

Reflections on a Visit to Cervelo's North American HQ

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In the short time Cadence has been a [Cervelo dealer](#) we have become a top dealer world-wide. To foster our partnership, Cervelo recently flew a couple of us up to their North American headquarters in Toronto for a tour of their offices, shipping facilities, and testing lab. Here's the inside scoop!

Cervelo is located in a converted WWII artillery manufacturer's warehouse in a hip and up-and-coming section of downtown Toronto. The office space is small and austere-very Euro-with additional massive square footage for bike assembly, warehousing, and shipping. Aside from the relics of Cervelo's short-termed but profound racing accomplishments that adorn their office foyer (Stuart's and Fabian's Roubaix-winning R3s; Fabian's World Championship P3C; Zabriskie's National Championship P3C) are a few conspicuously [P3- and P2-looking](#) rebadged frames, including Laurent Jalabert's 2002 Tour de France "Look" time trial frameset and Brian Walton's "LeMond" from the 2000 Olympics.

These tangible tributes to Cervelo's impressive palmares testify to Cervelo's prowess as a racing bike manufacturer. But they only tell half the story: the story of world-class racers riding world-class products. Where Cervelo truly excels is in the design, manufacturing, and testing of their bikes, and because both Phil White and Gerard Vroomen were in Toronto during our visit, we got a very up-close on personal look at what goes on behind the scenes. Specifically, in Cervelo's secured testing lab.

It's perhaps overstated but it's equally underestimated just how much of an engineering company Cervelo is. In many ways, Cervelo is like Porsche: like that marque's founder, Dr. Porsche was first and foremost an engineer. The same is true of Phil and Gerard. They are engineers (both graduates of the prestigious McGill University) who just happen to design bikes. This means they come at problems with the scientific, problem solving minds of engineers: everything they do must have a reason, a stated purpose, and a positive outcome, and to verify the outcome they rely on extensive testing. If the results aren't what Phil and Gerard are looking for, don't corroborate a benefit, or prove unsafe, the project is scrapped and they start over. Primary among all their objectives is to build faster and *safer* racing bikes: if those bikes just happen to be light and beautiful, then so much the better.

The result of countless hours of crunching mathematical formulae, modeling of innumerable prototypes, and seemingly incessant returns to the proverbial drawing board are the phenomenal racing frames which bear the Cervelo name. In addition to this is a meticulous testing process for each Cervelo frame which, as far as we are aware, is unequalled in the cycling world. Due to strict European safety standards for racing bike frame design (CEN standard EN 14781) any bike frame made for street racing use which may also be purchased through a retail outlet must pass a rigorous battery of durability tests. One example of these tests is a bottom bracket flexion test which repeatedly applies 20kg of pressure to the bottom bracket for 100,000 cycles. We witnessed this test in progress at Cervelo and, according to Phil White, Cervelo simply shuts the test down after a whopping 300,000 cycles. In other words, Cervelo's bikes withstand *three times the amount* of testing required by the most demanding racing frame safety test on the planet.

That the two lightest racing bike frames in the pro peloton (Cervelo's R3 SL and the SLC SL) not only withstand but dramatically surpass the amount of stress testing required by CEN is remarkable. But put it in this context: *every single Cervelo is designed so that it can be safely ridden by any person weighing up to 225 pounds!* Add to this the fact that nearly every Cervelo provides an unmatched aerodynamic advantage over non-Cervelos-a quality which, at the end of the race, proves more valuable than low weight-and it's no surprise that Cervelo's marketing manager has a meter high pile of team sponsorship proposals on her desk.

Our trip to Cervelo was immensely informative, and surprisingly, Phil and Gerard were very open and upfront about their design and testing processes, what they've learned over the years, and how many of their best innovations were fortuitous-like the [SLC SL](#) being even stiffer than the SLC even though it's almost 200 grams lighter. But what most impressed us as we prepared to leave on our final day was this: it was Phil and Gerard in the testing lab, huddled together next to a dynamic model of something that looked very much like a P3. They were deep in intense conversation, making slight changes here and there to tube angles and shapes, and clearly 100% focused on the task at hand. These two engineers, founders of a revolutionary bike brand, are not content to rest on their laurels, or cash in, or head off to the Caribbean on a cold, Canadian December day. No, Phil and Gerard are knee-deep in the trenches, constantly striving for improvements.

We came away from our trip inspired by what Cervelo does. Contrary to chat-room banter, the Cervelo brand is anything but marketing hype. Cervelo reinvests hundreds of thousands of dollars into research, outrageously expensive testing equipment, time in the wind-tunnel, cutting edge technology, and a payroll that seemingly includes as many engineers as General Motors. Rest assured, Cervelos are the most thoroughly tested, best engineered, and most aerodynamic bike frames anywhere. Cervelo goes to great length and enormous cost to test not only their designs, but those of all the competitors vying for a share of Cervelo's enviable dominance.