At the heart of every great endeavor is a common feature: to do your best. Whether you’re trying to win Paris-Roubaix or just ride to a PR, there’s a satisfaction that comes from knowing you’ve done your best that nothing can beat. We know that feeling, too. By the time we introduce a new product, we’ve collected enough data to know that it is superior to our previous work. From the materials we use to the designs we create, each year Zipp® is a better company than it was in the past. The promise of helping cyclists reach their full potential is a passion that has fueled our work since Zipp was founded in 1988. We have but one purpose: to help you ride your best.
Being good at anything requires a significant investment. We put our capital into hiring the best and brightest, into training our staff to keep them on the cutting edge and into technology. From the best machines to wind tunnel time by the week, we spare no expense. Just as anyone can claim to be a racer, anyone can take a product to a wind tunnel once and say it’s “wind-tunnel tested.” Our approach is a little different. When we visit the wind tunnel, we’re there to figure out how to go faster, how to rob the wind of its power over you. That’s why we didn’t rush to market with a carbon clincher; a carbon clincher didn’t make sense until we realized we could make a rim that was more aerodynamic, stronger and lighter than our previous aluminum/carbon hybrid rims. That same thinking led to our decision to offer wheels with so many different depth rims; each is purpose-built for an application. Whether you hope to deliver your best at an Ironman® or off the front of your local crit, we offer seeds to grow your success.

A great product is just like a great performance. It’s the result of countless hours of hard work. The athletes who deliver performances with the power to inspire us months or even years later labored over each decision. They analyzed each ride. They examined their diet. They guarded their rest. And they selected equipment with the meticulous eye of an architect. Our quest to present you with the best components on the market has required no less commitment from us. We search for talent who can bring new ideas to our efforts. We look for materials that offer us unparalleled freedom to follow our ideas. We use the best tools available to us, whether they are computers, wind tunnels or machine shops. We examine our processes, just the way you think about your pedal stroke. Strategic thinking led to our decision to offer wheels with so many different depth rims; each is purpose-built for an application. Once we know we have the science right, we make prototypes and we ride them. We know there’s no substitute for the insight the open road offers. In our zeal to make the world’s fastest products, we refuse to be lulled by satisfaction.

Persistence is rewarded

NO STONE UNTURNED

AN APPETITE FOR EXCELLENCE

Development takes time

Being good at anything requires a significant investment. We put our capital into hiring the best and brightest, into training our staff to keep them on the cutting edge and into technology. From the best machines to wind tunnel time by the week, we spare no expense. Just as anyone can claim to be a racer, anyone can take a product to a wind tunnel once and say it’s “wind-tunnel tested.” Our approach is a little different. When we visit the wind tunnel, we’re there to figure out how to go faster, how to rob the wind of its power over you. That’s why we didn’t rush to market with a carbon clincher; a carbon clincher didn’t make sense until we realized we could make a rim that was more aerodynamic, stronger and lighter than our previous aluminum/carbon hybrid rims. That same thinking led to our decision to offer wheels with so many different depth rims; each is purpose-built for an application. Whether you hope to deliver your best at an Ironman® or off the front of your local crit, we offer seeds to grow your success.
It’s science, pure and simple. By the time we’re finished with the wind, it’s just a bunch of numbers. At Zipp®, there are no gurus, no high priests of fluff. We take the wind and break it down with powerful software using CFD (computational fluid dynamics) run on the same ultra-fast computers used by the most advanced motorsport teams. Think of it as a wind tunnel in a computer; it makes the movement of air visible. We end up with reams of results and our engineers know where to look for solutions to problems that have stymied both our competition and yours. By the time we visit the wind tunnel, we’re there to verify the results we generated on our workstations weeks or months before. And we’re in the wind tunnel more than most; rather than a day here, a day there, we rent it a week at a time. Most of our brain trust comes from a motorsports background. They’ve done everything from build custom steering wheels for some of the world’s top drivers to analyze the airflow over a race car’s rear wing. Access to that level of talent is why Zipp is based in the world headquarters for motorsport. By assembling our team from homegrown talent we have been able to bring each critical element of the design, testing and manufacturing process under one roof. This gives us absolute control over our work and allows us to shrink development time; we bring new ideas to market as soon as we have proven them.
Each of the parts of a clock is instrumental to its performance. We might only be concerned with what time the clock displays, but the gears, anchor and escapement—important parts, all—are instrumental to telling accurate time. Without each of them, the clock won’t function properly. Similarly, to achieve their unparalleled performance Zipp® wheels are held to exacting standards. Our examination of optimal rim shape led to the invention of Firecrest™, which resulted in a design that was not only faster, it’s the most stable design on the market. Our ABLC™ dimpling would never have been developed if we hadn’t been curious about the ideal surface texture for a rim. We’ve taken knocks for durability and the lessons we’ve learned resulted in the 303, the only carbon fiber wheel to win the Paris-Roubaix and the Tour of Flanders, and with Flanders that’s something we’ve done not once, but twice. Some folks think stiffer is always better but we’ve seen firsthand how in bars, wheels and seatposts, stiffness is a matter of diminishing returns. We are careful to build in compliance to reduce the jarring that a rough road can inflict on a rider. Fresher is faster.
The great chefs labor over each ingredient that goes into every dish and how those dishes can come together to create a memorable meal. We may not have the big white hat, but we know their passion. We wouldn’t be a formidable solution to your speed problems if all we offered were rims with good aerodynamics. Each day at Zipp® begins with a quartet of aerodynamic specialists thinking about how to disregard the wind. Then we build those rims into no-compromise wheels. We source the best spokes on the market. Some of the most advanced medical equipment in the world is produced on machines that are made here in our home; we turn to them for the precision we require to produce our hubs. Because fit is such an integral part of performance, we created a bar that offers an incredible 126 possible pad positions. When it comes to working in carbon fiber, we do more than source the best material out there. Carbon fiber is only as good as the resin it is paired with, so we hired an engineer with a Ph.D. in resin chemistry; we formulate our own resins specific to their application, be it the spoke bed of a rim, a clincher brake track or a handlebar. It was our realization that not every tire performed the same on our wheels in the wind tunnel that led us to conceive the Tangente tire, bringing our ABLC™ dimpling to the leading edge of your wheels. Finally, because control is an indispensable component of speed, we formulated our own brake pads to make sure you stop, but not before—or after—you intend to.
It’s not often that a company introduces a product line that clearly exceeds the performance offered by its competitors. We’re pleased to have done it repeatedly. Our wheels are the gold standard for performance for good reason. At each rim depth we offer, our wheels provide the greatest aerodynamic advantage on the market. It’s a fact, one no company can touch. Control is a function of speed; without control, you can’t be fast. Our cutting-edge work that led to Firecrest™ resulted in wheels that weren’t just faster, they set a new standard for stability in all kinds of wind, a standard no one else has reached. We didn’t ignore weight along the way, though. Our wheels consistently rank among the lightest in their category, making them easier to accelerate when you need that extra spark of speed. Finally, while we could make a wheel stiffer than a shot of whiskey, we know better than to do that. Our carbon fiber rims are designed to take their lumps—and keep them from you. No other wheels can soak up a rough road as well as ours. These industry-leading features are why we can say, if it’s good enough to win the Tour of Flanders, or enter T2 at Kona all alone, it’ll help you on your big day.
Firecrest™ is the result of our efforts to solve two problems. First, we were dreaming up new ways to make the industry’s fastest wheels even faster, ‘cause that’s how we, uh, roll. Simultaneously, we were working to solve the problem of stability in crosswinds. We know that when the force of a crosswind is applied to the wheel, it responds as if a finger were pushing on it—that point of leverage is called its center of pressure. Most wheels have a center of pressure ahead of the hub, causing a wind from the left to push the rider to the right. The Firecrest shape makes the wheel faster by treating the spoke bed not as a trailing edge but as a second leading edge. Firecrest is the first rim design that addresses the aerodynamics of the half of the wheel behind the axle. We found our wheels are faster everywhere, from CFD modeling software to the wind tunnel and best yet, out on the road. Race results have proven this for the 404 and 808, and now the 303 is available in Firecrest as well. By treating the spoke bed as a leading edge, the new design shifts the center of pressure behind the hub, virtually in-line with the steering axis. Practically speaking, this makes crosswinds ineffectual against the front wheel. We discovered that a single shape could solve both of these problems—a classic case of two birds, one stone. As pleasantly surprising as the combination of improved aerodynamics and stability was, we soon realized that Firecrest gave us yet other advantages. The rim’s broad profile gives it greater strength when compared to rims of similar depth and improves lateral stiffness for sprinting and cornering, and the wider rim also prevents the air from “spilling” into the spokes and slowing the wheel down. Finally, Firecrest allows us to build in vertical compliance, making it the most comfortable rim you’ve ever ridden.

