts. It’s like getting beat across your quads with baseball bats. But you tell yourself ‘You LOVE IT – Bring it!!!’”*

*“1 Minute!!!! You are a machine. Unstoppable! Unmovable! A force that cannot be contained!”*

*“45-Seconds – YOU’VE GOT TO HOLD ON! Your body want to fail but you say NOOOOO!”*

*“30 Seconds....DEEP!.....15 Seconds....EVERY LAST BIT – EVERY TURN OF THE PEDALS!.....4...COME-ON!....3....2...THERE IS THE FINISH.....1.....”*

**COOL-DOWN / STRETCH**

Length: 10:00 Minutes  
 Intensity: 50-60% PE / Zone 1  
 Cadence: 70 - 85 RPM

I recommend taking the first 4 minutes to allow riders to spin their legs and cool-down reducing their heart rate and body temperature. Use the last 6 minutes for stretching or allow riders to choose to stay on the bike if needed.

This is a good time to review not just what your riders accomplished but how they felt performing each approach to anaerobic endurance. Which approach was most suitable to them or their level of fitness? This may provide some insight for them allowing them to assess which areas of their fitness need more focused training and where they are rock solid.

Don't skip over this self-assessment! This is an opportunity to show them that our classes are not only focused but provide tremendous value. Our classes represent: Real Cycling, Real Training and Real Results (that's my motto).

**THE MUSIC:**

SONG TITLE	TIME	BPM	ARTIST	FOCUS
Liquid Sky	8:07	91	David Arkenstone	Warm-Up
Run Baby Run	7:23	95	Alex Cortiz	Intensity Ramps
Tom's Diner	2:00*	93	Alex Cortiz	Recovery
Shirashikkur	8:39	100	David Arkenstone	Ramp-Attacks (3x)
Tom's Diner	3:00*	93	Alex Cortiz	Recovery
Chicken Neck	6:13	97	Sal Difusco	Attack-Sustain (2x)
Tom's Diner	4:45	93	Alex Cortiz	Recovery
Cascades	3:22	103	Falling Up	Ramp-Attack (1x)
Tom's Diner	3:00*	93	Alex Cortiz	Recovery
Fire In My Eyes	2:58	90	Firefight	Attack-Sustain (1x)
The Colors of Fall	5:11	86	David Arkenstone	Cool-Down
Maenam	5:39	**	Jami Sieber	Stretch

\* I used MixMeister Express to shorten the 4:45 minute version of Tom's Diner by Alex Cortiz to make a 2 & 3-minute version for recovery purposes.

\*\* Maenam does not have a consistent rhythm. Perfect for stretching.