

cervélo

2010 MODEL YEAR CATALOGUE



WELCOME TO CERVÉLO 2010



Thor Hushovd, 2009 Green Jersey Winner

In a year when “turbulent” defined most companies’ experiences in the most adverse sense of the word, we’re pleased that Cervélo’s foundation allowed us to thrive, even to grow at a nice clip.

The introduction of the Cervélo TestTeam was certainly the most visible event of the year for us. No bicycle brand has owned and operated a top pro team in 40 years, but it made perfect sense to us. Our thesis was that team ownership would give us the control necessary to make real strides in product development, not to mention provide some pretty cool riding experiences for customers from around the world. So far, that thesis has proven correct.

But in addition to the product development side of owning the team, we’ve really enjoyed the friendships developed with the riders. We’ve yelled at the tops of our lungs with them through the wins in Qatar, Critérium International, the Giro and the Tour. And over beers at the team hotels, we’ve shared in their disappointment on the “almost got it” days in San Remo, Flanders and Roubaix. When the men’s team was ranked #1 in the world in June, we had to ask: was this part of the plan? When the women replicated the feat in August, we just had to smile. Had a reporter asked last fall, “will CTT be #1 this year?” (none did) we would have laughed and written the journalist off as a cub reporter. Sometimes things don’t go according to plan. Sometimes that’s OK.

Bike racing provides a great analogy for business. In a race, the breaks that win are often those launched when the hill is steep, the weather is bad, or the road is cobble-strewn. Attacks in the sun, on the flat sections and in good weather rarely stick. The same is true in business. At Cervélo, we chose to go full gas in 2009, betting that, as in a bike race, when times are tough, that’s the best moment to step it up. In the past year, we increased our engineering staff from 11 to 16 (and spent heavily on new development tools to support them). We’ve also invested in innovative marketing, like the Beyond the Peloton documentary series (check it out on www.cervelo.com). So, even faster products are in the pipeline with even more interesting ways to communicate their merits to riders everywhere. Stay tuned.

Cervélo’s success would not be possible were it not for the exceptional support we receive from our employees, dealers, distributors and partners around the world. Thank you to everyone who helped drive the train this year. Thanks for coming along for the ride with us.



Phil White, co-founder



Gerard Vroomen, co-founder

CERVÉLO TEST TEAM



Claudia Häusler, 2009 Tour de l'Aude Winner

When we launched the Cervélo TestTeam last fall, it was based on three core ideas. First, consider the team as a true RD&D partner to drive better, faster product development. Second, provide a high level of fan access to the team. Third, perform well on the race course. The goal was not to be #1 in the world. The goal was not to win major races in our first year. That Tour and Giro stage wins for the men, the pink jersey for the women at the Giro (and podium finish for Carlos) and #1 world rankings for both have come to pass is gratifying. Those wins, however, do not fulfill our complete vision for the TestTeam's potential.

The real value of the TestTeam rests in our "RD&D first" philosophy. To support that philosophy, we created a new role: Race Engineer. Industry veteran Damon Rinard took that job to work directly with the TestTeam and to channel the product knowledge and rider experience generated by our pros back into the RD&D process. This approach benefits not only Cervélo but the TestTeam technical partners, each of whom is integrated into the TestTeam/RD&D process. It's still too early for the marketplace to harvest the full benefits of this approach (remember, the team first met as a single unit in December 2008) but stay tuned.

For 2010, nearly all the riders are back, including Thor, Carlos, Heinrich, Claudia, Emma and Kirsten. Thirteen nationalities are represented and (proof that we signed riders for their brains as well as their lungs & legs) their ranks include a trained medical doctor, three engineers and an economist. The mix of youth, experience, wisdom, men and women has validated a philosophy that governs not only the TestTeam but our company as well: only hire great people who work well together.

Twelve months ago, the TestTeam was not much more than a fantasy. Without the confidence of our partners, there would be no TestTeam. We consider them the industry's thought leaders. Thank you.