Above: CFD particle study showing harmonic shedding of airflow. This phenomenon, perceived by the rider as “buffeting,” was critical to solving the stability and handling of aero wheels during the Firecrest development.

Right: One of the great challenges with carbon fiber is to give strength in three dimensions. We use Kevlar to sew carbon at the spoke bed of our rims and at the edge of the brake track on our tubular rims. The process isn’t easy, but it gives our rims the strength to handle four times the rider’s weight without flaking. It’s the process that makes the rim round. It’s the process that gives it its own weight.
Let’s be honest: Aluminum, all things considered, is a dynamite material for making a clincher rim. It’s fairly low in weight, very high in strength, dissipates heat well, offers terrific brake response and is inexpensive as well. Unless you can improve upon that, there’s not much point in making a rim from carbon fiber. The “Aha!” moment for us came when we realized we could create a clincher rim with the exact same aerodynamic profile as our tubular rims by using carbon fiber to create an angled braking surface. The opportunity to create the world’s most aerodynamic clincher rim was too juicy an opportunity to pass up. We invented a plastic skin prototyping technology that allowed us to refine the clincher shape to match the way air flows over a tire and wheel. It isn’t easy to produce a carbon clincher that will stand up to braking forces without crushing, and inflation pressure without blowing apart. Braking forces cause incredible, localized spikes in heat, and most resins cause an uneven, “pulsating” brake response. To solve each of these problems, we worked with our composites supplier to formulate our own proprietary resin just for this application. It’s so impervious to heat you could line your oven with it and so strong you could build a race car out of it. Our clinchers are the only wheels on the market to pass the most stringent European safety standards with no restrictions on rider weight or brake pad options. In combining our Carbon Clincher with the wide rim profile of Firecrest, we have created a clincher that improves aerodynamics, handling and comfort, and is lighter than an aluminum clincher, too. We also offer more choices; in addition to the 404 and 808, we have added the 303 to the Carbon Clincher stable. Combined with our Tangente brake pads, these wheels offer the performance necessary to descend the world’s biggest mountains with confidence.
Imagine a wheel with Zipp’s superior aerodynamics, the handling of a traditional box-section rim, the weight of a light set of clinchers and the ease of use of an aluminum rim. We did. Then we made the 101. With the 101 we redefined what was possible with an aluminum rim. It is the only fully toroidal rim on the market. It features the angled brake track found in its big brother carbon fiber models for improved aerodynamics. At a depth of only 30mm, this rim is faster than many deeper rims, but with the added benefit of superior handling in windy conditions. The 24.5mm rim width means that the wheel’s aerodynamics are optimized for tires in the 23 to 25mm range—the sizes most roadies prefer. That wider rim comes with additional benefits: The tire maintains a rounder profile for better cornering, plus the wider rim bed makes mounting tires easier while reducing pinch flats as well. Built with the same hubs found in Zipp’s other wheels and Sapim® CX-Ray spokes, this wheel may be our most affordable model, but it’s no compromise. The 101 is available now in two new color options: Falcon Grey (grey anodized hub with black end caps, black aerodynamic KammNuts, silver spokes and spoke nipples) and Beyond Black (black rim, black spokes and spoke nipples, and black hub).

Available in Aluminum Clincher. Color options: Falcon Grey (pictured) and Beyond Black.
202

Aerodynamics — time and watt savings over 40K for 202 Wheelset:
42 seconds / 14 watts.

Tubular with toroidal profile

Being an athlete’s go-to answer is the dream of every equipment manufacturer—trust us on this. Day after day at the Giro d’Italia, Alberto Contador chose this sub-1100-gram wheel set, even when he had the pick of the litter. For the rider wishing to attack on a climb, this is one of the world’s most formidable weapons because of its ultra-light carbon fiber rims. Of course, weight isn’t the only game in town. We gave the 202 a fully toroidal shape and textured its surface with our proprietary ABLC™ dimpling, making this wheel more aerodynamic than many with deeper rim sections. There’s no denying that your competitors will rue seeing these wheels on your bike when you hit a climb, but that’s no reason to think of the 202s as exclusively for climbing. The 202s have twice finished in the top four at Paris-Roubaix, proving that they are as durable as they are easy to accelerate.

Available in Tubular. Color options: Falcon Grey (pictured) and Beyond Black.
You’d think that after seeing the redesigned 303 ridden to victory at the 2010 Tour of Flanders and Paris-Roubaix we might sit back on our laurels. Sorry, it’s just not in our nature. We saw the incredible advantage that our Firecrest™ technology had given the 404 and 808 wheels and, frankly, we couldn’t resist giving the 303 a big ice cream scoop of extra speed. Of course, Firecrest also revamped the wheel’s stability, giving it the handling of a box section rim. We also added the carbon clincher option to the 303’s arsenal for those who want the ease of use of a clincher tire without compromising strength or aerodynamics. ABLC™ dimpling ensures that the rim moves through the wind with the ease of a shark through water. Did we mention that the weight of the 303 is virtually unchanged? In re-designing the 303 we created a serious do-it-all wheel, a wheel light enough to be an asset on climbs long or steep, fast enough to justify putting your nose in the wind, stable enough that you don’t need to think twice before mounting them on race day and of such uncompromising integrity that you could train on them the whole year-with no regrets.

Available in Firecrest Tubular and Firecrest Carbon Clincher. Color options: Falcon Grey (pictured) and Beyond Black.

Aerodynamics — time and watt savings over 40K for 303 Firecrest Wheelset:
19 seconds/71 watts.
Aerodynamics — time and watt savings over 40K for 404 Firecrest Wheelset: 80 seconds / 27 watts.

