

Are carbon shoes worth the hype?

You've seen them on the feet of the elites, and they're now (relatively) available for non-elites to purchase. These shoes are very in-demand and can be hard to get in popular sizes after initial release. The number one thing you'll notice with these shoes besides the addition of a carbon fiber plate is the price tag – expect to pay at-least \$199 for a pair. The price-tag alone may have some of you looking for other shoes. Effectively what we're speaking to here is purchasing a race specific shoe commonly known as a racing flat. With the advent of foam and carbon technology, the days of thin, ultra light racing “flats” may be behind us.

Each brand has released their own carbon shoe in 2020 and with the release has received some controversy from national governing bodies (NGB's) about where we draw the line. Why the controversy? The carbon plate acts like a lever and gives athletes a mechanical advantage that goes beyond aerobic fitness and has recently been coined “mechanical doping”. This has caused the governing bodies to make rules around stack height and rules around commercial availability. This commercial availability goes back to competition in other sports like World Rally Championship demanding that cars raced had to be “commercially available”. This is effectively trickle-down technology from the bleeding edge to the average consumer.

So if the pro's get an advantage – should we expect a 3 hour or 4 hour marathoner will see the same advantage. The answer is a hesitant yes and definitely more of a “maybe” at best. Throwing on a pair of shoes doesn't make any impact to your aerobic abilities or a major improvement in your running mechanics. *You can put drag tires on a mini van but you still need the race car engine to see the benefit.* Simply put, some athletes won't see a huge improvement from these shoes. However, the potential exists for “free speed” so if you're on the edge of qualifying for Boston or New York Marathon – why wouldn't you? The shoes might just be the difference you need to punch your ticket. It's up to you to complete the cost-benefit analysis. These surely aren't every day trainers – they're something extra on race-day that can take your race from good to great. You shouldn't rely on this sealing your outcome – nothing beats consistent training, no matter what the ads tell you.

### **So what should I buy?**

We speak to the marathon a lot because it's the longest road race many athletes will conquer and it's where you'll see the biggest time jump if you benefit from these shoes. However, carbon shoes can have benefits for very short races as we're seeing carbon plate technology moving into track spikes. We've created a short-list of shoes that our athletes have enjoyed or had success with – this is not an exhaustive list but merely a summary of shoes to consider. Simply put, nothing beats taking a few pairs for a test-drive.

#### **5K/10K Shoe – Asics Meta-Racer – 6.6oz's**

A light nimble shoe that gives you enough cushion but keeps things light and comfortable. At 6.6oz's it is one of the lightest shoes in this compilation. Made for cornering at speed, it also has a very low stack height to help you feel the ground underneath you weight weighing you down.

### **½ Marathon – Nike Zoom Tempo/ Saucony Endorphin Pro**

The hefty Nike Zoom Tempo weighs in at 9.2ozs with the Endorphin Pro coming in far ahead at 7.5oz's. The big difference between these shoes is the Nike has added bulk that can withstand regular training where as the Endorphin Pro will compact and lose grip after 60-90 miles of regular use. Both shoes can be used for training but the ROI of the Nike Tempo will get you further down the road. Both shoes are a bump in stack height from the Meta-Racer which is a trend we'll see in the marathon shoes as well. Both shoes are noticeably stiffer on the feet than traditional racing flats because of the carbon fiber plate. You need to get both of these shoes "up to speed" to take full advantage of the carbon plate and feel what everyone is talking about.

### **Marathon – Adidas Adizero Adios Pro / Nike Alphafly**

The alphafly is the reigning king of speed and distance but has recently been taken to the mat by the Adizero Adios Pro. The Adidas shoe is a mouth full but has managed to take a half ounce diet from Nike coming it at 7.4 oz's compared to Nike's 7.9 oz weight. Neither one would be considered heavy (less than half a pound!) but both have a seriously "chunky" look to them and are quite odd to slip on as the contact profile is akin to moon boots. The biggest thing you'll notice on close inspection is Adidas's full foam midsole (carbon plate is sandwiched internally) compared to Nike's Zoom Air Pods which sets it apart from every other brand. The next thing you'll notice is the adidas outsole appears smooth but under foot has substantial grip much like the soft rubber of a climbing shoe. The ride of the Nike feels very springy and mechanical compared to a coaxing to lean forward from the Adidas Adizero Adios Pro. The best choice is personal fit and comfort!

### **Training Shoe / All Rounder – NB Fuel Cell RC Elite or Nike Tempo**

You can absolutely use these shoes to train in and it's a great idea to use a shoe a number of times before you race in them to ensure you fit the shoe well. The Nike Tempo or New Balance Fuel Cell are both great options for regular training as they have a slightly thicker midsole with harder outsole compounds that mean you'll get well beyond the 150K mark that most of these shoes are rated for.

### **So are they worth it?**

Yes – these shoes are going to be the trend moving forward and they will be designed to work around or up to every guideline giving by national governing bodies. The requirement to make shoes commercially available to be allowed in pro level events means that we'll continue to see innovation at the consumer level. Our questions for you – have you tried them? Have you noticed a big difference in your performances? Are you a believer or do you hate what these shoes are doing to the sport?