DESIGN, ENGINEERING AND TESTING



Cervélo co-founder Phil White with Thor Hushovd at the wind tunnel

Cervélo was founded by two engineers, both still engaged in all aspects of our product RD&D process. Their backgrounds and personal expertise set the tone at Cervélo and reminds us, always, that no matter the question, the answer is "engineering." In fact, the highest praise a non-engineer employee at Cervélo may ever enjoy is to be mistaken by a consumer or a dealer for an engineer. They, and especially the real McCoys in Vroomen.White.Design, are our rock stars.

At the big bike companies, you might find 5 to 10 engineers and several hundred frame platforms competing for their attention across multiple typologies (road, mountain, tt/tri, hybrid, city, kids, cruiser etc). It's hard to be focused in such an environment. By contrast, Cervélo fields 10 different frame platforms, four in tt/tri and six in road. Against those ten platforms, Vroomen.White.Design deploys sixteen engineers.

Businesses, like bike racing teams, are not successful simply by out-spending their competitors. The first-year success of the Cervélo TestTeam, with an operating budget less than half of its major competitors, certifies this truth. Businesses are successful when they invest in the best people for the right roles. This is the case at Vroomen.White.Design, the exclusive engineering supplier to Cervélo. Vroomen.White.Design does not hire "bike engineers." Vroomen.White.Design does not hire bike geeks who like to tinker. We hire the best engineers to execute in specific engineering roles to make better bikes.

Dave Kennedy, for example, is one of the world's leading experts on aerodynamics. He has been working as an applications, design and test engineer in airflow aerodynamics and structures for over two decades. Among other achievements, he was on the lead design team for the U.S. Air Force's subsonic wind tunnel. Few aerodynamicists, regardless of industry, can match Dave's knowledge and experience.

Don Guichard is our Director of Engineering and a leader in composites engineering. Remember the project 'SB2 Project '96 Superbike II? That frame was Don's baby. The revolutionary R3 and R3 SL frames? Don again. The 1984 U.S. Olympic team disc wheels were designed and manufactured by Don and, prior to joining Cervélo, he designed and manufactured composites in many applications, including prosthetics and spacecraft.

Richard Matthews is one of our Senior Composites Engineers. He spent several years working on aerospace projects, most notably advanced metal matrix composite design and microwave communications and optical equipment used on Cassini, Galileo and Iridium space projects. Through his own company, Revolution Design, he did significant work in FEA, structural design and electronics packaging across a broad range of industries.

Damon Rinard is the TestTeam Race Engineer. In the automotive world, race engineers are common. Every company employs several. Not so in the bike world. But how serious can you be about accelerating product development through racing if you don't have an engineer focused on working with your racers? Damon's background includes work at GKN Aerospace where he focused on airfoil optimization and repair for business jets. He also has extensive experience in CFD analysis of aerodynamic and thermodynamic properties of bicycle frames, wheels, and other components, much of which was performed in conjunction with performance optimization for a variety of Pro Tour level race teams.

In 2010, our plan calls for continued investment in RD&D. This will manifest in more staff at Vroomen.White.Design plus upgraded tools, resources and processes so those at Vroomen.White.Design can maximize their effectiveness. Our goal, as always, is to integrate the very best engineering talent with visionary product design, using the TestTeam as a laboratory and testing center, to deliver the same best products for our pro racers and customers worldwide.

S1



The S1 shares the build principles of Hushovd's green jersey-winning S3

"It explodes off your pedal strokes with that instantaneous acceleration, but it also keeps on rocketing ahead after your booster phase, as if a free tailwind was thrown in with your purchase" – Bicycling Magazine

Formerly known as the Soloist Team, the S1 offers the least expensive way to ride a real ProTour frame. But don't let that fool you; it is also one of the most successful bikes in the peloton, with victories in Paris-Nice, Critérium International, Liège-Bastogne-Liège, Tour de l'Avénir and many other races. Boasting a TrueAero profile, Smartwall tubeset, and a stiff yet comfortable ride, the S1 outperforms many of the other ProTour frames around it, even carbon ones. It's no surprise that many pro riders also use the S1 as their training bike. To top it off, the S1's reversible seatpost and adjustable geometry easily convert it into a high performance TT machine.