When it comes to high-performance wheelsets, the 404 has become the benchmark to which all other wheels are compared. There’s a reason for that. We have led the 58mm-rim category for more than 20 years. You could say our experience gives us a home court advantage. As a result, the 404 is a repository of everything we know. We were working on the 404 when we made the discoveries that led to our revolutionary Firecrest™ technology. Firecrest doesn’t just make a wheel faster, it makes it more stable, no matter what the wind is doing. ABLC™ dimpling is to wind what grease is to the threads on a bolt. Whether your event ends with a sprint or a marathon, our VCLC™ damps vibration to keep your legs as fresh as possible. There is a reason why this is the only wheel on the market ridden to victory at Kona and l’Alpe d’Huez—it has spent more time in the wind tunnel than any athlete, more than most teams. It may just be that the 404 is our easiest answer to your needs, a wheel that really can do it all.

Available in Firecrest Tubular, Firecrest Carbon Clincher, Clincher, Tandem, Clincher Max. Color options: Falcon Grey (pictured) and Beyond Black.

404 Firecrest Tubular
404 Firecrest Carbon Clincher
404 Clincher with hybrid-stacked profile
Traditional "V" Clincher

Aerodynamics — time and watt savings over 40K for 404 Firecrest Wheels:
80 seconds / 27 watts.
As fast as it is versatile

There was a time when the only way you could achieve the aerodynamic efficiency offered by the 808 was with the help of disc wheels. That’s how much our knowledge has progressed in the last few years. But the 808 isn’t just fast. It’s a dream in the wind and in the turbulent air of Queen K highway. The Firecrest™ rim shape means no other wheel this deep is as easy to handle in crosswinds; suddenly, the wind becomes a competitive advantage for you. That same edge means solo efforts in a road race or criterium are that much more likely to work. After all, what could you do with an extra 32 watts? People may remember the marathon from the 2010 Ironman® Hawaii as the tightest, most dramatic finish in the race’s history, but we remember it for the way the 808 kept Chris McCormack fresh to deliver the goods at the line. And Marino Vanhoenacker recently smashed the world record for the fastest-ever Ironman®, riding a front 808.

Available in Firecrest Tubular, Firecrest Carbon Clincher, Clincher, Track, Clincher MAX. Color options: Falcon Grey and Beyond Black (pictured).

[Image of 808 wheelset]
When we introduced the 900 we changed expectations for disc wheels. We demonstrated that they didn’t have to weigh as much as a small dog, while offering the stiffness necessary to perform under the world’s greatest cyclists. With this wheel whole kingdoms of records have fallen, and Olympic medals, Ironman® championships and Grand Tour stages have risen. At 936g, the tubular version of the 900 is still the lightest full disc in our arsenal. | The 900 continues to be the disc of choice for riders who want the speed of a disc and the ease of use and brake response of a clincher rim. But those aren’t the best reasons to choose it. Thanks to its toroidal bulge, the 900 clincher is as comfortable as some tubular wheels and faster than email. TJ Tollakson proved just how fast when he rode to within 10 seconds of Steve Larsen’s bike record at Lake Placid—a ride that helped him net the win.

Available in Tubular, Clincher, Track, 650c, Wheelchair, Handcycle.

900
Aerodynamics — time and watt savings over 40K for 808 front and Sub-9 rear: 113 seconds / 37 watts.

The promise of disc wheels has always been free speed, that the wind will turn your rear wheel into a spinnaker and push you to your fastest finish ever. Until recently, that is. Thanks to its toroidal bulge, the Sub-9 actually generates forward lift at the yaw angles you’ll encounter most often when out on the road when paired with a 23mm Tangente tubular. That bulge, combined with our ABLC™ dimpling, smooths and speeds airflow over the wheel while providing another important benefit: comfort. We engineered the carbon layup in the bulge to offer compliance to the rider so that every bump in the road isn’t turned into a jab to your derriere. And because the Sub-9 transmits less shock to the bike, it doesn’t bounce around as much, which makes for a faster ride with better control. But why take our word for it? This wheel has been ridden to countless TT victories, two Ironman® 70.3 World Championships and has even won a stage of the Tour de France®. It’s that fast.

Available in Tubular.
The Super-9 takes the toroidal bulge of the Sub-9 and makes that the width of the disc virtually from the rim to the hub. ABLC™ dimpling speeds airflow over its surface to create a disc with practically the same aerodynamic advantage as the Sub-9: it is able to generate forward lift, effectively turning the wheel into a sail to propel you up the course. By virtue of its wider profile it increases stiffness dramatically, making it the wheel of choice for short-course triathlons, road time trials and track events, where out-of-the-saddle efforts demand a responsive wheel. To aid in that responsive ride, the Super-9 features our proven 188 rear hub with its stiff 17mm axle. Not only has this wheel won stages of the Tour de France and a TT world championship, Ben Hoffman used the Super-9 to build a five-minute lead on the bike leg at the Boise Ironman 70.3 on his way to a commanding victory, proving that the wheel is versatile enough to be winning at any distance. Marino Vanhoenacker rode a Super-9 on his way to smashing the world record for the fastest ever Ironman.

Available in Tubular and Track.
ZIPP TUBES

The tube is a pawn with the weight of a queen on its shoulders. While it won’t make you faster, it can prevent you from being slower. To help you squeeze a little more peace of mind from your bike, we begin with a lightweight butyl tube to minimize weight and rolling resistance. We add a lightweight aluminum valve with a removable core to work with our valve extenders, making inflation easy and reducing weight, while keeping the wheel as well balanced as possible. The 37mm-long valve on this 96g tube fits the 101 for 19-25mm tires.

TANGENTE TIRES

Tires matter. From the grip they provide to their ability to absorb bumps and vibration to the face they provide the wind, your tires are where your bike first encounters the wind and touches the road. As your bike’s first handshake with the wind, we realized the tire was an obvious place to add our airflow smoothing ABLC™ dimples. This wind-tunnel-developed tire is produced in conjunction with Vittoria® to combine Zipp’s winning aerodynamics with a 290tpi tubular casing, puncture-resistant latex tube and a grippy, yet durable rubber tread compound. Available in tubular and clincher in 21 and 23mm widths, the Tangente won’t just make Zipp® wheels faster, they’ll make any wheel faster.

No detail is too small

The tube is a pawn with the weight of a queen on its shoulders. While it won’t make you faster, it can prevent you from being slower. To help you squeeze a little more peace of mind from your bike, we begin with a lightweight butyl tube to minimize weight and rolling resistance. We add a lightweight aluminum valve with a removable core to work with our valve extenders, making inflation easy and reducing weight, while keeping the wheel as well balanced as possible. The 37mm-long valve on this 96g tube fits the 101 for 19-25mm tires.
Because our wheels are designed to take the demands of racing—everything from the spring classics and Tour de France® to Ironman® courses the world over—we engineered our 88-188 hubs to take wattage that would light a ballroom and turn it into pure speed. To make sure the wheels benefit from as precise a build as possible, we machine the spoke holes to the very angle required to perfectly match the run of the spoke from hub to rim. We also moved the hub flange angle to give the spokes a stress-free seat and help ensure even tension throughout the wheel. We changed the rear hub body slightly by smoothing the transition from the flange to the body and moved the outer non-drive-side bearing 7.5mm closer to the dropout. This made the hub significantly stronger and stiffer. Ultra-stiff 17mm axles ensure the internals run with undisturbed precision, and locking in place the bearings on which the hubs roll are our aerodynamic KammNuts. Inside the bearings we use a Teflon® retainer—most are brass—to keep each ball in perfect position. You won’t find a smoother, more durable bearing standard in a hub. As proud as we are of our hubs’ accuracy, stiffness and strength, we named them for their weight in grams, a little reminder that we keep our eye on more than one ball at a time.

