





84 - Medium-Profile wheels HHAMSIN" - VENTO" SCIROCCO" - ZONDA" EURUS" - SHAMAL" ULTRA"

Driginal Spare Parts

116 - Spare Parts - Tools

118 - Corkscrew

Campagnolo, Campy, Record, Chorus, EPS, CT, Centaur, Veloce, Mirage, Xenon, Hyperon, Neutron, Proton, Eurus, Zonda, Scirocco, Vento, Bora, Ghibli, Pista, Khamsin, Shamal, Time Trial, Ergobrain, Superlative, Floating-Link-Action, HD-Link, HD-L, Exa-Drive, Ultra-Drive, Pro-Fit, Pro-Fit PLUS, Differential brakes, Threadless, Hiddenset, Hiddenset TTC, TTC, Ergopower, BB System, C10, C9, ED, UD, Ultra Narrow, Ultra-Torque, UT, Ultra-Hollow, Skeleton, Quick Shift, QS, Escape Infinite, Champ Triple, Race Triple, Comp Triple, HPW, G3, Grouped Spokes, DPRO, Dual Profile, Ultralinear-Geometry, Ultralinear, Differential rims, Differential spokes, Asymmetric, Ultra, Ultra Aero, Full Carbon, Multidirectional, Unidirectional, AC-H, AC-S, SC-S, Big, Miro, Pro-Shop, Tecnologia ed Emozione, are Campagnolo Srl Trademarks



120 - Pro-Shop[™] - Service Center

CYCLING APPAREL COLLECTION

- 123 Fall/Winter 2006
- 158 Spring/Summer 2007
- 198 Limited Warranty Sportswear
- 201 Technical Specifications
- 222 Limited Warranty

"Campagnolo®-style" innovation

Innovation and Tradition, two equally important qualities combined in Campagnolo[®] to ensure that the engine of evolution is powered by both research and technology but guided by historical values.

Almost 75 years have passed since Tullio Campagnolo's first intuition, years during which the World has changed and the racing bike with it. Unfortunately today more than ever the market offers disposable products, ones without soul or tradition which are soon forgotten. But there are products that still incorporate values which are timeless and which will always be vital: quality, durability, reliability and safety.

Without a doubt, new materials and machining technologies allow those who have the know-how for using them to offer components and wheels with increasingly elevated performance levels, but for Campagnolo® this only makes sense if it remains possible to do so while fully respecting the profound historical values which guide the company.

In Campagnolo[®], the challenge is not to create a lighter or better performing product, but rather to lighten it or enhance its performance without sacrificing safety, life and reliability.

The new generation of cranksets and brakes are the maximum expression of Campagnolo®-style innovation, as they improve the previous product from every point of view. The products perform better, are lighter, transfer the athlete's power more effectively, improve the ergonomics and are even at the highest levels of style, but do not lose any of the characteristics which made them famous all over the World and made cycling history.

Once again in Campagnolo[®], innovation springs from that long history of passion and successes that has accompanied generations of riders and enthusiasts and will accompany others, as the integrity of its values is contained in the company's DNA and is reflected in the products it creates. Campagnolo® has been developing racing bike components and wheels for over 70 years, components and wheels which come into being with the input of our most demanding customers: professional riders. These, with the thousands of kilometres they pedal every year, have always shown us the best way to meet your needs.

Campagnolo® possesses one of the most evolved laboratories in the bicycle sector and, as everyone knows, lab tests are fundamental for a product and for making it available to you. But a final test, the one before affixing the Campagnolo® brand, is on the road and always will be. A long road, full of difficulties, variously called Milan-Sanremo, Paris-Roubaix, Giro d'Italia, Tour de France, Vuelta in Spain and the World Championships.

2006 professional-*lampagnolo*

A road tackled in the most extreme conditions, where even the slightest error has a price, where every detail is important as it means victory or defeat, and where components and wheels become one with the rider to help him achieve the most yearned for target.

Campagnolo[®] is at their side every day with the most reliable and highest performing components and wheels. An ideal condition which gives them peace of mind and allows them to concentrate solely on the race, with the security that everything will work perfectly. Peace of mind and perfection now available to you too, with the Campagnolo[®] brand.



Damiano Cunego





Bettini, Boonen, Pozzato

2006 Professional Teams - Belgium

-JEP

PRO TEAM	FRAME	TOP RIDERS
Quick Step - Innergetic	Time	Tom Boonen Paolo Bettini
Davitamon Lotto	Ridley	Robbie McEwen Chris Horner
Landbouwkrediet	Colnago	Bert De Waele
Chocolade Jacques Top Sport	Merckx	Nico Eeckhout



Bert De Waele

Chris Horner

Robbie McEwen

Davitamon



2006 Professional Teams - France

1.0	PROTEAM	FRAME	TOP RIDERS
	Ag2r Prevoyance	Decathlon	Christophe Moreau Sylvain Calzati
	Bouygues - Telecom	Time	Lauent Brochard Thomas Voeckler









Groupset of integrated components

Chain

Geometries and dimensions have been studied to perfectly match the machining of the chainrings and the sprockets to optimize transmission of the rider's leg-power and ensure that the chain is moved up and down the sprockets and chainrings rapidly, precisely and silently.

Sprocket set

0000000 DBBBB The teeth of the Campagnolo[®] sprocket set feature an Ultra-Drive[™] geometry and have been specially machined to interface perfectly with the geometry of Campagnolo chains to produce perfect ratios both when upshifting and downshifting, even when pulling on the

Crankset

The chainrings of the Campagnolo[®] cranksets use Ultra-Drive™ geometry, as do the chain and sprockets, and have special sectors, namely special machining and pins that match the Campagnolo® chains perfectly to always move them up and down at the most efficient point.

Campagnolo® components are designed to interface exclusively with Campagnolo® groupsets. Materials, dimensions and design: nothing is left to chance. All the components work in harmony at the maximum of their potential with highly precise teamwork. The perfection of the whole is only achieved by paying attention to the details.

Each individual component is realized to excel, but always with the aim of interfacing perfectly with the others. It is only in this way that you get a groupset of components with superior performance, a Campagnolo® groupset.

Ergopower[™] shifters

The Campagnolo[®] Ergopower™ shifters are used to actuate the cable-housing insert that moves by a calibrated angular portion so as to pull the control cable by the correct distance and enable the rear-derailleur parallalelogram to move by the correct amount. The same applies to the brake levers, which have been suitably sized to obtain powerful and progressive braking if combined with Campagnolo[®] brakes.

Campagnolo components: a single integrated design.

Brakes

The dimensions, geometry and materials have been chosen to operate in perfect harmony with Ergopower[™] shifters and with the Campagnolo_® cables and housings system. This also applies to the brake pads, whose compound has been selected to produce top performance when combined with the braking surface of a Campagnolo® rim.

Rear derailleur

A composite system of springs that are balanced together means that the action of the control transmitted by cable is matched by perfect shifting of the rear-derailleur parallelogram. This shift moves the cage and positions the chain rapidly and silently on the selected sprocket.

Front derailleur

Actuated by the Ergopower[™] left-hand control, the job of the front derailleur is to shift the chain from one chainring to another. The difficulty is to do this under effort, when the athlete is pushing on the pedals. For this reason it is fundamental for the derailleur fork, the chain and the chainrings to be part of a single project in which every component has been designed to work with, and only with, those components. It is only in this way that you obtain fast and precise displacement of the chain in any situation.

INNOVATION 2007

Ultra-Torque™ Cranksets

With its 2007 range Campagnolo® is introducing the new Ultra-Torque[™] crankset with integrated bottom bracket. This is the effective response to the demand for a new system finally superior in every detail to the traditional, reliable and welltried ISO spindle. Only a system which would be truly innovative and significantly improved, compared with any alternative available on the market, could convince Campagnolo[®] to abandon a product which can boast of decades of performance at the highest level.

RECO

ULTRA-TORQUE

SYSTEM

The Ultra-Torque™ system has been developed by the Campagnolo® R&D team which has always worked in symbiosis with the racing world and enthusiasts, with a double aim: design a superior product and put an end to the weaknesses of the existing system.

In fact, for example, if on the one hand external cups were appreciated because of the slight increase in the system's rigidity, on the other hand the increase in the lateral dimensions of the cranks in the ankle/heel area was a nuisance and made it necessary to broaden the pedal stroke.

Furthermore, there was a great need to create a more immediate, secure

and simpler crank fixing system which would not require continuous monitoring, combined with the aim of rendering the disassembly, reassembly and maintenance operations easier and fast.

Ingenious technical solutions have been adopted to solve the problems of an ergonomic and structural nature. By increasing the diameter of the bottom bracket axle in the interface zone with the crank it was possible to reduce the thickness of the cranks, moving the bearings outside the bottom bracket without increasing the lateral dimensions of the crankset.

Then, a technical solution designed for aircraft engine shafts was adopted in order to make it possible to insert the bearings: a bottom bracket axle composed of two semiaxles joined integrally with a joint of the Hirth type. In fact, by splitting the axle into two halves, the bearings are inserted from the centre, and it is therefore possible to increase the diameter of the interface area between the semi-axle and crank just enough to reduce the thickness of the same and thereby increase the lateral space available for the pedal stroke.





The new Ultra-Torque[™] cranksets are:

WADE IN ITALY

- lighter
- more rigid
- more ergonomic
- smoother
- easier to maintain



INNOVATION 2007

The front coupling of the Hirth type is selfaligning and self-centring, but it has to be preloaded if it is to work properly and transform the two semi-axles into a solid and very rigid shaft: this function is provided by the spring washer of the central fixing screw which exerts a pressure of 600kg/1300lb on the coupling. Each semi-axle is therefore joined integrally to the crank, fixed by interference in the case of aluminium cranks and by special bonding in the case of carbon cranks; the bearings are driven by interference onto the semi-axles while the seals that protect the bearings are mounted both on the semi-axles and on the cups. What are the advantages of this new generation of Ultra-Torque[™] cranksets with integrated bottom bracket?

Lightness

Thanks to the lightness of the oversize axle and, in the case of carbon ones, because the cranks no longer have metal inserts on which to fix the bottom bracket axle, but incorporate the axle itself directly.



In this way, the oversize axle of the Ultra-Torque[™] bottom bracket behaves for all intents and purposes as if it were made in a single, extremely strong and ultra-rigid piece.

It is worthwhile to underline, in a bottom bracket with external cups, that the flexion is maximum between the bearing and crank and minimum between the mid-point of the axle where there is mostly a transmission of torque.

0



See.

'ONO'

Rigidity

Thanks to the external caps and greater diameter of the oversize axle.

Ergonomics

The greatest advantage, however, derives from the fact that there is more space left for the ankles and shoes of the athlete who will not be obliged to shift the cleats to broaden the position of the feet and therefore of the pedal stroke.

The Q factor also remains unchanged from the already excellent values previously offered by Campagnolo[®].

Maintenance/Functionality

Standard wrenches are used to tighten the light allow caps, while a normal 10mm socket wrench is used for the central screw that unites the axle.