- Versatile and affordable - This bike can climb, descend, sprint, and of course is ideal for break-aways. On top of that, it morphs into a part-time TT/Tri bike and it's the most affordable way to truly ride what the pros ride.
- Aerodynamic without compromising other features - Combines aerodynamics with light weight, great power transmission, and an excellent ride.
- ICS (Internal Cable Stops) - The best internal cable stop system available. Easy to install, easy to service, easy to keep clean and improving aerodynamics.
- Adjustable geometry - Cervélo adjustable aero seatpost (optional) allows for a switch in seattube angle from 73 degrees to anywhere up to 76 degrees for occasional time trials and/or multisport events.
- Winning pedigree - Ridden to victory in Liege-Bastogne-Liege, Paris-Nice, Tour de l'Avénir, Critérium International and many other races.

S2



S2 winning 2009 Grand Boucle

– Light, stiff, lively, aerodynamic, and comfortable; equally at home in the Tour or Thursday – night club ride – Bicycling Magazine

The S2 has enjoyed the reputation for being the ultimate pro bike; not surprising, given its long list of victories. But how about comfort? Truth be told, many frames with aero tubing lack in comfort. But at Cervélo, we have been designing aero bikes since our inception, so we have the most experience in building aero frames without sacrificing the traditional focal points of weight, stiffness, strength and comfort. This may explain why only the Cervélo TestTeam used aero frames at the cobblestone races (including Thor Hushovd's victory at the semi-Classic Omloop Het Nieuwsblad). While for some races the R-series may still be better, to know that the S2 (and the even more compliant S3) excel even on the cobblestones shows you can have all the usual characteristics of a great frame AND aerodynamics.



- No compromise - Extremely aerodynamic yet among the lightest frames in the pro peloton and with excellent stiffness & compliance properties.
- New profile downtube - Our work into improving the downtube and headtube on the TT bikes has directly benefited the S2.
- Horizontal teardrop-shaped sloping toptube allows for improved aerodynamics; the toptube is designed with a proper airfoil cross section in the direction of the airflow.
- Stealth aero headtube is ultra thin and only 1mm wider than the P3 headtube. The leading edge is kept straight, but the sides neck down in the center section, resulting in a very good airfoil shape around the headtube in combination with a classic side profile.
- Oversized bottom bracket area provides even greater BB stiffness. The smooth contours of the BB help both for this BB stiffness and for its strength as the fibers have a more continuous path for better load transfer.
- ICS 3 – improves aerodynamics, serviceability and shifting performance. The best cable stops made just got better.



S3 winning Stage 13 at the Tour

"If I had the money, I don't think there is any other bike I would buy" – Outside magazine

As the inventor of aero road bikes, Cervélo continues to lead the category. Aero road frames are the most difficult frames to design, as they have to be everything in one: aero, light, stiff, comfortable. Cervélo has worked to optimize this balance between the various requirements since its inception 13 years ago. For the S3, the engineers at Vroomen.White. Design used the R3 seatstay technology, rotated the stays 90 degrees and gave them a proper Cervélo aero shape. This reduces the weight, increases the vertical compliance and improves the aerodynamics. Sounds simple, but the structural design is extremely complex, which is why only Cervélo has such stays. The chainstays were also redesigned to optimize aerodynamics. Finally, the cable routing system (ICS3) is the first to have cable entries through the top of the toptube without sacrificing shifting performance.