TRACK HUBS

Few circumstances place greater demands on equipment than elite track competition. The hubs must be able to take everything from the power unleashed in a kilo start to the loads placed on a wheel during a final sprint, all while turning like an electric motor. We start with a 15mm solid stainless steel axle. Rolling on this axle are steel bearings with a virtually friction-free spin because seals are unnecessary at the velodrome. The hub bodies are forged using our proprietary Z310.9 alloy for exceptional strength, and thanks to our Spoke Hole Impact Forming Technology (SHIFT) these hubs can handle spoke tensions that would rip other flanges apart. All winning track performances require a great start, and all winning wheels start with a great hub.
We are a technology company first and foremost. Wheels may be the most visible expression of our work, but we apply the same combination of engineering, materials and execution that goes into making the 404 such a fast and versatile wheel to each of our bars, stems and seatposts. Our expertise in working with carbon fiber has given us the palette to fashion some of the lightest and most aerodynamic drop and aero bars on the market. And aluminum, still the material of choice for the pro peloton, is what we use to create our Service Course® line of components, which set a new standard of no-compromise durability without abandoning the weight considerations necessary to deliver riders like pro cyclocrosser Tim Johnson and Peanut Butter & Co. Team TWENTY12 to the finish line, first.
SERVICES COURSE STEMS

We make our Service Course stems in seven lengths (70mm to 130mm in 10mm increments) and two angles (+/- 6 degrees and +/- 17 degrees). We're confident that with 28 possible positions available, this stem can help anyone find the perfect fit. Forged from 7000-series aluminum and precisely controlled for length and alignment, the Service Course stem features a superior stiffness-to-weight ratio and clean lines that make it look as good as it performs.

SERVICE COURSE SEATPOSTS

When we set out to design our Service Course seatpost our engineers made adjustability as great a requirement as weight and strength. To make sure we could fit any rider, we created two setback designs—0mm and 20mm—with an innovative low-profile clamp that allows greater fore-aft adjustment than many similar posts. And to complete the package, we made the downward-facing micro-adjust bolts easy to access.

SERVICE COURSE C BARS

Face it, the days of setting lever position with a straight edge at the bottom of the bar are gone. Some riders still like their levers low, while others go for the ultra-high Belgian position. We developed the Super Short Reach with a unique three-radius bend to facilitate an easier reach to the levers no matter whether you position your levers high, low or in-between. Made from the same 7000-series aluminum as our other Service Course bars to balance strength, weight and value.

SERVICE COURSE BARS

The Service Course bars reflect the classic shapes the pros use. In addition to the Traditional Bend still so popular, we offer a Short and Shallow bend to give riders a bar to suit their riding style and comfort. All of our bars are angled out by 2 degrees for increased comfort and are drawn from 7000-series aluminum for high strength, low weight and maximum value.

SERVICE COURSE C AND CSL MODELS

*Only available on the Service Course C and CSL models.
SERVICE COURSE SL SEATPOSTS
Rounding out our Service Course SL cockpit is a seatpost that matches our bars and stems in both form and function. The post begins with a 3D-forging of 7075 aluminum. Additional machining inside the seatpost shaves off unnecessary material, leaving behind one of the strongest and lightest aluminum seatposts ever made. Two Ti bolts secure the clamp in place and keep adjustment quick and easy. Available in 0mm and 20mm setback.

SERVICE COURSE SL BARS
The Service Course SL bars are designed to meet the needs of the rough-and-tumble world of professional bike racing by providing a bar that is both lightweight—285g for the 44cm—and incredibly durable. Their unparalleled strength means that they can be wrenched on daily without worry and provide the stiffness necessary for the world’s greatest sprinters.

SERVICE COURSE CSL BARS
As fit has evolved so has the placement of control levers on bars. With its unique three-radius bend, the Super Short Reach CSL bar gives riders a greater choice in lever placement than any other bars on the market. The bar top adopts the ultra-comfortable flattened profile of our popular Contour SL to give riders a bar that weighs only 285g for the 44cm, but thanks to its ZTL-71 alloy is both strong and stiff enough for the world’s top pros.

SERVICE COURSE SL STEMS
To make the 120g (100mm) Service Course SL stem, we took our Service Course stem and thinned the forging of the 7075 aluminum. We replaced the stainless steel bolts with Ti ones and use TORX® heads on all the bolts for maximum durability. We even cut windows in the face plate because no detail is too small to escape our efforts. Finally, the Service Course SL stem is rigorously evaluated for both length and alignment, meaning your fit is perfect, every time.

SERVICE COURSE SL SEATPOSTS
Rounding out our Service Course SL cockpit is a seatpost that matches our bars and stems in both form and function. The post begins with a 3D-forging of 7075 aluminum. Additional machining inside the seatpost shaves off unnecessary material, leaving behind one of the strongest and lightest aluminum seatposts ever made. Two Ti bolts secure the clamp in place and keep adjustment quick and easy. Available in 0mm and 20mm setback.
To produce a great handlebar, stem or seatpost is no small challenge. It’s easy to assume that weight is the most important aspect of a great design, but it’s not. Our first priority is to create components that will enhance your fit, giving you a comfortable position on the bike from which you can produce optimal power. Carbon fiber is the ultimate palette in our quest, allowing us nearly unlimited flexibility in shape, uncompromising strength and weight figures other companies have yet to achieve.
When we saw just how fast the VukaBull™ base bar was, that little lightbulb over our heads lit up. The drag savings were so terrific we knew we could apply its airfoil design to the bar top of a drop bar. The combination of aerodynamic shape, internal cable routing and our I-beam-stiff carbon layup makes this our fastest drop bar. It’s perfect for those nose-in-the-wind and solo efforts, but with its flattened top, you may decide this is the most comfortable bar you ever used on a long climb. Not only is it fast, it’s light, too; the 42cm-wide bar weighs just 210g. It’s available in both Short & Shallow and Traditional bends and four widths (40, 42, 44 and 46cm).
We were proud to unveil the lightest handlebar on the market, but we weren’t satisfied to offer a 170g bar; we wanted it to feature all the performance benefits of our other designs. It meets the stringent strength and fatigue standards of the independent EFBe test lab while giving the rider the stiffness you’d expect from a high-performance road bar. The best part: It’s available in two bends and four sizes to give you the perfect fit.

CONTOUR SL BARS
We designed the Contour SL bars to be the most comfortable available. These bars include both a flattened airfoil section to give your hands a relaxing grip on long climbs and ovalized drops to follow the shape of your hands. At 190g, these bars are the ideal blend of lightweight performance and ergonomic grace for the rider who places a premium on rider interface.