The tightness of the screw is very intuitive because you "sense" the compression of the spring and clearly feel it when compression is complete because of the exponential increase of the resistance. Another function of the spring, which is mounted on the screw and cannot be removed, is to prevent unscrewing.

Finally, extremely high-precision and oversize bearings complete the system. They offer great smoothness and very low friction, are protected, as we have said, by two seals and are very easy to change.

So it appears clear that the Ultra-Torque[™] system is a fundamental evolutionary step, which hits the bull's-eye of the target Campagnolo[®] set itself: a new system which improves the existing ones from every point of view.

OP



INNOVATION 2007

Skeleton™ Brakes

Campagnolo® brakes have always been able to combine exceptional braking performance with the industry's highest levels of lightness and longevity. These results are obtained using optimized designs and top-quality forgings, with brake pads which give truly extraordinary performance even in wet conditions.

A must for Campagnolo[®] when creating new lighter components is to be able to maintain the characteristic performance, reliability, life and safety levels of the previous products or even improve them.

Skeleton[™] brakes are born just like this: as a sophisticated evolution of the previous project, capable of raising the performance benchmark even higher without sacrificing

anything on the altar of lightness. From a structural point of view the material of the resistant sections has been repositioned outwards, and the improvement so obtained in the ratio between resistance and mass has permitted the reduction of weight with a slight gain in thickness.

The brake arms are of course produced by means of a forging cycle which gives them the maximum strength and life, thanks to exaltation of the mechanical characteristics of the alloy due to the arrangement of the micro-crystalline structure, which also reduces the probability of separation of the grains of the structure.

All the Skeleton[™] braking systems are differentiated, an innovation introduced by Campagnolo[®] a few years ago to adapt the braking system to the effective dynamic needs of the bicycle. This is because the double fulcrum front brake is more powerful as it must exert more than 70% of the braking force, while the single-fulcrum rear one reduces the probability of dangerous blocking of the rear wheel, and is still lighter.

That is why braking is more instinctive and more progressive with a consequent reduction of the stopping distances and therefore greater safety.

But lightness is not everything: in fact while the trend for building light products by machining solid pieces of metal on CNC machine tools makes it possible to make lighter products with attractive forms, it also means that the life cycle of the components is inevitably reduced.

It is in fact known that CNC products are the most vulnerable to light alloy fatigue phenomenon because of the random and uncontrollable arrangement of the micro-crystalline lattice structure, which reduces the structural strength and facilitates the occurrence of cracks.

The design of Skeleton[™] brakes is also of great impact, as it combines a powerful technical racing-style approach with traditional refinement, making them truly unique. Skeleton[™] brakes therefore constitute the new

benchmark in terms of performance, lightness, life and design, projecting the great Campagnolo tradition towards the future.

Quick Shift™

Left-hand Ergopower[™] controls will all be of the Quick Shift[™] type with the 2007 range; this makes shifting possible with an actuating force which has been reduced even further. This result has been achieved by reducing the lever stroke to permit immediate actuation of the front derailleur. The pre-stroke is that "idle" part of the shift lever movement which precedes the effective displacement of the derailleur, and now just a minimum movement is sufficient. The geometry of the front derailleur arm has been changed to offer more favourable levering and reduce the actuating force.



10-Speed Groupsets

Campagnolo[®], which was the first to introduce 10-speed drivetrains, both double or triple, to racing bikes and permit a greater choice of ratios, has decided to extend these advantages to enthusiasts of all kinds.

And so the great innovation in the 2007 range is that all the groupsets, from the XenonTM to the RecordTM, will come with 10-speed drivetrains.

Among other things, the choice of ratios is further increased by the introduction of 11-25 sprocket sets, ideal for athletes at the highest levels or for interfacing with compact drivetrains.





Ergopower[™] Controls with the new Escape[™] mechanism

The new EscapeTM mechanism used in the XenonTM, MirageTM, VeloceTM and CentaurTM groupsets introduces an interesting evolution of the ErgopowerTM control and offers a series of very significant benefits.

The first advantage is a weight reduction of about 40 grams, obtained thanks to a simpler mechanism with fewer moving parts, where indexing is entrusted to an arm similar to that of the escape mechanism of a clockwork watch.

The second and no less important benefit is the substantial absence of any extraordinary maintenance as the indexing function is no longer entrusted to springs but, as we have said, to a different release-engage mechanism which is effectively free from any kind of wear.

This means that apart from periodical lubrication of the system for preventing

any rusting phenomena, the Ergopower[™] Escape[™] control offers years and years of impeccable "coupon-free" operation.

The Escape[™] mechanism is also distinguished by the downshift indexing of the front derailleur which moves with precision onto the smallest sprocket every time the control lever is operated; it does of course retain the possibility of making small adjustments that prevent contact with the chain during extreme crossovers.

Finally it should be noted that the operating force is slightly lower than that of the classic mechanism.

FLAT-BAR FOR URBAN RACERS

MY WEEK

MY WEEK-END

Ergopower™ Flat Bar Controls

Most cyclists travel the greatest distances with their hands on the horizontal part of the handlebar or with their hands on the controls, mainly to pedal in a more comfortable position. It goes without saying that if they have their hands on the handlebar and have to brake in an emergency, reaction times are longer and the force they are able to apply on the brake lever is lower. Furthermore they have to move their hands to change gear ratios.

Ergopower[™] Flat Bar controls for flat handlebars have been designed to integrate perfectly with Campagnolo[®] 10-speed drivetrains, to give life to bicycles where you brake and shift without moving your hands from the handle grip, but without losing the extraordinary features typical of traditional racing bikes: lightness, responsiveness, agility and speed.

A bicycle equipped with a Campagnolo[®] groupset and Ergopower[™] controls for flat bars is a highperformance advanced-technology tool which is extraordinarily effective in many situations. The most obvious use for this jewel is as a training bike for practitioners of road racing: the handlebar and controls of a classic racing bike are changed to obtain a safe and comfortable training bike, with two fingers on the brake levers and the possibility of shifting at any moment without moving your hands from the most comfortable and safest position.

It is also true that this type of bike is the ideal training tool for mountain-bikers and those who want to train on the road.

But a Campagnolo-equipped bike with Ergopower[™] Flat Bar controls is also a very desirable fitness device, the ideal means for carrying out aerobic exercise without suffering the heat of summer and without the typical articular microtraumas caused by running, for example.

The commuter category will also get great satisfaction from a light and snappy bike, with a comfortable and safe position.

Linear-pull cantilever brakes are available for those who have to travel on rough road surfaces, and therefore need an increased tyre diameter. These are interfaced with the special version of Ergopower[™] Flat Bar controls, characterized by a suitable "cable tensioner" for brakes of this type.

Ergopower[™] Flat Bar controls are a concentrate of technology, have truly surprising compactness and lightness features and offer shifting performance at the highest level.

They are available in three versions: ChorusTM, with carbon brake lever, VeloceTM, with aluminium brake lever, and MirageTM with composite brake lever.





XENDN







XENON™ GROUPSET

The Xenon[™] groupset is the most affordable 10-speed groupset on the market. Now everyone can really take advantage of the precision, shifting speed and vast range of gear ratio options offered by the Campagnolo[®] 10 speeds.







Xenon[™] Rear Derailleur

The dimensions of the XenonTM rear derailleur cage have been slightly modified in the 2007 range to interface with the 10v chain, which is narrower than the 9v one.

It is available in short and medium cage versions, depending on the drivetrain it will be used with. See the table before the specifications for compatibility.

Xenon[™] Crankset

The new Xenon[™] crankset employs chainrings machined in the same way as toprange drivetrains, and which therefore interface perfectly with Campagnolo[®] 10-speed drivetrains.

The cranks interface with the traditional and extremely reliable ISO bottom bracket.

Xenon™ QS™ Front Derailleur

The 2007 range Xenon[™] front derailleur has undergone a major outer link modification with lengthening to offer lighter shifting, thanks to the more favourable joint. It interfaces with the new Ergopower[™] control of the QS[™] type.



the introduction of Veloce™ bottom bracket, with optimized aperture tolerances and geometries to obtain ideal coupling with the cranks and a precise chain line.

Ergopower™ Xenon™ Controls

Ergopower[™] Xenon[™] controls are distinguished by the great lightness, both of the controls themselves and of the drive mechanisms, by the Escape[™] mechanism and by the Quick Shift[™] enhancement on the lefthand control. These controls are even smoother to operate and snappier when shifting. Weighing less than 260g they fear no comparison, even from more expensive products.







Mirage[™] 11-25 Sprocket Set

The 11-25 sprocket set springs from the demand from professionals for a broader set of ratios, suitable for steeper climbs but also for faster descents. But it also stems from the demand from amateurs who along with compact cranks wanted ratios which would make it possible to push in descent without giving up the agility in ascent offered by the 25-tooth sprocket, as well as 34 or 36 ones.





Veloce[™] Ultra Narrow[™] 10s Chain

Having become 10-speed, the Xenon[™] groupset adopts the Veloce[™] Ultra Narrow[™] 10s chain with a width of only 5.9 mm. This decision makes the Xenon[™] transmission lighter and quieter and increases the precision of the shifting operations.

Tests carried out in our laboratories on the Veloce™ Ultra Narrow[™] 10s chain show that the values of resistance to traction, wear, elongation, torsion and flexion are equivalent to Record[™] Ultra Narrow[™] 10s ones: the top of the Campagnolo[®] range.

Mirage[™] Dual Pivot Brakes

Xenon[™] groupset. Brakes with a very low weight, just 340 grams, and with generous performance thanks to the special geometries and use of pads with the Record[™] class compound, they guarantee braking power and progressiveness both in dry and wet road conditions.



MIRASE Campage

CAMPAGNOLO

Mirage[™] Hubs

The Xenon[™] groupset uses the new Mirage[™] hubs with an oversize design, lighter and with enhanced performance. These hubs have black anodized bodies with sealed high-precision bearings.

CAMPAGNOLO

MIRAGE[™]





MIRAGE

Mirage[™] Groupset

The Mirage[™] 10s groupset is available in three versions to allow you to interpret your racing bike in the most appropriate manner for you: double transmission, compact transmission and Flat Bar controls. Whatever your world on two wheels is, Mirage[™] is the solution.

Mirage[™] Front Derailleurs

The new MirageTM front derailleurs have a longer front link to offer even lighter shifting thanks to the more favourable joint. They interface with the ErgopowerTM Quick-ShiftTM controls and are perfectly compatible with the ErgopowerTM Flat Bar controls.



Mirage[™] Rear Derailleur

The 10-speed Mirage[™] rear derailleur has a composite body and a cage dimensioned for the narrower chain, the geometries are the same as those of the high-range rear derailleurs and the overall quality gives users years of satisfaction when training and racing.

DFI



Mirage[™] Ultra-Torque[™] Cranksets

The super-new Mirage[™] crankset adopts Ultra-Torque[™] technology, developed to provide performance at the absolute levels in terms of rigidity, life, simplicity of assembly and maintenance, without any sacrifices in terms of Q factor or lateral dimensions, while making use of outer cups and of the benefits that these entail.