- Outstanding aerodynamics – Like the S2, the S3 uses the best airfoil shapes specifically designed by Cervélo for bicycle speeds. Additionally, the S3 has a new aerodynamic seatstay and chainstay design.
- Light, but efficient – It is easy to make a light frame, just use less material. But the S3 is light by using material in the right places, rendering stiffness properties in the BB and in torsion that are even 5-10% higher than the already leading-edge S2.
- Vertical compliance – Cervélo invented the minimalist seatstays with the R3, and although the thin looks have been copied, nobody can match the low weight and high compliance of Cervélo's design. Now Cervélo has done it again, using the same technology to design extremely thin & compliant yet also aero seatstays.
- ICS 3 – improves aerodynamics, serviceability and shifting performance. The best cable stops made just got better.

RS



RS takes third at Paris-Roubaix

"The bike that raised the bar in the plush bike category is back... with a complete, ready to ride, rough road crusher." – Bicycling Buyer's Guide

We are not all created equal. Some of us are flexible, others are not. For those who are not, the bike industry designs frames with longer headtubes. Unfortunately, these types of frames are also designed with sluggish handling and without pro-level features, as if having your handlebars 3cm higher would exclude the possibility that you are a serious rider. To Cervélo, this makes no sense, so we build the RS, for people who want a pro-level bike but prefer a higher handlebar position. Why is Cervélo the first to do this? We have no idea, but given the response from our customers, this is yet another area where others will likely follow us soon.



- Incorporates the Squoval, Smartwall for Carbon and lay-up technology of the R-series.
- Innovative seatstay design with built-in deflection mode for optimal vertical compliance.
- Same handling philosophy as our other road bikes, but with a longer headtube for those who prefer a higher handlebar position and slightly longer chainstays to ensure that the weight distribution remains optimal with the rider's shifted center of gravity.
- Special XS size – On a smaller frame, the front wheel moves closer to the rider, causing toe-overlap. This only happens at low speeds, because at normal speeds the steering angles become very small. We can prevent toe overlap by not moving the front wheel back, but that affects weight distribution & handling, or use 650c wheels, but that means no neutral support in races. Since we build performance bikes and won't compromise handling, we accept toe-overlap for the R3 and S-ranges, while offering the 650c wheel solution for the smallest RS.

R3



R3 winning at the Tour de l'Aude

"Best bike we've ever ridden" – 220 Magazine

In its first three years, the R3 scored two wins and a second place at Paris-Roubaix - unparalleled in professional racing. But to the pro team mechanics, more incredible than the victories is the fact there has never been any mechanical issue with an R3, even though it is the lightest frame to be used in that race. In a race where every manufacturer lies awake worrying the night before, that's simply unheard of. But the R3 is much more than just a Paris-Roubaix frame. It was also pink jersey-winner Claudia Häusler's choice to tackle the high mountains of the Giro. Race wins aside, there is perhaps no better proof of the R3's extraordinary performance than the speed with which several other bike companies try to copy its looks. But of course, the R3's performance is more than paint-deep, and its superiority is safely stowed away in all its small details and proprietary lay-up designs.



- The downtube and chainstays have Cervélo's ingenious Squoval shape to optimize stiffness without adding unnecessary material.
- The toptube's cross section changes shape along its axis to perfectly match the complex load case it experiences. Therefore, it is Squoval near the headtube and seat tube and oval in the center section.
- The increased volume of the oversized bottom bracket area provides outstanding stiffness and power transfer. The smooth contours of the BB volume help both for the BB stiffness and also for its strength as the fibers have a much more continuous path to transfer the loads better.
- High-Modulus plies are added to the sides of the tubes where they have the greatest effect in bending. They are feathered to transfer the loads into the structure. High-strength plies on the bottom of the down-, head- and toptube distribute the loads from a potential headtube impact. Kevlar plies in that same area are to prevent rupture.
- The R3's seatstays are quite simply the most amazing stays ever designed – super light & compliant yet very strong. A true testament to the skills of our engineering team.