SLC2™ BARS
Our SLC2 bars are a test case for the strength of carbon fiber. This 190g bar has an unbeatable strength-to-weight ratio which gives it the ability to stand up to any crit-finishing sprint as well as take the clamping force of a pair of clip-on bars. That may be why it’s a favorite of sprinters, ’crossers and triathletes everywhere.
SLSPEED SEATPOSTS

Done well, a seatpost disappears beneath you. Our SLSpeed seatposts take the edge off rough roads and at 185g are light enough to give you another opportunity to shave weight off your bike. The SLSpeed seatpost comes in two diameters (27.2mm and 31.6mm), one length (330mm) and one setback (20mm). All hardware is titanium, and two caps are included in red and white.

SLSPEED STEMSTo produce a 102g stem (100mm), we didn’t really shave weight, we took an axe to it. We began with ultra-strong unidirectional carbon fiber. We created a titanium face plate that used rear-facing bolts to eliminate the need for a threaded insert in the stem. The SLSpeed stem clamps the steerer with a single, self-aligning bolt which, like the others, is naturally titanium. Available in one clamp diameter (31.8mm) and six lengths (80-130mm in 10mm increments); can be angled +/- 6 degrees. The Zipp® carbon stem top cap is sold separately.

SL145™ STEMSThis stem was created with one goal: to create the strongest carbon fiber stem on the market. This was confirmed by the independent EFBe test lab in Germany, but then, we expected that. Even at 135g (100mm) this is one light stem; thanks in part to the aluminum face plate and titanium hardware. Available in one clamp diameter (31.8mm) and six lengths (80-130mm in 10mm increments); can be angled +/- 12 degrees. The Zipp® carbon stem top cap is sold separately.

CARBON SL™
CARBON AERO

A letter for yields more speed

We didn’t invent the aero bar. Instead, our mission has been to make aero bars that are faster, more adjustable and lighter. Why? Because we know your best performance will come when you’ve optimized your position for power, comfort and aerodynamics. That’s a tall order. We understand that the cumulative effect of a number of small details can make a big difference in aerodynamics. That’s why we hide bolts, internally route cables, mold grips and create multiple extension shapes. But those features aren’t what make our bars so winning; it’s the fact that no matter who you are or what your personal dimensions are, you will find your ideal position with our bars, and you’ll have an easier time adjusting them as you do it.
The VukaShift combines our popular chicane extension with an integrated shifter mount to bring the shifters as much as 30mm closer to your hands to eliminate the need to move your arms in order to execute a shift. Less movement means better control and better aerodynamics, which translates to greater speed for you. It doesn’t hurt that they save up to 80 grams per pair. Available for VukaR2C, SRAM® or Shimano® shifters; 120g per pair.

We wouldn’t be the kings of aerodynamic positioning if we offered only one extension shape, which is why we offer three VukaExtensions for the VukaAero and VukaClip. Each bend is a response to a different rider position; the ski-tip offers the highest rider position while the straight extension allows for the lowest, most aggressive position. The chicane is the middle road, which may be why it is our most popular. Internal cable routing is possible with any of them and they can be shortened by nearly 100mm from their uncut 335mm length; 100g per pair.

Making an ultra-aerodynamic base bar was but one of our goals when we designed the VukaBull. It needed to be comfortable for the hands and give the rider a wind-cutting position even when on the grips. This UCI-legal bar manages even the smallest details (like internal cable routing) and offers superb stiffness for out of the saddle efforts like climbing or sprinting. The VukaBull is available in two drops, 0mm or 40mm, has a 31.8mm clamp diameter and measures 420mm (outside to outside).

VukaClip™
The VukaClip extensions changed the conversation about clip-on bars. With the VukaClip you get an exceedingly Aero bar that maintains all the adjustability of its less-aero competition and goes one step further with its ease of adjustability. Our simple compression sleeve controls fore-aft, vertical, rotational and angular adjustment, giving you the opportunity to dial your position with a minimum of fuss. We spec replaceable EVA foam pads for the supports that mount either directly above or 12.5mm behind the base bar depending on your fit. They can be turned to yield 42 possible positions to keep you focused on pedaling, not getting comfortable. We shot-peen the aluminum body for fatigue resistance and anodize all the parts to eliminate corrosion caused by sweat.

Bar-end shifters were first mounted on clip-on bars to eliminate the need to move your hand down to the control lever to shift. With that thinking in mind, we realized that we could make shifting even more seamless and aerodynamic by creating a shifter that always returned to the same position. No more awkward hand movement, no more elbow lift. Following each shift, the lever returns to its home position, pointing forward and saving you 6 seconds over 40km compared to other bar-end shifters. No other shifter is as simple, ergonomic or fast. Available for SRAM® or Shimano® shifters; 180g per pair.
When you’ve spent as much time in the wind tunnel as we have, you see how the tiniest adjustment in position can result in surprising savings. We’ve created the VukaAero bars to be infinitely adjustable. There are 126 possible pad positions alone. The extensions can be adjusted in four axes: fore/aft, vertical, rotational and angular. But there’s no point to incredible variation if adjustment is difficult; a single, rear-facing bolt secures the bars and doubles as the exit point for the internal cable routing. Finally, we molded the grips to feel like control lever hoods and integrated the brake lever into the grip to cut drag and keep weight to a minimum. Fast never felt this good.
WATER BOTTLE CAGES
There's not much point in making a 21g carbon fiber water bottle cage if it won't hold a bottle. Ours are designed to hang on to your bottles even when you hit bumps that turn ordinary cages into ejector seats. Available in four colors: black, white, red and silver.

TANGENTE BRAKE PADS
We offer two pads depending on your needs. Our Tangente High Performance Cork Brake Pads are designed for our carbon rims and employ a composite cork polymer to reduce glazing and offer consistent brake response. Our Tangente Platinum Pro Brake Pads are made for the rigors of pro racing and give excellent brake power in all conditions. Available for SRAM®, Shimano® or Campagnolo®.

AERO SKEWERS
Wind tunnel testing has shown our aero skewers save as much drag as removing two spokes from your front wheel. The stainless steel weighs just 84g—included with all Zipp® wheels—or 62g for titanium.

VALVE EXTENSIONS
We design our valve extensions for each rim depth in our line and insert O-rings to ensure leak-free inflation. They are clearly labeled for each model. A pack includes three extensions and two wrenches, plus singles are available as well.

SPEED TWIST CO2 INFLATOR
Flats aren't fast, but our CO2 inflator is. Made from die-cast aluminum, the Speed Twist inflator is half the size of a mini-inflator. A flip-up cover allows you to control the rate of inflation to achieve perfect pressure and save partial cartridges. It includes aluminum head, two recyclable 16g cartridges, and a cold-proof, noise-reducing cover.

CARBON HEADSET SPACERS
For a headset to turn smoothly, every element of the steering assembly must be parallel, from the bearings right down to the headset spacers. We precision grind our spacers to ensure they have parallel top and bottom surfaces. They are made for 1 1/8” steerers and come in 4, 8, 12 and 30mm lengths to help you achieve a perfect fit.