The sprockets are 10-speed and offer substantially identical performance to top range ones, whose design essence they embody.



Ergopower[™] Mirage[™] Controls

ErgopowerTM MirageTM controls for 10speed drivetrains are much lighter than the 9v version, both because of the adoption of the EscapeTM mechanism, which weighs 40g less, and thanks to the new light-alloy levers with laser-impressed logo. A benchmark for performance and lightness.

Mirage[™] Ultra-Torque[™] Compact Crankset

The compact version of the very latest Mirage[™] Ultra-Torque[™] crankset is distinguished only by a reduced bolt circle diameter (BCD) which makes it possible to fit up to 34-teeth sprockets.

It is the ideal product for those who want to tackle demanding ascents without the need to upgrade to a triple.

MIRAGE

10v Mirage[™] sprocket sets

The 10v Mirage[™] drivetrain has its own dedicated 10-speed Mirage™ sprocket set, absolutely identical to the Veloce[™] set except for a difference in the surface finish. The same steels therefore, the same heat treatments and the same tooth shape design to offer the same quality and the same performance.



Veloce™ Chain A concentrate of strength, quietness and performance dedicated to vour transmission

FORFORNELS

CAMPAGNOLO

Mirage[™] Hubs

The new Mirage[™] hubs, with their stupendous black finish which exalts oversize body technicality, offer excellent performance and a very attractive weight, thanks to the optimum-level sealed industrial bearings and the precision of the machining.

MIRATE Campagener

Mirage[™] Dual Pivot Brakes

Mirage[™] Dual Pivot brakes read only 340 grams on the scales. Their special geometry combined with pads made of the class Record[™] compound quarantees braking power and great progressiveness. Tests carried out at our laboratories have revealed 50% greater braking performance

in dry conditions and 60% on wet roads compared with the products of reference on the market.

Ergopower[™] Flat Bar Mirage[™] 10s controls

Ergopower[™] Flat Bar Mirage[™] controls are dedicated to those who prefer comfort to pure performance. Designed for fitting on straight handlebars, they are ideal for those who want to pedal in a more

comfortable and relaxed position. This non-competitive philosophy is not employed at the expense of performance, however, always at the highest Campagnolo® standard. The indexing mechanism makes the shifting action extremely light both upwards and downwards and makes it possible to shift several ratios in a single movement.

The control integrates the shift lever and brake lever for a more compact design and lightness without equal. An

Those who opt for Ergopower[™]



Flat Bar controls will be able to choose between the classic Dual Pivot brakes and Linear Pull Cantilever ones.



The pad couples with the brake shoe by means of a patented system. The special design of the two components makes it possible to insert the pad from the front and then seat it by interference, as is already the case for calliper brakes.

In the latter case, there will

be more of a "biker feel" on

the brake lever, thanks to

85mm long arms which ensure

adjusting barrel located in the butt area of the brake lever striker makes it possible to adjust the distance between the lever and knob to adapt better to the user. Ergopower[™] Flat Bar Mirage[™] controls are available in versions for Dual Pivot and Linear Pull Cantilever brakes and are compatible exclusively with the new Mirage[™] QS front derailleurs.



VELOCE





VELDCE



Veloce[™] Groupset

There are lots of important new features in the 2007 configuration of the Veloce[™] group. They begin with the Ultra-Torque[™] crankset and continue with the new Skeleton[™] brakes and with a new sprocket set, and are completed with two chromatic versions. The Veloce[™] groupset will in fact be available with both the classic silver finish and in the new and aggressive shiny black finish named Veloce[™] Infinite[™].



Veloce™ Ultra Torque™TheVeloce™ cranksetCranksetalsoadoptsUltra-Torque™

STATUS ST

also adopts Ultra-Torque[™] technology in which each crank incorporates a bottom bracket semi-axle and the two cranks combine integrally to form a strong rigid assembly.

Thanks to the oversize axle and external cups, the system is very rigid, but unlike other systems that are broadened in the ankle area because of the external cups, the new Veloce[™] crankset does not make it necessary to change

the pedalling position. More rigid and lighter, it transfers the force exerted by the athlete without wastage and with the maximum ergonomics. Available with Silver or Infinite[™] finishes.

Veloce™ Rear Derailleur

The 2007 Veloce[™] Rear Derailleur is also available with the stupendous new Infinite[™] finish, coordinated with the other components in the series.

0

Veloce™ Ultra Torque™ CT™ Crankset

The Veloce[™] Ultra-Torque[™] crankset is also available in the compact version for those who prefer more agile ratios or want to tackle very demanding climbs without having to use the triple crankset.

The compact crankset is also available with the InfiniteTM finish.

Veloce[™] QS[™] Front Derailleur

The new VeloceTM QSTM front derailleur offers snappier faster shifting thanks to the interface with ErgopowerTM QSTM controls and the greater length of the outer parallelogram link.

It is compatible with Ergopower[™] Flat Bar controls and is available in two versions, standard and compact crankset (CT).





Ergopower[™] Veloce[™] Controls

2007 Ergopower[™] Veloce[™] controls have undergone considerable lightening as a result of the use of the Escape[™] mechanism. and a racier look thanks to the adoption of drilled-out or composite shift levers. Available with Silver levers and with Infinite™ levers.



VELOCE FB Company

Veloce[™] sprocket sets

The profile of the teeth is designed with Ultra-DriveTM geometry which facilitates the passage of the chain on the sprockets and makes shifting precise, fast and silent. Available from this year, the 11-25 combination is ideal if combined with CT^{TM} -type cranksets.



CAMPAGNOLO

Veloce[™] Ultra Narrow[™] 10s Chain

The VeloceTM Ultra NarrowTM 10s chain with a width of only 5.9 mm is lighter and quieter and facilitates adjustment of the rear derailleur thanks specifically to its dimensions.

The tests carried out in our laboratories show that the resistance to traction, wear, elongation, torsion and flexion are identical to the Campagnolo[®] benchmark: Record[™] Ultra Narrow[™] 10s chain.



Veloce™ Hubs

The new hubs for the Veloce[™] 2007, with oversize bodies and high-class sealed bearings, are differentiated from Centaur[™] hubs only by the quick release. More modern in design and therefore lighter. Only in a Silver finish.

Ergopower™ Flat Bar Veloce™ Controls For those who prefer a more

comfortable less racing-oriented position, Campagnolo® has designed the Ergopower[™] Flat Bar Veloce[™] controls for flat handlebars. These controls successfully combine performance and comfort. Shifting is extremely smooth and it is possible to change several gear ratios when

shifting both upwards and downwards.

Lightness and a compact design are guaranteed by the integration of the shift lever and brake lever in a single component. A special adjusting barrel in the butt area of the brake lever adjusts the distance from the handlebar to obtain the best possible ergonomics. The Ergopower™ Flat Bar Veloce™ controls are available in versions for Dual Pivot and Linear Pull brakes.





The Veloce[™] groupset comes with the very latest Skeleton[™] brakes, a completely new project that made it possible to reduce the weight and slightly increase performance, thanks to the greater rigidity of the new generation forgings in which the resistant material has been displaced outwards, leaving the inside hollow. The brakes are of the differentiated type, as is

Veloce[™] Brakes



300

already the case with RecordTM and ChorusTM ones, with the front brake more powerful and the rear one lighter. The look is highly aggressive even with the traditional purity typical of the form of Campagnolo[®] products. Available in a Silver version and with the new InfiniteTM finish.

Veloce[™] Linear Pull Cantilever Brakes

Campagnolo® has developed Linear Pull Cantilever brakes with 85mm arms for Ergopower™ Flat Bar control users who prefer "biker-style" braking. This braking system guarantees powerful and precise braking in both dry and wet conditions.

The special compound designed for this brake type does not absorb aluminium particles which are harmful for the rim's life.

The brakes are provided with orbital adjustment for perfect

positioning.

The pad couples with the brake shoe by means of a patented system. The special design of the two components makes it possible to insert the pad from the front first and then seat it by interference in the manner already known for Caliper brakes.







CAMPAGNOLO VIENTE



Centaur[™] Groupset

The Centaur[™] groupset opens the door to Campagnolo[®] high range groupsets with components designed for long-lasting high performance. There are lots of important new features in 2007: Ultra-Torque[™] crankset, Skeleton[™] brakes and the new 11-25 sprocket set for compact cranksets.

Centaur™ Front Derailleurs

With a new arm actuating the parallelogram, the CentaurTM 2007 QSTM front derailleurs allow riders snappier and lighter shifting. They need to be interfaced with the left-hand ErgopowerTM QSTM controls and are available in two versions: for standard cranksets and for compact cranksets.

Centaur™ Ultra-Torque™ Crankset

A CONTRACTOR OF

The high range of Ultra-Torque[™] aluminium cranksets is represented by the Centaur[™], which is differentiated by the Chorus[™] class chainrings with numerically controlled machining for impeccable shifting. The Ultra-Torque[™] system makes this crankset rigid and light, very responsive and with excellent smoothness. The forged cranks have a new design to maximize the benefits offered by the new integrated bottom bracket system. Assembly and disassembly are easy and fast, the fixing system is very secure and the tools needed are standard.

> A product with great performance for very demanding athletes.



Centaur™ Rear Derailleur

The new Centaur[™] rear derailleur is distinguished by the carbon outer parallelogram link which marks it out as a component for competitions, and forcefully underlines its positioning in the top of the range of products for racing bikes. Alongside this the materials of the highest quality and refined design and manufacturing make this product a benchmark component.

Chorus™ 10s Ultra Narrow™ Chain

The Centaur[™] groupset presents the Chorus[™] Ultra Narrow[™] 10s chain with a width of only 5.9 mm that is lighter, quieter and facilitates adjustment of the rear derailleur thanks specifically to its dimensions. The links are lightened and the total weight is only 269 grams. The tests carried out in our laboratories show that the values of resistance to wear, elongation, torsion and flexion are equivalent to Campagnolo®'s top of the range, the RecordTM Ultra NarrowTM 10s.

0660

Hiddenset™ Centaur™

0000

Centaur[™] Ultra-Torque[™] Compact Crankset

Also available in the compact version, the new Centaur^T Ultra-Torque^T crankset with integrated bottom bracket is an effective

option for cyclists who prefer routes with lots of height differences.

CSARSSON C



CENTALIR



Centaur™ sprocket set

10 speed, Ultra-Drive™geometries and Chrome-Nickel-PTFE surface treatments for long-lasting high performance. Now also available in the 11-25 combination for compact cranksets.

Centaur[™] Brakes

New generation Skeleton[™] brakes for the Centaur[™] 2007, realized with special forgings, optimize the resistant sections and eliminate material where it is not needed, to offer high performance with a lower weight. The brake arms are more rigid and lighter than their predecessors, and feature a truly aggressive design.

MENTAUR

As in the Campagnolo® tradition for top of the range products, the front brake is more powerful, while the rear one has been lightened and designed to reduce the possibility of wheel locking.



INOLO (EDITATIO

Ergopower Centaur™ Controls

The Ergopower[™] Centaur[™] 2007 controls have been completely renovated, thanks to the adoption of composite levers, the new Escape[™] mechanism, and the left-hand QS[™] control.