R3 SL



R3SL at the 2009 Tour

"Best carbon frame" – Tour Magazine Germany

"The Cervélo R3 SL is quite possibly the fastest bike that we have ever tested" – Cycling Plus

It would be easy to exclaim "Tour-winning bike" here (and I guess we just did), but that's not so relevant. What is relevant is that the rider, Carlos Sastre, can't imagine riding anything else. With Tour Magazine's laboratory tests clearly showing the R3 SL the best combination of stiffness, low weight and comfort, it's easy to see why. Add to that the impact strength and incredible fatigue life (both at our internal levels, which are several times higher than the industry levels) and it is clear why the R3 SL is a favorite among consumers and reviewers alike.



- With eight engineers working on carbon fiber projects, Cervélo can call on a wealth of knowledge about how to increase the performance of carbon frames. The R3 SL is the latest iteration of our lay-up optimization, allowing us to further increase the stiffness-to-weight ratio and the vertical compliance.
- R3 Seatstays – Through testing and analysis (in particular with our custom developed software tools), every last gram was squeezed out of the R3 seatstays without any sacrifice. It passes the highest impact, fatigue and road vibration test levels in the industry as well as the “Paris-Roubaix victory-test” on the cobblestones.
- Front boomerang construction – Monocoque frames typically have a weight penalty, while frames with lugs can have lower impact strength, as each lug joint is a potential separation point. Cervélo's patent pending boomerang design of the R3 series allows continuous fibers to run from toptube to headtube to downtube, thereby greatly enhancing the frontal impact strength without encountering the lay-up control problems of a full monocoque design.

P2



The P2 is a big success for TeamTBB

"The P2 packs a better punch than many bikes at twice the price" – Triathlete magazine

"No upgrades are required. Slap on a set of race wheels and you're ready to win Kona" – Dan Empfield, founder QR and editor Slowtwitch.com

Dan Empfield made the quote above in 2007, and he didn't have to wait long for confirmation – Ironman Hawaii was won on a P2 later that same year. In 2008, P2 wins came at Ironman Australia and Germany. At any other bike company, the P2 would be the top-of-the-line bike. At Cervélo, it is number three behind the P3 and P4. But the P2 is not your average 3rd place bike; no other frame in this price category offers anywhere near the same performance. No wonder that the P2 is regularly rebadged by pros with different bike brand logos, or that customers sometimes have to wait months to get their hands on one despite another tripling of our production. But afterwards, we hear the same response over and over again: It was more than worth the wait.



- TrueAero tube shapes and minimal frontal area for optimal aerodynamics, Smartwall for Carbon lay-up to optimize the bottom bracket and torsional stiffness of the frame.
- The constant width seattube cutout closely covers the rearwheel tire. Most cutouts (with the exception of the P3) have a cutout width that varies as you move up and down the cutout, thereby hampering the proper airflow from the seattube to the rearwheel.
- The Integrated seattube collar provides you aerodynamically with an integrated seatmast, but structurally the post can still be removed with ease so you can fit the P2 into any bike case and travel without a problem. This is always an issue with frames with a structurally integrated seatmast, as we know from the original 1996 P2 which was the first bike to sport that feature. While it was the best solution we could come up with back then, the new system with the removable seatpost is superior not only for traveling but also for aerodynamics, as it allows us to use a much narrower seatpost than if it was a structural part of the frame.

P3



P3 winning the 2009 Giro TT

"Most successful time trial bike on the ProTour circuit"
"Most successful triathlon bike on the Ironman circuit"

If it was going to be surpassed, it was going to be by another Cervélo, and the P4 has finally managed to do so. But with the P3 scoring both Gold medals and a total of four out of a possible six medals in the time trial in Beijing (men & women), it is clear that the P3 is here to stay. There is a bright future for the second-best TT bike in the world.



