



Zipp 404 Carbon Clincher

New Firecrest Technology

Darren Dowling, FCM

The competition in the carbon clincher market has heated up and getting extremely competitive, not only in technology but also pricing. But, what is really the benefit of opting for carbon clincher?

Well let's be honest, replacing a tube is a lot less hassle than replacing a tubular. That's for sure. In addition, the cost of replacing a clincher is much less than a tubular. For most racers and weekend warriors a clincher is easily preferred over a tubular from an ease of use and cost standpoint.

DOWNSIDE

I have ridden many carbon clinchers in the past but I have never enjoyed the ride quality and most importantly the handling.

The main issue I have found is carbon clinchers are not very forgiving with their harsh ride characteristics making racing around corners in a crit a scary event—especially

for a rider like me who doesn't weigh all that much. I simply get bucked and thrown about too much. The second big issue I have had with carbon clinchers is the handling. The tire can't roll like it can on a standard alloy clincher rim or tubular leading to the feeling that you are fighting your bike around a corner as it simply just wants to go in a straight line.

However, I can't say this when it comes to the new 2011 Zipp new 404 carbon clinchers. Every experience I have had in the past wasn't even relevant. Cornering was a dream since there was no fighting the bike to go around the corners. Overall ride quality was just that of a good tubular rim. The aerodynamics of the new Firecrest rim is noticeable as well. An all-around great wheel, excellent for crits, road races, and of course time trials.

“The shape of the Firecrest rim also really improves handling.”

BRAKING

Braking is one of the biggest issues in the carbon clincher world, when Braking on a carbon surface a lot of heat is created, this isn't really a problem for carbon as it can take heat very well, the issue lies in the resin that holds everything together, Zipp have worked diligently on creating a new carbon lay-up and resin to increase Braking performance while being able to take the heat at the same time.

Again the 404 sets a new standard, Braking was phenomenal for a carbon wheel.

FIRECREST

One of the main reasons attached to the success of the Firecrest shape is that it encourages the airflow to reattach to the side of the rim after airflow has come around the tire, rather than creating turbulent air. This ease of airflow attachment means that the wheel quickly reduces drag. The shape of the Firecrest rim also really improves handling. It essentially allows the air to stay attached to the rim, improving aero performance and moving the center of pressure of the wheel behind the steering axis. This allows the wind to have less torque when pushing the wheel, actually allowing the wheel to self-correct into the wind. This is felt when accelerating, the Zipp 404 carbon clincher gets up to speed much faster than other rims of similar depth.



404 Firecrest Carbon Clincher

Cost: \$2700 (Pair)

List weight 1,557g, (F 728g, R 829g) F 16 spokes, R 20 spokes, 125psi max tire pressure

FCM

