

VELO

2ND GEAR

BICYCLE
CULTURE
AND
STYLE



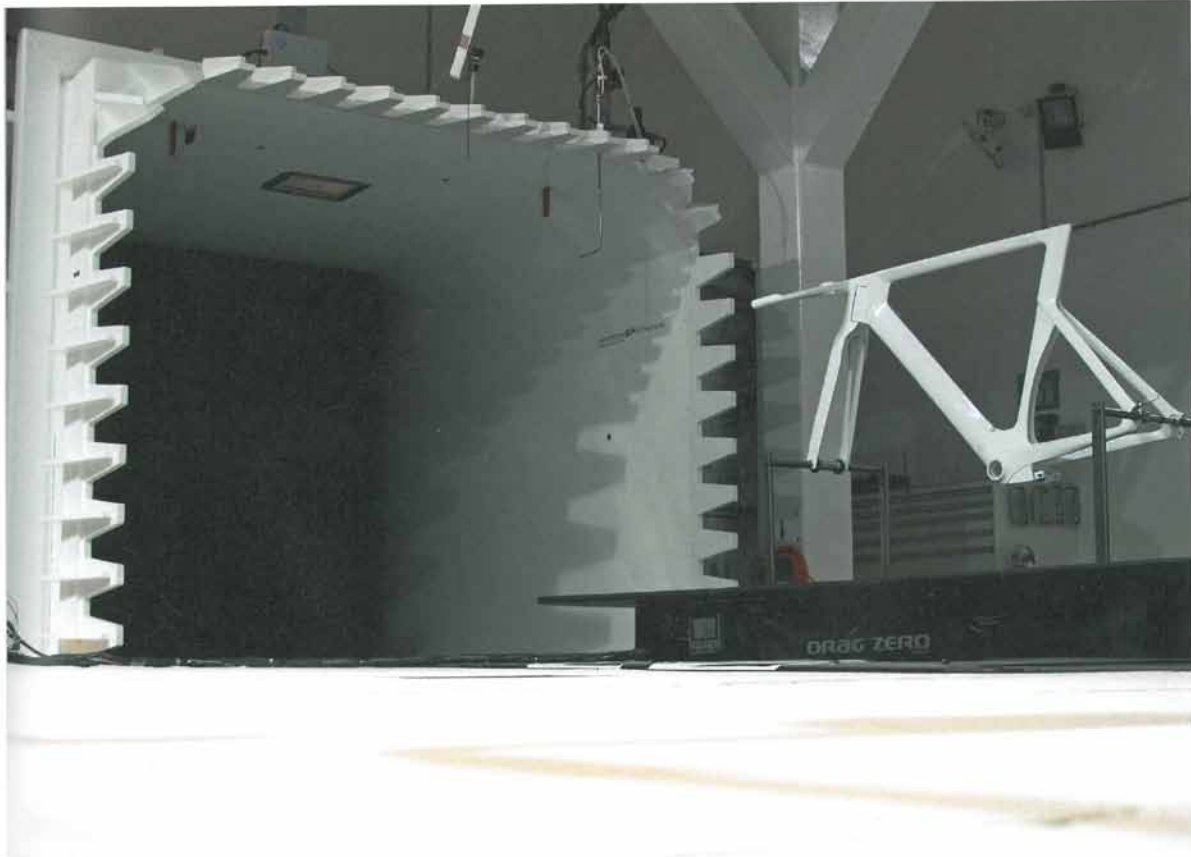
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ARTEFAKT

SPEEDMAX CF EVO TIME TRIAL BICYCLE

With its stripped bare, rectilinear silhouette, the Speedmax CF Evo time trial bicycle may be an object of great beauty but that isn't really the point. For Germany's online-only Canyon Bicycles, Darmstadt agency Artefakt—known for everything from bathrooms to packaging and gadgets to architecture and one of whose partners is a serious road racer, himself—made a speed machine that the Russian Katusha team rode to a surprise second-place finish during the Giro d'Italia. →