- Optimized rearwheel cutout – Don't be fooled by imitations: just because a seattube is curved, that doesn't mean it's fast. The Cervélo P3 seattube cutout is still the only one with all the proper details that allow the air to flow from the seattube to the rear wheel with the least amount of disturbance.
- TrueAero tube shapes and minimal frontal area for optimal aerodynamics, Smartwall for Carbon lay-up to optimize the bottom bracket and torsional stiffness of the frame.
- The Integrated seattube collar provides you aerodynamically with an integrated seatmast, but structurally the post can still be removed with ease so you can fit the P3 into any bike case and travel without a problem. This is always an issue with frames with a structurally integrated seatmast, as we know from the original P2 which was the first bike to sport that feature. While it was the best solution we could come up with back in 1996, the new system with the removable seatpost is superior not only for traveling but also aerodynamically, as it allows us to use a much narrower seatpost than if it was a structural part of the frame.

P4



P4 at the Tour Team Time Trial

"The P4 is the biggest leap we have ever made in aero bike technology." – Phil White

It had to be! Creating the successor to the Cervélo P3, the current time trial standard, still the fastest bike available three years after its introduction, proved a formidable challenge. The mandate: make the new model significantly faster than the P3, and achieve equivalent or better performance relative to stiffness, power transmission, low weight and comfort. After millions in research & development, over two months of intensive testing at the San Diego Low Speed Wind Tunnel, the P4 is the fastest bike ever in the wind tunnel, including both UCI-legal and non UCI-legal bikes. The P4's strengths are found in its many fine details, some quite visible while others are difficult to detect at first glance. The key to the performance of the P4 lies in the frameset's integrated design. This System Engineering approach, which considers the frame, components, wheels, hydration and the rider together, generates substantially reduced drag values in virtual (CFD) and physical wind tunnel testing.



- Optimized aero tube shapes are completely new, improving airflow attachment & reducing turbulence. Asymmetric aero chainstays generate very low drag values, particularly in cross-wind environments. Seatstays positioning is optimized with seattube for maximum aerodynamic efficiency.
- Custom fork by Vroomen.White.Design integrates seamlessly into headtube and downtube, optimizing space between tires and wheels and frame and fork. Results: significant reduction in drag values. Aerodynamically complex, our engineers tested over seventy-five designs during development.
- Custom integrated rear brake by Vroomen.White.Design is recessed behind the bottom bracket. Invisible to the wind, the brake has the same power and modulation as a Dura Ace brake but 30% lighter.
- Water bottle integrates the downtube, seattube and bottom bracket in a single aero form, reducing drag typically associated with bike bottles, and the P4 is faster with the bottle than without.
- ICS 3 – improves aerodynamics, serviceability and shifting performance. The best cable stops made just got better.

T3



In the Points race in Beijing, the T3, formerly the P3 Track, took five of the top-10 spots, including Gold and Silver. In the Team Pursuit, Denmark took Silver on the same bike. Where most manufacturers use different frames for their pursuit and sprint stars on the track, Cervélo uses the same frame because the T3 is a perfect combination of light weight, stiffness and aerodynamics.

This represents a great opportunity for our customers; now you can invest in one great track bike and use it for all events, rather than having to divide your budget over two bikes.



- Unbeatable aerodynamics - All the details that make the P3 an aerodynamic stand-out are incorporated into the T3.
- Superior bottom bracket stiffness - We were expecting that our test riders would ask for even more stiffness in the bottom bracket, but they all concluded that the original P3 lay-up was more than sufficient for the track. Even the most powerful sprinters agreed.
- The extremely narrow and aero headtube is short enough for pursuit events, and stiff enough to be used with a rising stem for sprint events.
- Dual position seatpost - An extremely narrow profile seatpost with two positions, one for sprint and one for pursuit racing.

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For more details please check www.cervelo.com.
Bikes and equipment may not be exactly as shown, specifications subject to change without notice.
Cervélo uses recycled paper.