The most important feature technically is the weight loss of about 70 grams, but similarly important is the evolution of the design, thanks to composite levers which powerfully identify the product's pure competitive essence.

CAMPAGNOLO

Along with the QS[™] front derailleurs they offer even snappier and lighter shifting.

Centaur™ Hubs

New oversize hubs with sealed bearings, increased body diameter and no need for adjustment.

Centaur™ bottle cage Weighing only 35 grams with very high resistance thanks to Campagnolo Multidirectional[™] Carbon Fiber technology.



Made of light alloy, this has a special groove pitch for perfect saddle

CHORUS[™]







For all intents and purposes the Chorus[™] groupset is for competitions. The wide recourse to composite materials, the technical solutions adopted and the use of the most advanced construction technologies make it a star product.

Chorus[™] Ultra-Torque[™] CT[™] Crankset

The new Chorus™ Ultra-Torque[™] crankset is also available in the compact version, for those who want a lighter transmission or prefer more agile ratio sets, but do not want to pass to the triple crankset.

Chorus[™] Ultra-Torque[™] Crankset

The Chorus[™] crankset with integrated bottom bracket has been completely redesigned with the new Ultra-Torque™ technology.

carbon structure in which it was not therefore necessary to add another insert other than the one that houses the pedal

The crank structure is always in unidirectional carbon combined with multidirectional carbon, to form a structure with great strength and rigidity.

There is a low-density but uncompressible core inside it to resist the enormous pressures used in the special production process developed by Campagnolo[®] technicians. The bottom bracket semiaxles are fixed directly to the

thread. The use of a large integrated

axle and external cups has further improved the already considerably rigidity features. However this did not make it necessary to broaden the system laterally, especially in the bottom bracket zone, and allowed a weight reduction at the same time.

As a result, riders can benefit from superior performance while maintaining the pedal



cleat position unchanged on

their soles and without suffering

annoying interferences with

the crank.

Chorus™ **Rear Derailleur**

Carbon fibre immediately indicates a component's competitive spirit. So just imagine if the component in question is the very soul of the racing bike: the rear derailleur.

The carbon front link says it clearly: the Chorus[™] groupset is designed for racing. Available with a short or medium cage, to interface perfectly with double and compact cranksets.

EPS C10 50



Chorus™ Front Derailleurs

The Chorus[™] QS[™] front derailleurs in the 2007 range, in both the standard and compact crankset versions, have a longer front link to provide snappier and lighter shifting in combination with Ergopower[™] QS[™] controls. The cage is in aluminium with a surface treatment which exalts lightness and stiffness, with even more responsive shifting.





Chorus™ Chain Only 269 grams for fast, precise and quiet shifting.



Campagnolo[®] clamp for front derailleurs

Thanks to its asymmetrical design it guarantees uniform closing around the hole tube circumference. Available in diameters 32 and 35 mm, and with black and silver finishes.

Chorus[™] Sprocket Set

Thanks to Ultra-Drive[™] geometry which defines the forms and machining of the sprocket teeth and nickel-chrome finish, the Chorus[™] sprocket set ensures fast precise shifting that remains constant over time.

Also available from this year, the 11-25 combination is ideal if combined with CT-type cranksets.





Chorus[™] Ergopower[™] Controls

Body and levers in composite characterize the Ergopower[™] Chorus[™] 2007 controls, with lightness and strength for the most demanding athletes. The left-hand control is of the QS[™] type to interface with the new QS[™] front derailleurs and snappier and lighter shifting. These are very light controls which maintain the possibility of shifting to

smaller sprockets, even jumping lots of positions in one step, and permit microadjustments of the front derailleur. The great ergonomics and an aggressive

The great ergonomics and an aggressive design for a product which provides the maximum performance levels an integrated control can offer.

Ergopower™ Flat Bar Chorus™ Controls

Users of the Chorus™ groupset, a synonym for competitiveness right from its beginnings, can choose a more comfortable position thanks to Ergopower™ Flat Bar Chorus™ controls. These controls successfully combine performance and comfort without giving up the "racing" appearance which distinguishes the Chorus™ groupset. The materials used are at the highest level, and the most obvious sign is the presence of brake levers in 90°-braided carbon fibre. Shifting is extremely smooth and it is possible to change several ratios when shifting both upwards and downwards. Lightness and a compact design are guaranteed by integrating the shift lever and brake lever in a single component.

CAMPAGNOLD

Record[™] Hubs for Chorus[™]

The Chorus[™] groupset in the 2007 range uses the new Record[™] hubs.

CHORUS FR

CHORUS[™]

Chorus[™] Brakes

The differentiated brakes of the Skeleton™ type which equip the Chorus™ groupset in the 2007 range are the most advanced expression of design in the service of performance. The starting point was the previous brakes, which thanks to the differentiation between front and rear, offered the maximum braking power along with the minimum risk of locking the rear wheel, to guarantee the shortest braking distances.

To further improve performance, it was decided to study different forms for the forged arms to permit lightening of the structure without sacrificing rigidity and, indeed, enhancing it. This gave rise to arms in

which the resistant sections were modified in such a way as to create an oversize effect, by moving them towards the outside of the structure and eliminating the superfluous material.

As a result, the new differentiated Skeleton™ brakes provide performance that is possibly even better with the reduced weight, but thanks to the fact that the arms are forged, and not CNC-machined, their life and safety are quaranteed.



The Chorus[™] bottle-holder weighs under 30 g and is distinguished by a truly unique system of bottle retention. The system is patented: a deliberate difference of a few degrees between the support axis and the collar means that when the bottle is inserted the carbon collar acts as a thrust spring that holds the bottle in the ideal position.



Chorus[™] Headset

The Chorus[™] headset has always been known for its smoothness, longevity and reliability. It is available in two versions: Threadless[™] and Hiddenset[™].

The Threadless[™] headset has been designed for unthreaded fork steerers. It is extremely light and allows quicker and more precise adjustment than its threaded counterpart, besides being lighter and longer lasting.

Campagnolo® waterbottle

Ergonomical, closed by a screw cap, and

made of the highest quality material.

Available in 500 and 750 ml versions.

The Hiddenset[™] headset is integrated into the head tube of the frame, conferring an extremely elegant look to the bicycle. It is light, smooth, durable and simple to fit and maintain. It is hidden out of sight but its presence can be felt positively.

Chorus[™] Seat Post

The Chorus[™] seat post is made of 90°-braided carbon fibre. The light alloy head has a special grooving which allows perfect angular adjustment of the seat so as to meet any stylistic need.

Seat Post

Available with 27.2 diameter for the 250 mm version and with diameters 31.6 and 32.4 for the 350 mm version.







TIK



RECORD[™]







Record[™] Ultra-Torque[™] Cranksets

The new Record[™] crankset with integrated bottom bracket is the most technologically advanced version of the Ultra-Torque[™] system. The oversize axle system with outer cups is combined with a carbon fibre structure which is completely hollow internally Not only is the main crank arm hollow, but also the small arms supporting the chainrings of the RH crank.

We have called this new technology Ultra-Hollow[™] Structure and it is created using a unique method, developed by Campagnolo[®], which combines extremely high-pressure moulding, capable of compacting the fibres of the structure like no other process, with hollowing of the structure, removing material from areas which have no structural function. The result is that oversize cranks are obtained, characterized by lightness, strength, rigidity and long life without precedents. Unlike cranks of the previous generation, which had a metal insert for interfacing with the bottom bracket axle, Ultra Torque™ carbon cranks have an oversize steel axle fixed directly to the carbon structure of the crank, giving a considerable weight saving. Despite the use of outer cups, the Q factor and the lateral dimensions in the bottom bracket area remain substantially unchanged and do not require the athlete to adopt biomechanically incorrect pedalling positions. The Record[™] Carbon crankset is available both in a compact version (CT) and a standard one which also includes lengths 177.5 mm and 180 mm.





Record™ Front Derailleur

The Record[™] 2007 QS[™] front derailleur, already previously characterized by the external reinforced carbon fork and by the internal chemicallytreated aluminium one, adopts the elongated arm which, interfaced with Ergopower[™] QS[™] controls, permits even more immediate and lighter shifting.

Available in both the version to interface with standard cranksets and the version for compact cranksets. Maximum performance for the most demanding professionals.

Medium cage in Multidirectional Carbon Fiber for the 13-29 sprocket set

Record[™] sprocket set

The teeth of the Record[™] sprocket set have an Ultra Drive[™] design that integrates the chain and chainwheels of the crankset to ensure fast, precise and consistent shifting through the years. The 11-25 combination is also available from this year and is ideal if used with compact cranksets.



Record[™] Ultra Narrow[™] Chain

The Record[™] groupset presents the Record[™] 10s Ultra Narrow[™] chain that is just 5.9-mm wide. Owing to its dimensions, it is lighter and quieter and facilitates adjustment of the

rear derailleur. Chain links and pins have been lightened so that the chain weighs only 255 g in all.



Record™ Rear Derailleur

The Record[™] rear derailleur is the symbol of the Record[™] groupset and communicates an unarrestable competitive charge thanks to the dominant presence of carbon fibre. Every particular has been designed down to the smallest detail to obtain the maximum effectiveness. The Record[™] rear derailleur ensures rapidity and precision in every situation.

Available with a short or medium cage, to interface perfectly with classic and compact cranksets.

Record[™] Headset

There are three types of headset in the Record $^{\text{TM}}$ groupset: Threadless $^{\text{TM}}$, Hiddenset $^{\text{TM}}$ and the traditional threaded headset.

The Threadless[™] headset has been designed for unthreaded

fork steerers. It is extremely light and allows fast sensitive adjustment. It is distinguished by its weight and working life. The HiddensetTM headset is integrated into the head tube of the frame, conferring an extremely elegant look to the bicycle. Light, smooth, long lasting and easy to install, the Record headset is available in the standard version or with a TTC^{TM} cap.







Record[™] Seat Post

The tube of the Record[™] seat post is made of 90°-braided carbon fibre. The top clamp is in composite material to reduce weight.

The head is in light alloy and has a special groove that enables the seat to be angled perfectly.

Record[™] Pro-Fit Plus[™] pedals

Record[™] Pro-Fit Plus[™] pedals successfully combine lightness, performance and comfort. Despite the relatively compact dimensions and reduced weight, the ergonomics are

perfect so that even the

longest rides are incredibly

comfortable. Pedal engagement and disengagement forces are independent. Disengagement force can thus be adapted to one's style of pedaling. The axle of the Record™ Pro-Fit Plus™ pedal turns on three bearings: two on the inside and one on the outside.



Record™ Hubs

The new Record[™] hubs have been substantially redesigned to exalt the qualities which made the previous ones famous and appreciated all over the world.

The oversize body design has been accentuated, some parts have been lightened and the freewheel body is made entirely of light alloy. The highly appreciated adjustable 15-ball bearings have remained unchanged and the ceramic ball kit is available as an option.

The quick releases have been redesigned completely; they are now lighter and their operation is based on a symmetrical fulcrum lever. An evolutionary refinement to offer more demanding users the ne plus ultra for performance and reliability.