BRAKE PADS
We make our polyurethane brake tape in two versions. Our road model features a traditional finish but the cross version features a scored surface for better grip in rainy conditions. Available in four colors: red, white, gray and black.

BAR TAPE
We make our polyurethane brake tape in two versions. Our road model features a traditional finish but the cross version features a scored surface for better grip in rainy conditions. Available in four colors: red, white, gray and black.

When you spend as much time as we do designing the perfect solution to a performance requirement, you learn to love the details. If we had a middle name, it would be thorough. That's why we have created a line of Zipp®-branded accessories. From headset spacers to rim strips and handlebar tape, we've assembled a group of accessories executed to our rigorous standards. Some of these items, such as our valve extensions and new Tangente Platinum Pro Brake Pads, have been designed specifically to work with Zipp wheels. It's our way of dotting the “i” and crossing the “t.”

Even our details are fast.

ACCESSORIES
CASTELLI® CYCLING KIT
Wind-tunnel developed and pro-race proven, the Castelli® Team Jersey and Aero Race Bib Shorts are the perfect match for your Zipp products. The Team Jersey features a classic fit for everyday riding. The Aero Race Bib Shorts include Castelli’s popular KISS3 pad for comfort on those longest of training rides. Five sizes: S - XXXL. Made in El Salvador.

CASTELLI® CYCLING CAP
Sometimes old-school is the way to go. This cotton cycling cap sports Zipp logos on the brim, front and sides and comes in black and gray— to match any cycling kit. One size. Made in China.

CASTELLI® TRACK JACKET
Perfect for cool evenings or trips to the movie theater, this Castelli® Track Jacket is our way to tell the world we’re cyclists when we’re off the bike. It features cotton construction, a high collar and full zipper. Five sizes: S - XXL. Made in China.

SWIFTWICK™ CYCLING SOCKS
Whether you’re on or off the bike these socks will show your good taste. The white socks are crafted from Swiftwick’s remarkably soft olefin, while the black ones are from merino wool. The wide bands will keep it in place when you’re on the bike, and come in black or silver. Four sizes: S - XL. Made in USA.

SOFT GOODS
We’ve assembled a set of soft goods to complement your taste in parts. We offer bags to ensure the safety of your wheels, a cycling kit, caps and a gear bag. All of them feature classic Zipp® styling and are produced by the world’s top suppliers. From Castelli® to Swiftwick®, we’ve partnered with premium manufacturers to give you the opportunity to accessorize on or off the bike in style and quality. Like you, we ride, and we wouldn’t be caught with anything else.

GEAR BAGS
How do you make a gear bag better? By organizing it. Ours has specific pockets for helmet, shoes, wetsuit, floor pump and four bottles. Made in China.

WHEEL BAGS
Our wheel bags will protect your investment when you travel. We make versions to hold one (unpadded), two or four wheels (padded) at a time. Made in China.

RUNNING CAP
Just because you’re out of T2 doesn’t mean you have to give up Zipp speed or style. Our running cap by Headsweats® adds comfort and dries quickly thanks to Coolmax®. One size, with adjustable closure. Made in China.

PODIUMicap
On the podium or off, this classic cotton podium cap features Castelli’s incomparable quality. One size, with adjustable closure. Made in China.

BEANIE
Ultra soft and unapologetically cozy, our Zipp Beanie is produced by Castelli® from a blocks/blend of merino wool and acrylic. One size. Made in China.

CASTELLI® CYCLING KIT
Sometimes old-school is the way to go. This cotton cycling cap sports Zipp logos on the brim, front and sides and comes in black and gray— to match any cycling kit. One size. Made in China.

CASTELLI® TRACK JACKET
Perfect for cool evenings or trips to the movie theater, this Castelli® Track Jacket is our way to tell the world we’re cyclists when we’re off the bike. It features cotton construction, a high collar and full zipper. Five sizes: S - XXL. Made in China.

SOFT GOODS
We’ve assembled a set of soft goods to complement your taste in parts. We offer bags to ensure the safety of your wheels, a cycling kit, caps and a gear bag. All of them feature classic Zipp® styling and are produced by the world’s top suppliers. From Castelli® to Swiftwick®, we’ve partnered with premium manufacturers to give you the opportunity to accessorize on or off the bike in style and quality. Like you, we ride, and we wouldn’t be caught with anything else.

GEAR BAGS
How do you make a gear bag better? By organizing it. Ours has specific pockets for helmet, shoes, wetsuit, floor pump and four bottles. Made in China.

WHEEL BAGS
Our wheel bags will protect your investment when you travel. We make versions to hold one (unpadded), two or four wheels (padded) at a time. Made in China.

RUNNING CAP
Just because you’re out of T2 doesn’t mean you have to give up Zipp speed or style. Our running cap by Headsweats® adds comfort and dries quickly thanks to Coolmax®. One size, with adjustable closure. Made in China.

PODIUMicap
On the podium or off, this classic cotton podium cap features Castelli’s incomparable quality. One size, with adjustable closure. Made in China.

BEANIE
Ultra soft and unapologetically cozy, our Zipp Beanie is produced by Castelli® from a blocks/blend of merino wool and acrylic. One size. Made in China.

CASTELLI® CYCLING KIT
Wind-tunnel developed and pro-race proven, the Castelli® Team Jersey and Aero Race Bib Shorts are the perfect match for your Zipp products. The Team Jersey features a classic fit for everyday riding. The Aero Race Bib Shorts include Castelli’s popular KISS3 pad for comfort on those longest of training rides. Five sizes: S - XXXL. Made in El Salvador.

CASTELLI® CYCLING CAP
Sometimes old-school is the way to go. This cotton cycling cap sports Zipp logos on the brim, front and sides and comes in black and gray— to match any cycling kit. One size. Made in China.

CASTELLI® TRACK JACKET
Perfect for cool evenings or trips to the movie theater, this Castelli® Track Jacket is our way to tell the world we’re cyclists when we’re off the bike. It features cotton construction, a high collar and full zipper. Five sizes: S - XXL. Made in China.

SWIFTWICK™ CYCLING SOCKS
Whether you’re on or off the bike these socks will show your good taste. The white socks are crafted from Swiftwick’s remarkably soft olefin, while the black ones are from merino wool. The wide bands will keep it in place when you’re on the bike, and come in black or silver. Four sizes: S - XL. Made in USA.

SOFT GOODS
We’ve assembled a set of soft goods to complement your taste in parts. We offer bags to ensure the safety of your wheels, a cycling kit, caps and a gear bag. All of them feature classic Zipp® styling and are produced by the world’s top suppliers. From Castelli® to Swiftwick®, we’ve partnered with premium manufacturers to give you the opportunity to accessorize on or off the bike in style and quality. Like you, we ride, and we wouldn’t be caught with anything else.

GEAR BAGS
How do you make a gear bag better? By organizing it. Ours has specific pockets for helmet, shoes, wetsuit, floor pump and four bottles. Made in China.

WHEEL BAGS
Our wheel bags will protect your investment when you travel. We make versions to hold one (unpadded), two or four wheels (padded) at a time. Made in China.