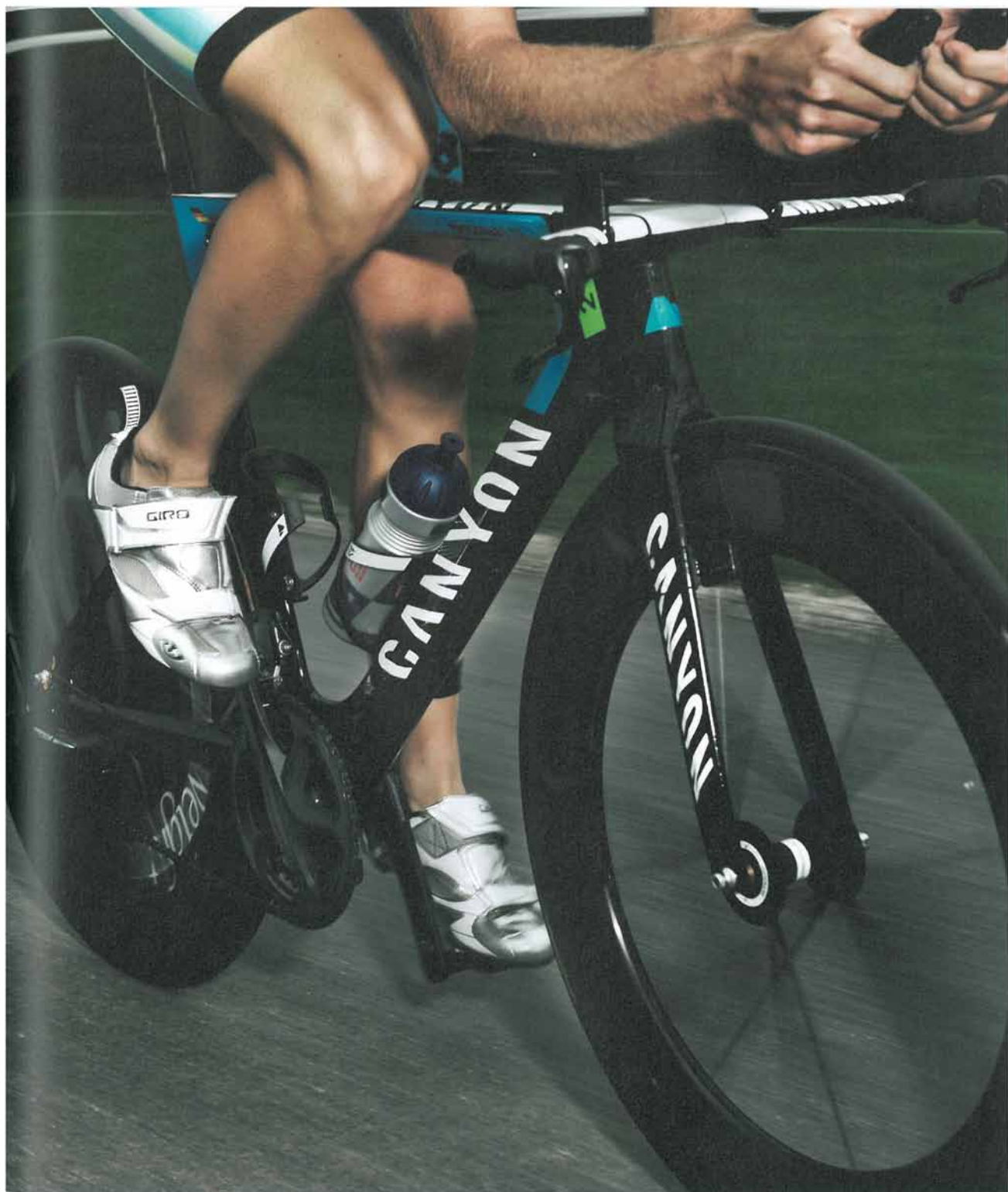
Its hardcore streamlining, stability, unprecedented potential for personalization, and materials technology shave crucial milliseconds from crucial races, meaning it didn't yellow shirt the 2012 Red Dot Best of the Best award, the IF Eurobike Award and the German Design Prize 2013 for nothing. According to the Red Dot jury, the design "visualizes its aerodynamics to perfection."

To achieve this perfection, Artefakt—with help from aerodynamics engineers, marquee time trialist Michael Rich and aero specialist Simon Smart—used the highest tech tools around: computational fluid dynamics, a CT scanner, a Mercedes wind tunnel and even a 3D printer to create 1:1 scale models of components. This model helped them to carefully form the handlebars, porch, fork, and brakes into a

single unit, for instance, creating a system so integrated that only 12cm of brake and shift cable are exposed thereby mightily reducing drag. The rear wheel produced in high-grade carbon fiber looks fast even at a standstill and renders it featherweight. Together, these details save riders a lot of wattage.

By using computational fluid dynamics, the team beveled the Evo's frame, giving it drop-shape tubular cross sections and tubes that took their cues from an aerofoil plus some. The new profile, dubbed Trident, of the fork legs, down tube, seat tube, seat post, and seat stays, features voluptuous leading edges that end in blunt angles. This cuts drag for 10% less wind resistance, only a 10% vulnerability to cross winds, and 20% greater rigidity.

In the end, the bike's geometry makes for excellent flexibility and rigidity simultaneously. Riders doing "twisting prologues" or teams of riders doing trials can shift easily into extreme riding positions and benefit from serious individualization (even with a barebones accessories kit). By adjusting the handlebars, stems, and extension type, and tweaking height and width, they can adjust the cockpit into 7,560 configurations (a number almost exactly the same as the bike's top-of-the-line euro value). The development of the CF was the most complex in Canyon's 25-year history and not for naught: bloggers have called it "mind boggling". ♦



I BIKE, THEREFORE I AM.

Choosing to ride a particular bike conveys an attitude and a way of life. VELO-2nd GEAR illuminates and celebrates contemporary bicycle culture's diverse scenes. From classic racing bikes to high-tech speed machines, from rough fixies to fashionable city cruisers and hardworking cargo bikes, this book showcases today's most outstanding and unusual bicycles and their riders.



VELO-2nd GEAR not only introduces coveted manufacturers, specialized boutiques, and historical tours. It also explains how each bike-related scene cultivates its own distinct codes through the choice of certain frames, jerseys, caps, or bags, or by visiting specific events or key establishments. In doing so, the book shows why, for more and more people, bicycles have now replaced cars as the vehicles that best express their identity.

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