Controls The 2007 range of Ergopower™ Record™ controls, body and

Ergopower[™] OS[™]

Record[™] controls, body and levers, are still in composite but their left-hand control mechanism has been slightly modified to increase the performance reference when interfaced with QS[™] front derailleurs.

The modification is to the indexing mechanism in which the idle stroke has been shortened so that the lever begins to act on the derailleur after a few degrees of actuation and shifting is snappier. And then, thanks to the modification of the derailleur, it is even lighter.

Seat Post

Available with 27.2 diameter for the 250 mm version and with diameters 31.6 and 32.4 for the 350 mm version.







The new differentiated Record[™] Skeleton[™] brakes arrive with a highly evolved design which, without rejecting the classic elegance of Campagnolo[®] products, forcefully highlights the product's racing vocation. It is worth noting that this design springs from an advanced structural analysis in which form follows function; the material has been moved to where its structural efficiency is maximum and eliminated where it is minimum, to get a considerable nominal 35 g weight reduction while leaving performance unaffected.

anonan

Ŕ

The system is differentiated so the front brake is more powerful while the rear one is lightened and easier to modulate, to reduce the danger of rear wheel locking. The materials used for the various components of the mechanisms have been refined, in order to guarantee high performance while reducing the total weight of the system.

Waterbottle

Ergonomic, closed by a screw cap, and made of the highest quality material. Available in 500 and 750 ml versions.



Record[™] bottle-holder

RECORD

18 g - this is what the Record[™] bottle-holder weighs. A monocoque in carbon fiber that clearly demonstrates the level of excellence achieved by Campagnolo[®] in the field of composites. The retention system is patented: a deliberate difference of a few degrees between the support axis and the collar means that when the bottle is inserted the carbon collar acts as a thrust spring that holds the bottle in the ideal position.



Record[™] Pista[™]

The Record[™] Pista[™] groupset is a set of high-range components designed to excel in the velodrome. It includes the crankset, hubs and bottom bracket. Three products designed exclusively for the specific needs of use on the track. The other components, such as seat posts, pedals and headsets have been borrowed directly from the Record road groupset.

ELECTION OF THE PARTY OF THE PA

manne

Time Trial™

Racing against the clock. Every detail is critical. Nothing is left to chance. Lightness and aerodynamics arethekeywords.Campagnolo[®] dedicates various special components to time trials: barend controls, chainrings with oversized toothing and superlight brake levers in composite material.

500



TRIPLE DRIVETRAINS

Triple Drivetrains

There are three triple drivetrain kits available for enthusiasts of the steepest climbs, two 10speeds and a 9-speed one, to have the most agile possible ratio set at your fingertips. The kits consist of a crankset, front derailleur and a rear derailleur with a long cage, and require the use of 111 mm and 115.5 mm ISO bottom brackets. The 10-speed kits can be interfaced with all the 10v groupsets and it goes without saying that the 9-speed kits are compatible with all the 9v groupsets.

CHAMP TRIPLE™

The Champ Triple[™] Kit was conceived for those who still use 9-speed drivetrain and wish to avail of a greatly expanded ratio set, in order to be able to tackle the toughest courses. The crankset is traditional with an ISO spindle while the rear derailleur has a long cage. It is compatible with all the Campagnolo[®] triple chainrings.



O CONSTRUCTION OF CONSTRUCTION



Triple Drivetrains

()

O

RACE TRIPLE™

The Race Triple[™] kit for 10speed drivetrains is a midrange kit for equipping all the bicycles with 10-speed drivetrains. Dedicated to enthusiasts of century rides with steep slopes and for climbers in general.

COMP TRIPLE[™]

Campagnolo[®] has created the Comp Triple[™] 10-speed kit for the needs of those who own high-range groupsets. A coldforged aluminium crankset, long cage rear derailleur and specific front derailleur for triple kits. It requires a bottom bracket with ISO spindle and 111 or 115.5 mm axle.





WARNING!

The theories covering rear derailleurs lose value when applied to real-life situations. This is due to a certain number of variables that are beyond our control. The first variable is that the chain can only be lengthened or shortened by two links at a time (106/108/110 etc.), making it impossible for the optimal length to be achieved for each frame. As a result, each time a choice is made, this shall have to be a compromise based on the technical specifications of the chainwheels, front derailleurs and frame dimensions. Further, while emphasising that the relationships between the geometries and dimensions specified by ourselves in accompanying instructions must be observed, the size and geometry of each cage influence the functionality of the various rear derailleur combinations greatly. For this reason the combinations listed in the table below are to be considered merely indicative and must be verified each and every time, depending on the frame on which the components shall actually be mounted.

RECOMMENDED COMBINATIONS

- Double or CT[™] crankset + short cage rear derailleur: all Campagnolo[®] sprocket sets except the 13-29
- Double or CT[™] crankset + medium cage rear derailleur: all Campagnolo[®] sprocket sets*
- Triple crankset + medium cage rear derailleur: all Campagnolo® sprocket sets except the 13-29 set
- Triple crankset + long cage rear derailleur: all Campagnolo® sprocket sets*

* if compact sprocket sets are used (e.g. 11-23) it may be necessary to keep the chain length shorter than the values indicated in standard assembly instructions.

XENON 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
	short cage	upper to lower pulley-axle: 55 mm	253
XENDN™ 10s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	258
XENDN TM Q5 TM CT TM 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT™ crankset - capacity 16 – chainring max 50 - chainring min 34	108
XENON ™OS ™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible – composite body and levers - ESCAPE [™] mechanism - not compatible with ErgoBrain [™]	363
MIRAGE™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	140
MIRAGE™ rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	303
MIRAGE™ UD™ 10s sprockets steel	11-25, 12-23, 12-25, 13-26, 13-29	Ultra Drive [™] - single sprockets - galvanized - supplied without lockring (except for 11-25)	259
<i>VELDCE™</i> Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra Drive™ - requires HD-Link™ for Ultra Narrow™ chain	2,39/ link **
XENON MET M crankset	170, 172.5, 175 mm	Exa·Drive™ chainrings – 34-50 - requires b.b. with L. 111 mm - requires CT™ front derailleur	768
VELOCE M bottom bracket	ITA, ENG	111 mm - cartridge b.b solid axle - light alloy cups	299
MIRAGE M brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adj. ratio: 40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut)	340
RECORD™ cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,39 x 108 links = 258 g

MIRAGE[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
<i>MIRAGE</i> ™ 10s	short cage	upper to lower pulley-axle: 55 mm	269
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	274
MIRAGE MD5 M 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard crankset - capacity 15 – max. chainring 54 - min. chainring 39	99
MIRAGE MDS M ET M front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT™ crankset - capacity 16 - max. chainring 50 - min. chainring 34	105
MIRAGE ™DS ™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compati- ble – composite body - aluminium levers - ESCAPE™ mechanism - not compatible with ErgoBrain™	352
<i>MIRAGE</i> ™10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible – alu-composite body - composite brake lever - requi- res QS™ front derailleur	340
MIRAGE ™10s Ergopower™ FB shifters		for linear pull cantilever brakes - double/triple crankset compatible – alu-composite body - composite brake lever - requires QS™ front derailleur	340
MIRAGE™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	140
MIRAGE™ rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	303
MIRAGE™ UD™ 10s sprockets steel	11-25, 12-23, 12-25, 13-26, 13-29	Ultra·Drive [™] - single sprockets - galvanized - supplied without lockring (except for 11-25)	259
<i>VELDCE™</i> Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra·Drive [™] - requires HD-Link [™] for Ultra Narrow [™] chain	2,39/ link **
MIRAGE M ULTRA-TORQUE 10s crankset	170, 172.5, 175 mm	39-53 - Black finish - Exa-Drive™ – steel inner chain- ring - integrated ULTRA-TORQUE™ semi-axles - requi- res ULTRA-TORQUE™ overboard cups	876
MIRAGE M ULTRA-TORQUE M CT M 10s crankset	170, 172.5, 175 mm	34-50 - Black finish - Exa-Drive™ – steel inner chain- ring - integrated ULTRA-TORQUE™ semi-axles - requi- res ULTRA-TORQUE™ BB overboard cups	861
RECORD™ ULTRA-TORQUE™ BB overboard cups	ITA, ENG	aluminium	49

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
MIRAGE M brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adj. ratio: 40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut)	340
MIRAGE™ linear pull cantilever brakes		for distances between brake bosses from 70 to 83 mm and for rim widths from 19.5 to 26.5 mm	432
RECORD TM cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,39 x 108 links = 258 g

VELOCE[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
<i>VELDCE</i> ™ 10s	short cage	upper to lower pulley-axle: 55 mm	250
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	259
VELOCE MD5 M 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard crankset - capacity 15 – max. chainring 54 - min. chainring 39	93
VELOCE MOS M CT M front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT [™] crankset - capacity 16 - max. chainring 50 - min. chainring 34	100
VELOCE ™OS ™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible - composite body – ESCAPE™ mechanism - not compa- tible with ErgoBrain™	351
VELOCE ™ 10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible - alu-composite body – aluminium brake lever - requires QS™ front derailleur	340
VELOCE ™ 10s Ergopower™ FB shifters		for linear pull cantilever brakes - double/triple crankset compatible - alu-composite body – aluminium brake lever - requires QS™ front derailleur	340
VELOCE ™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	169
VELOCE ™ rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	312
VELOCE ™ UD™ 10s sprockets - steel	11-25, 12-23, 12-25,13-26, 13-29, 14-23	Ultra·Drive [™] - single sprockets - nickel-chromed finish - supplied without lockring (except for 11-25)	250
<i>VELDCE™</i> Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra-Drive [™] - requires HD-Link [™] for Ultra Narrow [™] chain	2,39/ link **
VELOCE ^M L/LTRA-TORQUE ^M 10s crankset	170, 172.5, 175 mm	39-53 - Exa·Drive™ chainrings - integrated ULTRA- TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups	836
VELOCE™ ULTRA-TORQUE™ CT™10s crankset	170, 172.5, 175 mm	34-50 - Exa·Drive™ chainrings - integrated ULTRA- TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups - requires CT™ front derailleur	821
RECORD™ ULTRA-TORQUE™ BB overboard cups	ITA, ENG	aluminium	49

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
VELOCE *** SKELETON *** brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (mea- sured from brake fixing-bolt to brake-shoe-nut) - inte- grated shoe-holder - lightened rear brake	349
VELOCE ^{7M} linear pull cantilever brakes		for distances between brake bosses from 70 to 83 mm and for rim widths from 19.5 to 26.5 mm	378
RECORD TM cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,39 x 108 links = 258 g