RUNNING CAP
Just because you’re out of T2 doesn’t mean you have to give up Zipp speed or style. Our running cap by Headsweats® adds comfort and dries quickly thanks to Coolmax®. One size, with adjustable closure. Made in China.

PODIUMicap
On the podium or off, this classic cotton podium cap features Castelli’s incomparable quality. One size, with adjustable closure. Made in China.

BEANIE
Ultra soft and unapologetically cozy, our Zipp Beanie is produced by Castelli® from a blocks/blend of merino wool and acrylic. One size. Made in China.

CASTELLI® CYCLING KIT
Wind-tunnel developed and pro-race proven, the Castelli® Team Jersey and Aero Race Bib Shorts are the perfect match for your Zipp products. The Team Jersey features a classic fit for everyday riding. The Aero Race Bib Shorts include Castelli’s popular KISS3 pad for comfort on those longest of training rides. Five sizes: S - XXXL. Made in El Salvador.

CASTELLI® CYCLING CAP
Sometimes old-school is the way to go. This cotton cycling cap sports Zipp logos on the brim, front and sides and comes in black and gray— to match any cycling kit. One size. Made in China.

CASTELLI® TRACK JACKET
Perfect for cool evenings or trips to the movie theater, this Castelli® Track Jacket is our way to tell the world we’re cyclists when we’re off the bike. It features cotton construction, a high collar and full zipper. Five sizes: S - XXL. Made in China.

SWIFTWICK™ CYCLING SOCKS
Whether you’re on or off the bike these socks will show your good taste. The white socks are crafted from Swiftwick’s remarkably soft olefin, while the black ones are from merino wool. The wide bands will keep it in place when you’re on the bike, and come in black or silver. Four sizes: S - XL. Made in USA.

SOFT GOODS
We’ve assembled a set of soft goods to complement your taste in parts. We offer bags to ensure the safety of your wheels, a cycling kit, caps and a gear bag. All of them feature classic Zipp® styling and are produced by the world’s top suppliers. From Castelli® to Swiftwick®, we’ve partnered with premium manufacturers to give you the opportunity to accessorize on or off the bike in style and quality. Like you, we ride, and we wouldn’t be caught with anything else.

GEAR BAGS
How do you make a gear bag better? By organizing it. Ours has specific pockets for helmet, shoes, wetsuit, floor pump and four bottles. Made in China.

WHEEL BAGS
Our wheel bags will protect your investment when you travel. We make versions to hold one (unpadded), two or four wheels (padded) at a time. Made in China.

RUNNING CAP
Just because you’re out of T2 doesn’t mean you have to give up Zipp speed or style. Our running cap by Headsweats® adds comfort and dries quickly thanks to Coolmax®. One size, with adjustable closure. Made in China.

PODIUMicap
On the podium or off, this classic cotton podium cap features Castelli’s incomparable quality. One size, with adjustable closure. Made in China.

BEANIE
Ultra soft and unapologetically cozy, our Zipp Beanie is produced by Castelli® from a blocks/blend of merino wool and acrylic. One size. Made in China.
## TECH/SPEC

<table>
<thead>
<tr>
<th>WHEELS</th>
<th>WIDTH</th>
<th>DEPTH</th>
<th>SPOKE COUNT FRONT</th>
<th>SPOKE COUNT REAR</th>
<th>SPOKE PATTERN FRONT</th>
<th>SPOKE PATTERN REAR</th>
<th>MAX TIRE PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 Clincher</td>
<td>24.5mm</td>
<td>30mm</td>
<td>18</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>202 Tubular</td>
<td>23mm</td>
<td>32mm</td>
<td>18</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>303 Tubular</td>
<td>28.5mm</td>
<td>45mm</td>
<td>18</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>303 Carbon Cliniche X45</td>
<td>28.5mm</td>
<td>45mm</td>
<td>18</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>404 Tubular</td>
<td>27.5mm</td>
<td>58mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>404 MAX Clincher</td>
<td>22.5mm</td>
<td>58mm</td>
<td>18</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>404 Aluminum Clincher</td>
<td>22.5mm</td>
<td>58mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>404 Carbon Clincher X58</td>
<td>27.5mm</td>
<td>58mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>404 650c Tubular</td>
<td>22.5mm</td>
<td>58mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>No</td>
</tr>
<tr>
<td>404 650c Clincher</td>
<td>22.5mm</td>
<td>58mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>808 Tubular</td>
<td>27.5mm</td>
<td>82mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>808 Aluminum Clincher</td>
<td>24mm</td>
<td>82mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>808 MAX Clincher</td>
<td>24mm</td>
<td>82mm</td>
<td>18</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>808 Carbon Clincher x82</td>
<td>27.5mm</td>
<td>82mm</td>
<td>16</td>
<td>20</td>
<td>Radial</td>
<td>Cross</td>
<td>125 PSI</td>
</tr>
<tr>
<td>808 Track Tubular</td>
<td>26.9mm</td>
<td>82mm</td>
<td>20</td>
<td>24</td>
<td>Radial</td>
<td>Cross</td>
<td>Yes</td>
</tr>
<tr>
<td>900 Disc Tubular</td>
<td>N/A</td>
<td>N/A</td>
<td>21mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>900 Disc Track Tubular</td>
<td>N/A</td>
<td>N/A</td>
<td>21mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>900 Disc Clincher</td>
<td>N/A</td>
<td>N/A</td>
<td>25mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes 125 PSI</td>
</tr>
<tr>
<td>840 Disc 650c Tubular</td>
<td>N/A</td>
<td>N/A</td>
<td>21mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sub-9 Tubular</td>
<td>N/A</td>
<td>N/A</td>
<td>28.5mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Super-9 Tubular</td>
<td>N/A</td>
<td>N/A</td>
<td>27.5mm</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>
# BARS

<table>
<thead>
<tr>
<th>Model</th>
<th>Material</th>
<th>Weight</th>
<th>clamp diameter</th>
<th>diameter</th>
<th>Drop</th>
<th>Clip</th>
<th>Compatible Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL Unidirectional Carbon</td>
<td>170g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>VukaSprint Unidirectional Carbon</td>
<td>220g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>SLC2 Unidirectional Carbon</td>
<td>195g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>Contour SL Unidirectional Carbon</td>
<td>195g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>Service Course SL ZTL-71</td>
<td>285g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>Service Course CSL ZTL-71</td>
<td>290g</td>
<td>31.8mm</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>Service Course Al-7050</td>
<td>295g</td>
<td>31.8mm</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
<tr>
<td>Service Course C Al-7050</td>
<td>300g</td>
<td>31.8mm</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>40,42,44,46cm (outside to outside)</td>
</tr>
</tbody>
</table>

# AERO BARS

<table>
<thead>
<tr>
<th>Model</th>
<th>Material</th>
<th>Weight</th>
<th>clamp diameter</th>
<th>diameter</th>
<th>Drop</th>
<th>Clip</th>
<th>Compatible Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VukaAero Carbon</td>
<td>750g</td>
<td>31.8/26.0mm</td>
<td>18mm</td>
<td>Integrated</td>
<td>42cm</td>
<td></td>
<td>42cm (outside to outside)</td>
</tr>
<tr>
<td>VukaBull</td>
<td>Unidirectional Carbon</td>
<td>210g</td>
<td>31.8mm</td>
<td>0mm</td>
<td>Yes</td>
<td></td>
<td>42cm (outside to outside)</td>
</tr>
<tr>
<td>VukaBull 40</td>
<td>Unidirectional Carbon</td>
<td>210g</td>
<td>31.8mm</td>
<td>40mm</td>
<td>Yes</td>
<td></td>
<td>42cm (outside to outside)</td>
</tr>
</tbody>
</table>