CENTAUR[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
CENTALIR™ 10s	short cage	upper to lower pulley-axle: 55 mm composite outer plate	227
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate	232
<i>CENTAL/R™</i> <i>Q5™</i> 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard crankset - capacity 15 – max. chainring 54 - min. chainring 39- antifriction insert	86
CENTAL/R TM Q5 TM CT TM front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT [™] crankset - capacity 16 - max. chainring 50 - min. chainring 34 - antifriction insert	95
CENTAL/R™ Q5™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible – composite body - ESCAPE ^{M} mechanism - not compatible with ErgoBrain ^{M}	334
CENTAL/R M front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	169
CENTALIR TM rear hub	32, 36 holes	9s/10s - one-piece light alloy freewheel body – high quality bearings - lockring thread 27x1 - O.L.D. 130 mm	312
CENTAL/R™ UD [™] 10s sprockets - steel	11-23, 11-25, 12-25, 13-26, 13-29	Ultra·Drive [™] - nickel-chromed finish - light alloy carrier - "macro" spacers - supplied without lockring (except for 11-23 and 11-25)	233
<i>CHORU5™</i> Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra·Drive™ - HD-Link™ for Ultra Narrow™ chain - lightened links	2,36/ link **
<i>CENTALIR™ ULTRA-TORQUE™</i> 10s crankset	170, 172.5, 175 mm	39-53 - Ultra Drive™ chainrings - integrated ULTRA- TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups	828
CENTAUR MUL- TRA-TORQUE M CT M crankset	170, 172.5, 175 mm	34-50 - Ultra Drive™ chainrings - integrated ULTRA- TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups - requires CT™ front derailleur	828
RECORD ™ ULTRA-TORQUE™ BB overboard cups	ITA, ENG	aluminium	49
CENTALR **D SKELETON *** brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (mea- sured from brake fixing-bolt to brake-shoe-nut) - brake pads orbital adjustment - lightened rear brake	334
CENTALR™ seat post		Ø 27.2 mm - L. 250 mm - light alloy tube	221

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
CENTALIR [™] HIDDENSET [™] headset		1-1/8" - internal headset for unthreaded fork tube - height 5.9 mm - patent pending system - composite cap - without bolt washer and nut set	56
CENTALR TM water bottle carrier		carbon and composite, supplied with water-bottle	35
RECORD ¹⁴⁴ cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,36 x 108 links = 255 g

CHORUS" 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
<i>CHORU5™</i> 10s	short cage	upper to lower pulley-axle: 55 mm composite outer plate	202
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate	205
CHORUS MOS M 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard crankset - capacity 15 – max. chainring 54 - min. chainring 39 - light alloy fork with antifriction treatment	74
CHORUS MOS M CT M front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT [™] crankset - capacity 16 - max. chainring 50 - min. chainring 34 - light alloy fork with antifriction treatment	78
CHORL/S™ QS™ 10s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible – composite body – composite levers - light alloy hard- ware - ErgoBrain10 [™] computer ready	348
<i>CHORL/S™</i> 10s Ergopower™ FB shifters		for caliper brakes - double/triple crankset compatible – alu-composite body – aluminium brake lever - light alloy small parts - requires QS™ front derailleur	320
RECORD ™ front hub	32, 36 holes	light alloy axle and body – adjustable bearings – quick- release with aluminium lock nuts - O.L.D. 100 mm	116
RECORD™ rear hub	32, 36 holes	9s/10s - light alloy body, axle and one-piece freewheel body – adjustable bearings – quick-release with alumi- nium lock nuts - lockring thread 27x1 - O.L.D. 130 mm	231
CHORL/5 ™ UD™ 10s sprockets - steel	11-23, 11-25, 12-25, 13-26, 13-29	Ultra·Drive [™] - nickel-chromed finish - light alloy carrier - supplied without lockring (except for 11-23 and 11- 25)	220
<i>CHORUS™</i> Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra·Drive™ - HD-Link™ for Ultra Narrow™ chain - lightened links	2,36/ link **
CHORUS™ ULTRA-TORQUE™ CARBON 10s crankset	170, 172.5, 175 mm 39-52, 39-53	composite crankarms - Ultra·Drive™ EPS™ chainrings - integrated ULTRA-TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups	679
CHORU5™ ULTRA-TORQUE™ CT™ CARBON 10s crankset	170, 172.5, 175 mm 34-48, 34-50, 36-50	composite crankarms - Ultra·Drive™ EPS™ chainrings - integrated ULTRA-TORQUE™ semi-axles - requires ULTRA-TORQUE™ BB overboard cups - requires CT™ front derailleur	679
RECORD [™] ULTRA-TORQUE [™] BB overboard cups	ITA, ENG	aluminium	49
CHORL/5™ Pro∙Fit PLUS™ pedals		steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain" magnet	325

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
CHORU5™-D SKELETON™ brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio:40÷50 mm (mea- sured from brake fixing-bolt to brake-shoe-nut) - brake pads orbital adjustment-lightened rear brake	326
CHDRUS TM CARBON seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm	195
CHORUS™ THREADLESS [™] headset		1" - for unthreaded fork tube - height 24.5 mm - pa- tent pending system steel and light alloy fixing screw	117
<i>CHORU5™</i> HIDDENSET [™] headset	1-1/8″, 1-1/8″ TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC™: height 15,9 mm - patent pending system - steel and light alloy fixing screw light alloy cap - 1-1/8" TTC™ without bolt washer and nut set	82
<i>CHORUS</i> M water-bottle carrier		carbon and composite, supplied with water-bottle	29
RECORD TM cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,36 x 108 links = 255 g

RECORD[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
RECORD ™ 10s	short cage	upper to lower pulley-axle: 55 mm composite outer plate - composite outer cage - Tita- nium hanger and pivot bolt	184
rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate - composite outer cage - Tita- nium hanger and pivot bolt	193
RECORD MD5 TM 9s/10s front derailleur	braze-on / clip-on: Ø 32, 35 mm	for double standard crankset - capacity 15 - max. chainring 54 - min. chainring 39 - composite and alu- minum fork - Titanium bolts	69
RECORD MD5 M CT M front derailleur	braze-on / clip-on: Ø 32, 35 mm	for CT [™] crankset - capacity 16 - max. chainring 50 - min. chainring 34 - composite + alumiinium fork - Titanium bolts	75
RECORD MOS M 10s Ergopower M shifters		for caliper brakes - double/triple crankset compatible - composite body and levers – ball bearings light alloy hardware - ErgoBrain10 [™] computer ready	324
RECORD™ front hub	32, 36 holes	light alloy axle and body – adjustable bearings – quick- release with aluminium lock nuts - O.L.D. 100 mm	116
RECORD™ rear hub	32, 36 holes	9s/10s - light alloy body, axle and one-piece freewheel body – adjustable bearings – quick-release with aluminium lock nuts - lockring thread 27x1 - O.L.D. 130 mm	231
RECORD™ UD™ 10s sprockets - steel+titanium	11-21, 11-23, 11-25, 12-23, 12-25, 13-26, 13-29	Ultra·Drive [™] - nickel-chromed finish for steel sprockets - light alloy carrier - supplied without lockring (except for 11-21, 11-23 and 11-25)	188
RECORD ™ UD™ 10s sprockets - titanium	11-23, 12-25, 13-26	Ultra·Drive [™] - light alloy carrier - supplied without lockring (except for 11-23)	156
RECORD™ Ultra Narrow™ chain		10s - width 5,9 mm - Ni-PTFE Finish - 114 links - Ultra·Drive™ - HD-Link™ for Ultra Narrow™ chain - lightened links - hollow pins	2,24/ link **
RECORD™ L/LTRA-TORQL/E™ CARBON 10s crankset	170, 172.5,175, 177.5,180 mm 39-52, 39-53	Ultra-Hollow [™] composite crankarms - light alloy fixing bolts and nuts - Ultra·Drive [™] EPS [™] chainrings with antifriction treatment - integrated ULTRA-TORQUE [™] semi-axles - requires ULTRA-TORQUE [™] BB overboard cups	643
RECORD™ ULTRA-TORQUE™ CT™ CARBON 10s crankset	170, 172.5, 175 mm 34-48, 34-50, 36-50	Ultra-Hollow [™] composite crankarms - light alloy fixing bolts and nuts - Ultra·Drive [™] EPS [™] chainrings with antifriction treatment - integrated ULTRA-TORQUE [™] semi-axles - requires ULTRA-TORQUE [™] BB overboard cups - requires CT [™] front derailleur	643
RECORD ™ ULTRA-TORQUE™ BB overboard cups	ITA, ENG	aluminium	49

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
RECORD ™ Pro·Fit PLUS™ pedals		Titanium axle -light alloy body - with floating (stan- dard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain [™] magnet	266
RECORD ¹⁴ D SKELETON ¹⁴ brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (mea- sured from brake fixing-bolt to brake-shoe-nut) - ball bearings - light alloy and titanium hardware - brake pads orbital adjustment - lightened rear brake	279
RECORD ™ Carbon seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	185
RECORD M headset		BC 1"x24tpi - height 36.5 mm	104
RECORD™ THREADLESS™ headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	110
RECORD ™ HIDDENSET™ headset	1-1/8″, 1-1/8″ TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC™: height 15.9 mm - patent pending system - composite and light alloy fixing screw and cap	73
RECORD TM water-bottle carrier		monocoque carbon, supplied with water-bottle	18
RECORD ™ cable guide plate		to fit under bottom bracket shell - composite, suitable to oversize shells	5

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.
** Example: 2,24 x 108 links = 242 g

RECORD[™] PISTA[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
RECORD™ PISTA™ front hub	32, 36 holes	light alloy body – lubrication port - small flanges - O.L.D. 100 mm	204
RECORD™ PISTA™ rear hub	32, 36 holes	light alloy body – lubrication port - small flanges - O.L.D. 120 mm	284
RECORD™ PISTA™ crankset	165, 170 mm 47, 48, 49, 50, 51, 52	requires b.b. L. 111 mm (asymmetrical)	592
RECORD ™ PISTA ™ bottom bracket	ITA, ENG	axle L. 111 mm (asymmetrical) - composite and light alloy cartridge - light alloy cups - without sealings	220
<i>RECORD</i> ™ Pro∙Fit PLUS™ pedals		Titanium axle -light alloy body - with floating (stan- dard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain [™] magnet	266
RECORD TM CARBON seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	185
RECORD TM headset		BC 1″x24tpi - height 36.5 mm	104
RECORD™ THREADLESS™ headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	110
RECORD™ HIDDENSET™ headset	1-1/8″ 1-1/8″ TTC™	internal headset for unthreaded fork tube - version 1- 1/8": height 5.9 mm, version 1-1/8" TTC": height 15.9 mm - patent pending system - composite cover and light alloy fixing screw - composite/light alloy cap	73

TIME TRIAL[™] 2007

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
bar-end 10s shift. levers		composite body and lever	163
RECORD ™ brake levers		composite body and lever	210
inner chainrings	42,44	Exa∙Drive™ system	51
RECORD ™ 10s inner chainrings	54, 55	Exa∙Drive™ system	88
<i>CHORUS</i> TM 10s inner chainrings	54, 55	Exa∙Drive™ system	88

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.

CHAMP TRIPLE[™] - RACE TRIPLE[™] COMP TRIPLE[™]

COMPONENT	OPTIONS	DESCRIPTION	WEIGHT (g)*
<i>CHAMP</i> <i>TRIPLE</i> [™] 9s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	263
CHAMP TRIPLE TM front derailleur	braze-on / clip-on: Ø 32, 35 mm	for triple crankset - capacity 22 – chainring max 52 - chainring min 30	118
XENDN™ 9s Ergopower™ shifters		for caliper brakes - double/triple crankset compatible - composite lever and body - ESCAPE™ mechanism - not compatible with ErgoBrain™	357
CHAMP TRIPLE™ 9s Triple crankset	170, 175 mm	30-42-52 - Exa Drive™ chainrings requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	970
VELOCE™ bottom bracket	ITA, ENG 111, 115.5 mm	cartridge b.b solid axle - light alloy cups	299
RACE TRIPLE™ 10s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	275
RACE TRIPLE TM front derailleur	braze-on / clip-on: Ø 32, 35 mm	for triple crankset - capacity 22 – chainring max 52 - chainring min 30	118
RACE TRIPLE™ 10s Triple crankset	170, 175 mm	30-42-52 - Exa-Drive™ chainrings requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	882
VELOCE TM bottom bracket	ITA, ENG 111, 115.5 mm	cartridge b.b solid axle - light alloy cups	299
<i>COMP</i> TRIPLE™ 10s rear derailleur		long cage - upper to lower pulley-axle: 89 mm	275
COMP TRIPLE TM front derailleur	braze-on / clip-on: Ø 32, 35 mm	for triple crankset - capacity 22 – chainring max 52 - chainring min 30	118
<i>COMP</i> <i>TRIPLE™</i> 10s Triple crankset	170, 175 mm 30-40-50, 30-42-53	Ultra·Drive™ chainrings - requires b.b. with L. 111 (for seat tube Ø 28,6 mm) or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	788
CENTALIR [™] bottom bracket	ITA, ENG 111, 115.5 mm	cartridge b.b hollow axle- light alloy cups	233

* The nominal weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release. The nominal weight does not take account of the sometimes considerable quantities of grease used in the assembly of the products.



Campagnolo's low-profile wheels have been designed for climbs and long-distance rides. The special profile of the rims makes them laterally and torsionally stiff but also vertically elastic. That means they optimise the transmission of rider power while being able to absorb the jolts and bumps of badly surfaced roads. The whole range of low-profile wheels have an asymmetrical rear rim that helps improve wheel dish, hence making the wheel much sturdier.

The 2007 range sees the introduction of the super-performing NeutronTM UltraTM.





Symmetrical front wheel profile Asymmetrical rear wheel profile







Neutron™

Neutron[™] is the classic expression of the wheel for time trials over hills or century rides, while remaining suitable for any competition except fast time trials.

They are rigid laterally but vertically elastic, thanks to the asymmetry of the rear rim spoke drilling and the special rim section design. They are strong and longlasting, thanks to the quality of the design and materials which have allowed optimization of all the parameters.

The lateral machining of the rim provides a top level braking surface, while the butted spokes and aerodynamic profile means they are always swift.

The Record[™] class hubs rotate on very precise adjustable 15-ball bearings and have a new generation body. Release system with bilateral-acting light-alloy lever.









Neutron[™] Ultra[™]

After eight seasons of victories and infinite kilometres travelled, Neutron[™] wheels have been upgraded with calibrated extrusions for the rims, while the new-generation hubs have a carbon body and aluminium flanges.

The wheels therefore maintain all the features which have made them famous: lightness, reactivity, lateral rigidity when on the pedals, and exalt them, thank to the new lighter hubs. The rims are welded and their braking surface machined. Then the areas between the spokes, where the stresses are lower and the structure can be lightened, are ground. This is the typical result of a study using the finite element method, followed, of course, by an unforgiving validation cycle in the laboratory and on the road.

The rims are differentiated: the front rim is symmetrical and lighter while the rear rim is stouter and is drilled asymmetrically to improve the wheel dish and exalt lateral rigidity. As always, the spokes work without flexions thanks to the self-

locking nut coupled spherically to the plate that distributes the load, guaranteeing longer life cycles and greater lateral wheel rigidity.

This is a fabulous wheel for courses featuring considerable level differences or for very long competitions where performance and comfort must coexist.









Tubular Hyperon[™] Ultra[™]

The Hyperon[™] tubular was the first Campagnolo[®] wheel with carbon hub and rim, produced entirely in Vicenza. While being the lightest wheel in the range and one of the lightest racing wheels of all, it offers strength characteristics at the absolute level which are truly incredible for its weight.

It is a wheel built to achieve the same specifications of power, strength and rigidity of all the other Campagnolo[®] wheels with the added benefit of an even longer cycle of resistance to fatigue, thanks to the extraordinary characteristics of the material used.

The new Ultra[™] version is characterized by the adoption of a monolithic light-alloy freewheel body and by the use of lighter counternuts, with a weight saving of 20 g over the already extremely light 2006 version. Of course the tubular Hyperon™ Ultra™ does not set any special limits on the weight of the rider compared with other Campagnolo® wheels, as the lightness has been obtained thanks to design sophistication as well as to the use of special low-weight materials with extremely high mechanical specifications.









RLCOVE PBACHESOE

Clincher Hyperon™ Ultra™

Hyperon UltraTM wheels have all the advantages of HyperonTM wheels, but also take clinchers.

The rims and hubs are made from Full CarbonTM. Campagnolo[®] composites know-how is such that it successfully won the challenge of creating a full-carbon wheel for clinchers.

A clincher in fact requires resistance to pumping pressure and blows that is completely unknown in the wheel for tubulars. The result is a pair of wheels whose weight is more than 200 g lighter than the average for aluminium competition wheels although the wheels are just as reliable and durable. The right-hand side of the rear wheel carbon fibre hub has a special oversize light-alloy flange with an 80 diameter oversize flange which improves the drive torque and therefore the transfer of the athlete's power.

Hyperon Ultra[™] wheels require the use of special brake pads to ensure correct braking.





Medium-Profile Wheels

Campagnolo®'s medium-profile wheels are multipurpose wheels. As light and reactive as low-profile wheels and as aerodynamic and fast as high-profile wheels. They are immediately recognizable by the unmistakable Campagnolo® G3[™] spoking that sets them apart.

G3[™] spoking was created to provide better transmission of driving torque, better lateral stiffness and more balanced spoke tension.

Testsconducted atour laboratories have shown that compared with competitors' products, the G3[™] system provides more than 46% torsion resistance and more than 34% resistance to flection. The results can clearly be seen right from the very first pedal stroke.









Khamsin[™] Black

The new Khamsin[™] wheels are the highest expression of the technological capacity of Campagnolo[®] which is able to make wheels with the performance required for racing at a truly affordable price.

The rims of the Khamsin[™] wheels have a ground braking

surface, to provide powerful modulable braking, and a wear indicator.

The $G3^{TM}$ spoking optimizes transfer of the power generated by the athlete and improves the wheel's lateral rigidity. The front has 24 spokes (3x8) and the rear 27 (3x9). The hubs are in light alloy with an oversize body and sealed high-precision bearings while the freewheel body is monolithic.

The very latest Khamsin[™] wheels are all-rounders suitable both for everyday use and for competitions.







Khamsin™ Gold

Khamsin[™] wheels are also available with a Gold surface treatment, both for the hubs and rims, which gives a touch of novelty and uniqueness to the bike.











Vento[™] Black

Given their great success in 2006, Campagnolo[®] decided to offer a new version of the VentoTM G3TM, the Black. The VentoTM Black keeps all the features which made it popular: G3TM spoking with variable-section spokes, dynamic balancing, special oversize hubs, front hub with track-style oversize flanges, and monolithic freewheel body, but also becomes available with the new finish to make great chromatic combinations possible with a greater number of frames.







Vento[™] Silver

Of course VentoTM G3TM wheels continue to be available in the splendid Silver finish with which they debuted.



200



AGI



MEDIUM PROFILE WHEELS

Special oversize spoke





Scirocco[™] Black

Scirocco[™] wheels have won the heart of enthusiasts thanks to the extraordinary price/ performance ratio. Rims with a 24 mm profile

combine with oversize hubs with top-class spoking: spokes with a variable section and aerodynamic profile, radial on the front wheels and $G3^{\rm TM}$ on the rear ones. The hubs turn on high-class sealed bearings and the rear one has a monolithic freewheel body.

-

0

Dynamic balancing and newgeneration quick releases complete the picture of these technological jewels.





Scirocco™ Silver

The most appreciated Silver version continues to be available, with no changes to the features which have won the appreciation of tens of thous.







Special oversize spoke







Zonda™

Thanks to their aggressive aesthetics and weighing only 1,610 grams, Zonda™ wheels arrive at the starting line as indisputable competition stars.

They are the first to propose the differentiated rim wheel with a height of 26 mm for the front rim and 30 for the rear. Tests run at our laboratories have shown that this is the solution that currently provides the best results in terms of performance and reliability. This solution in fact gives a light and very steerable front wheel and a stiff rear wheel that maximizes the transmission of the rider's leg power.

Both rims have been lightened between the zones in which the spokes are inserted, i.e. the section of the rim where diameters can be reduced without diminishing solidity. Special milling in the section opposite the joint ensures dynamic balance during rotation of the wheel and prevents a "jump" being felt at high speeds.

Both rims have a top bridge that is free of holes. This means weight saving because rim tape does not need to be fitted and gives the wheel greater torsional stiffness and vertical elasticity.









The ultra aero stainless-steel butted spokes are arranged radially on the front wheel and the rear wheel has $G3^{TM}$ spoking. The rear rim has asymmetrical holes to improve wheel dish.

The hubs are oversize with aluminium axles and selfaligning bearings. The flange of the rear right-hand hub is oversize to increase torsional stiffness. ZondaTM hubs also use the Campagnolo[®] freewheel body and pawl carrier housed in a single part for maximum lightness.

Zonda[™] 2006 wheels are fitted with levers in cold-forged aluminium with two pivots for more balanced clamping. Available in Black and Silver colour versions.









Eurus™

Eurus[™] wheels, weighing only 1,490 grams, are the ideal choice for those who want a multi-purpose wheel which gives the utmost both on the toughest climbs and at high speed on the flat.

EurusTM feature a differential profile, i.e. a 26-mm extrusion profile for the front rim and a 30-mm extrusion profile for the rear rim.

Tests run at our laboratories have shown that this is the

solution that currently provides the best results in terms of performance and reliability: a light and very steerable front wheel and a stiff and responsive rear wheel.

The rims have been lightened in toroidal form between the spoke insertion zones, i.e. in the section of the rim where diameters can be reduced without lessening the solidity of the structure. The dynamic balance of the wheel is assured by special milling in the section opposite the joint. This balances the weight of the joint during rotation of the wheel.

Both rims have a top bridge that is free of holes. This is a significant weight saving, thanks to the lack of rim tape, and gives the wheel greater torsional stiffness and greater vertical elasticity.



The upper bridge has no spoke holes







The Ultra AeroTM aluminium spokes are butted and the front wheel has radial spoking whereas the back wheel has $G3^{TM}$ spoking.