# CLIP-ONS AND EXTENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Material</th>
<th>Weight</th>
<th>clamp diameter</th>
<th>diameter</th>
<th>Extension</th>
<th>Clamp Diameter</th>
<th>Internal Cable Routing</th>
<th>Shifter Fitment</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>VukaClip AL-2014</td>
<td>390g</td>
<td>31.8/26.0mm</td>
<td>22.0mm</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>330mm</td>
</tr>
<tr>
<td>VukaChicane Extension</td>
<td>Unidirectional Carbon</td>
<td>105g</td>
<td>22.0mm</td>
<td>22.0mm</td>
<td>Yes</td>
<td>Plug Style</td>
<td></td>
<td></td>
<td>330mm</td>
</tr>
<tr>
<td>VukaSki-Tip Extension</td>
<td>Unidirectional Carbon</td>
<td>105g</td>
<td>22.0mm</td>
<td>22.0mm</td>
<td>Yes</td>
<td>Plug Style</td>
<td></td>
<td></td>
<td>330mm</td>
</tr>
<tr>
<td>VukaStraight Extension</td>
<td>Unidirectional Carbon</td>
<td>105g</td>
<td>22.0mm</td>
<td>22.0mm</td>
<td>Yes</td>
<td>Plug Style</td>
<td></td>
<td></td>
<td>330mm</td>
</tr>
<tr>
<td>VukaShift R2C Extension</td>
<td>Unidirectional Carbon</td>
<td>120g</td>
<td>22.0mm</td>
<td>22.0mm</td>
<td>Yes</td>
<td>SRAM R2C/Zipp VukaR2C</td>
<td></td>
<td></td>
<td>330mm</td>
</tr>
</tbody>
</table>

# STEMS

<table>
<thead>
<tr>
<th>Model</th>
<th>Material</th>
<th>Weight</th>
<th>clamp diameter</th>
<th>diameter</th>
<th>stem angle</th>
<th>Sizeshardware</th>
<th>Hardware</th>
<th>Clamp Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLSpeed Stem</td>
<td>Unidirectional Carbon</td>
<td>102g</td>
<td>31.8mm</td>
<td>±6°</td>
<td>80,90,100,110,120,130cm</td>
<td>Titanium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL145 Stem</td>
<td>Unidirectional Carbon</td>
<td>135g</td>
<td>31.8mm</td>
<td>±12°</td>
<td>80,90,100,110,120,130cm</td>
<td>Titanium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Course SL Al-7075</td>
<td>120g</td>
<td>31.8mm</td>
<td>±6° or ±17°</td>
<td>70,80,90,100,110,120,130cm</td>
<td>Titanium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Course Al-7075</td>
<td>130g</td>
<td>31.8mm</td>
<td>±6° or ±17°</td>
<td>70,80,90,100,110,120,130cm</td>
<td>Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* SLSpeed Stem: 120 and 130mm use steel bolts

# SEATPOSTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Material</th>
<th>Weight</th>
<th>diameter</th>
<th>setback</th>
<th>Length</th>
<th>Hardware</th>
<th>clamp material</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLSpeed Seatpost</td>
<td>Unidirectional Carbon</td>
<td>185g</td>
<td>(330x 27.2)</td>
<td>20mm</td>
<td>330mm</td>
<td>Titanium Carbon</td>
<td></td>
</tr>
<tr>
<td>Service Course SL-20</td>
<td>Al-7075</td>
<td>220g</td>
<td>(275x27.2)</td>
<td>20mm</td>
<td>275/350mm</td>
<td>Titanium Al-7075</td>
<td></td>
</tr>
<tr>
<td>Service Course SL-0</td>
<td>Al-7075</td>
<td>220g</td>
<td>(275x27.2)</td>
<td>0mm</td>
<td>330mm</td>
<td>Titanium Al-7075</td>
<td></td>
</tr>
<tr>
<td>Service Course-20</td>
<td>Al-7075</td>
<td>285g</td>
<td>(350x27.2)</td>
<td>20mm</td>
<td>275/350mm</td>
<td>Steel Al-7075</td>
<td></td>
</tr>
<tr>
<td>Service Course-0</td>
<td>Al-7075</td>
<td>260g</td>
<td>(330x27.2)</td>
<td>0mm</td>
<td>330mm</td>
<td>Steel Al-7075</td>
<td></td>
</tr>
</tbody>
</table>

* Service Course-20 and -0 use one piece bars
PHOTO CREDITS:

Delly Carr: inside back cover
Simon Cittati: inside front cover, 33, 36-37
Luc Claessen: front and back covers, inside front cover
Tim De Waele: inside front cover, 2, 6-7, 10-11, 19
GSPH Pictures: inside front cover, 31
Jered Gruber: 21
Wil Matthews: inside front cover, 1, 17, 58-59, 40-41, 64, inside back cover
Andy Paskins: inside front cover
David Ripley: 3, 52
Lorry Ross: 27, 46-47, 54-55
SRAM*: 56
Nick Salazar: 50-51
Joe Vondersaar: 4-5, 8-9, 12-13, 14-15, 34, 42, 43-44, 48-49, 56, 58-59, inside back cover and all product photos
Graham Watson: 22, 61, 64, inside back cover
Eric Wynn: 25, 29

Thank you to Hammerquist Studios, Patrick Brady, and PrintSource. Special thanks to the entire Zipp® Team.

AERODYNAMICS CALCULATION METHODOLOGY:

Time and watt savings over 40km are calculated using a top-selling aluminum race wheel as the baseline and assuming a power output of 300 watts and a speed of 30mph (48kph). If you’re going slower, the time savings are greater, as you’ll be riding for a longer time. Aero savings reflect rider-on-bike testing, not wheels-only testing. All numbers are calculated at a 10° wind angle to approximate the most common real-world riding conditions. Tests are conducted using 29mm Vittoria® tires; Zipp Tangente tires can save an additional 3-9 seconds, or 1-3 watts. Visit zipp.com for the latest products and technical specifications.

Campagnolo® is a registered trademark of Campagnolo S.r.l.
Castelli® is a registered trademark of Castelli S.p.A.
Coolmax® is a registered trademark of INVISTA North America S.a.r.l.
Headsweats® is a registered trademark of Alan Romick
Ironman® is a registered trademark of World Triathlon Corporation
Sapim® is a registered trademark of SAPIM, naamloze vennootschap
Shimano® is a registered trademark of Shimano Inc. Japan
Teflon® is a registered trademark of E.I. du Pont de Nemours and Company
TORX® is a registered trademark of Acument Intellectual Properties, LLC
Tour de France® is a registered trademark of Société du Tour de France
Vittoria® is a registered trademark of Vittoria Industries North America, LLC

® 2011 COMPOSITECH, INC.