The rear rim has asymmetrical holes to obtain a better wheel dish.

The hubs are in oversize aluminium with aluminium axles and self-aligning bearings.

The rear hub has a larger flange to increase torsional stiffness and therefore wheel performance during acceleration and bursts of speed on the pedals. Eurus[™] wheels use the freewheel body and pawl carrier housed in a single

aluminium part for maximum

lightness.

The levers in cold-forged aluminium with two pivots grant a perfect and more balanced clamping Eurus[™] wheels are available in Black and Silver versions.









Shamal[™] Ultra[™]

The historical name which for many years has been a synonym for an aerodynamic wheel is back on the top again thanks to the ShamalTM Ultra™, the synthesis of fifteen years of evolution of highperformance wheels for racing bikes.

The super-new Shamal[™] Ultra[™] wheels incorporate all the innovations of recent years, consolidated in a product without paragon in terms of performance, strength, life and reliability.

The light alloy rims come from selected extrusions and are CNC-machined to optimize the mechanical specifications; they are welded rims with a ground braking surface and the spaces between the spokes are lightened by toroidal grinding. The rim is dynamically balanced; in other words the imbalance of the mass as a result of the non-equivalence of weight between joint and valve is compensated by the extension of the toroidal grinding.

The top bridge of the rim is not drilled in the traditional way to fit the nipples, so that the use of rim-tape is pointless and the system is lightened further as a result.

Clincher Profile



SHAMAL ULTRA TIMUA

For technical information see page 218





Both the spokes and nipples and in light alloy, to provide rigidity, lightness and aerodynamics at an absolute level.

The central body of the hubs is made of carbon and the flanges of aluminium, specially machined to lighten them; the axle is in light alloy while the 15-ball bearings are adjustable, and also available optionally in ceramic in the best Campagnolo® tradition. The right-hand flange of the rear hub is oversized to maximize torsional rigidity and therefore drive torque transfer. The cam lever of the release mechanism is actuated bilaterally and symmetrically. The result of all this design and manufacturing refinement is a light but strong wheel, snappy and reactive, laterally and torsionally rigid, but sufficiently comfortable in longer races.

Tubular Profile

MEDIUM PROFILE WHEELS



High-Profile Wheels

Campagnolo® high-profile wheels are made for sheer speed, where hundredths of a second make all the difference between victory and defeat.

Aerodynamics and total power transmission... all the rest comes next. Every wheel component has been designed to provide the best aerodynamic penetration and the best transmission of leg power.



HIGH PROFILE WHEELS

Bora[™] Ultra[™] wheel profile







HIGH PROFILE WHEELS

Bora™ Ultra™

Bora[™] Ultra[™] wheels are the wheels designed for speed *par excellence*. Perfect aerodynamics and maximum power transmission combined with extraordinary lightness make them the benchmark wheels for leading racing professionals.

The 50-mm rims are made from structural carbon which imparts great lightness and stiffness.

The hubs are made from structural carbon of variable thickness, have spherical surfaces, feature Record[™]class components with aluminium axle and a single body for freewheel and pawl carrier. The rear hub features an oversize aluminium flange on the right side which enhances the features of the G3[™] spoking. Radialspoking and G3[™]spoking are used on the front and rear wheels respectively. Nominal weight is just 1,285g. Bora[™] Ultra[™] wheels are fitted with new quick releases with levers in cold-forged aluminium with two pivots for more balanced clamping.





PISTA





Ghibli™

Ghibli™ wheels are the disc wheels par excellence. They were designed by the wind to excel in time trials, where every hundredth of a second counts. Maximum aerodynamics, maximum lightness and maximum stiffness - these are the features that make Ghibli™ wheels so special. The Ghibli™ wheel is the one and only wheel of its kind: it features a tensilestructure design adapted from aerospace technology that confers exceptional power transmission while maintaining extraordinary lightness. The oversize hub is specific to GhibliTM.

Ghibli™ wheels are fitted with quick releases with levers in cold-forged aluminium with two pivots for more balanced clamping.



Pista™

Pista[™] wheels were designed with only one objective in mind: to convert the track racer's energy into pure and simple speed.

In track events, weight is of relative importance. The difference is made by the wheel's ability to transmit the cyclist's power completely. With such a theory in mind, our engineers created an extremely stiff high-profile rim and a spoking pattern that yields the utmost in power transmission. This is how Campagnolo's PistaTM was born.

Competition Wheels 2007

KEK Image: Section is a sectin a section is a second between is a section is	requires special sprocket set
--	-------------------------------

L	0	W	/-P	R	0	FI	LE	V	VI		EE	LS
---	---	---	-----	---	---	----	----	---	----	--	----	----

NEUTRON™ front clincher 28" NEUTRON™ rear clincher 28"	660 890	alu alu	18/20 18/20		•	•	black black	22 24		SS SS	AE DB AE DB	•	•	alu alu	100 130	alu alu	•	black black	20 20	9/10
NEUTRON™ ULTRA™ front clincher 28"	630	alu	18/20	м		•	black	22		SS	AE DB		•	alu	100	alu/carb	•	bl/carb	20	
NEUTRON™ ULTRA™ rear clincher 28"	840	alu	18/20	м	•	•	black	24		SS	AE DB	•	•	alu	130	alu/carb	٠	bl/carb	20	9/10
HYPERON™ ULTRA™ front tubular 28"	520	carb	19/20	-		-	carb	22		SS	AE DB		•	alu	100	carb	•	carb	20	
HYPERON™ ULTRA™ rear tubular 28″	700	carb	21/20	-	•	-	carb	24		SS	AE DB	•	•	alu	130	carb	•	carb	20	9/10
HYPERON™ ULTRA™ rear tubular 28"(HG)	700	carb	21/20	-	•	-	carb	24		SS	AE DB	•	•	alu	130	carb	•	carb	20	10*
HYPERON™ ULTRA™ front clincher 28"	575	carb	21/20	-		•	carb	22	•	 SS	AE DB		•	alu	100	carb	•	carb	20	
HYPERON™ ULTRA™ rear clincher 28"	775	carb	23/20	-	•	•	carb	24	•	SS	AE DB		•	alu	130	carb	٠	carb	20	9/10
HYPERON™ ULTRA™ rear clincher 28"(HG)	775	carb	23/20	-	•	•	carb	24	•	SS	AE DB		•	alu	130	carb	•	carb	20	10*

Competition Wheels 2007

KEY M = Milled MT = Toroidal Milling DB = Butted AE = Aero UAE = Ultra Aero SS = Stainless steel BR = Brass QUICK RELEASES: 20, 30, 40	nominal weight (g) rim material	rim section: height/width – mm (nominal) type of rim	asymmetrical holes	requires rim tape rim finishing	number of spokes dynamic balance	spokes material	spoke type differential spokes r/l	Ultralinear" geometry	nut/nipple material	O.L.D. (mm)	hub body material	oversize hub axle	hub finishing	QR type	compatible (9/10)	requires special sprocket set
--	------------------------------------	---	--------------------	------------------------------------	-------------------------------------	-----------------	---------------------------------------	-----------------------	---------------------	-------------	-------------------	-------------------	---------------	---------	-------------------	-------------------------------

MEDIUM-PROFILE WEELS

KHAMSIN™ front clincher 28"	855	alu	24/20			•	blk/gold	24/G3"		SS			BR	100	alu	-	blk/gold	40		
KHAMSIN™ rear clincher 28"	1040	alu	24/20			•	blk/gold	27/G3"		SS			BR	130	alu	-	blk/gold	40	9/10	
VENTO [™] front clincher 28"	810	alu	24/20			•	slv/blk	24/G3"	•	SS	DB		BR	100	alu	-	slv/blk	40		
VENTO™ rear clincher 28"	945	alu	24/20			•	slv/blk	27/G3™	•	SS	DB		BR	130	alu	-	slv/blk	40	9/10	
SCIROCCO™ front clincher 28"	770	alu	24/20			•	slv/blk	20	•	SS	AE DB		BR	100	alu	-	slv/blk	30		
SCIROCCO™ rear clincher 28"	955	alu	24/20			•	slv/blk	27/G3™	•	SS	AE DB		BR	130	alu	-	slv/blk	30	9/10	
ZONDA™ front clincher 28"	675	alu	24/20	м			slv/blk	16	•	SS	UAE	•	BR	100	alu	•	slv/blk	20		
ZONDA [™] rear clincher 28"	935	alu	28/20	м	•		slv/blk	21/G3™	•	SS	UAE	•	BR	130	alu	•	slv/blk	20	9/10	
ZONDA™ rear clincher 28"(HG)	935	alu	28/20	м	•		slv/blk	21/G3™	•	SS	UAE	•	BR	130	alu	•	slv/blk	20	10*	
EURUS™ front clincher 28"	660	alu	24/20	МТ			slv/blk	16	•	alu	AE DB	•	SS	100	alu	•	slv/blk	20		
EURUS™ rear clincher 28"	890	alu	28/20	МТ	•		slv/blk	21/G3™	•	alu	AE DB	•	SS	130	alu	•	slv/blk	20	9/10	
EURUS™ rear clincher 28"(HG)	890	alu	28/20	МТ	•		slv/blk	21/G3™	•	alu	AE DB	•	SS	130	alu	•	slv/blk	20	10*	
SHAMAL™ ULTRA™ front clincher 28"	605	alu	24,5/20	МТ			gold	16	•	alu	AE DB	•	alu	100	alu/carb	•	blk/carb	20		
SHAMAL™ ULTRA™ rear clincher 28"	790	alu	28,5/20	МТ	•		gold	21/G3™	•	alu	AE DB	•	alu	130	alu/carb	•	blk/carb	20	9/10	
SHAMAL [™] ULTRA [™] rear clincher 28"(HG)	790	alu	28,5/20	МТ	•		gold	21/G3™	•	alu	AE DB	•	alu	130	alu/carb	•	blk/carb	20	10*	
SHAMAL™ ULTRA™ front tub. 28″	605	alu	24,5/20	МТ		-	gold	16	•	alu	AE DB	•	alu	100	alu/carb	•	silver	20		
SHAMAL™ ULTRA™ rear tub. 28"	790	alu	28,5/20	МТ	•	-	gold	21/G3™	•	alu	AE DB	•	alu	130	alu/carb	•	silver	20	9/10	
SHAMAL [™] ULTRA [™] rear tub. 28"(HG)	790	alu	28,5/20	МТ	•	-	gold	21/G3™	•	alu	AE DB	•	alu	130	alu/carb	•	silver	20	10*	

TECHNICAL

Competition Wheels 2007

KEY M = Milled MT = Toroidal Milling DB = Butted AE = Aero UAE = Ultra Aero SS = Stainless steel BR = Brass QUICK RELEASES: 20, 30, 40	nominal weight (g) rim material	rim section: height/width – mm (nominal)	type of rim asymmetrical holes	requires rim tape rim finishing	number of spokes	dynamic balance	spokes material	spoke type	differential spokes r/l	Ultralinear geometry	nut/nipple material	0.L.D. (mm)	hub body material	oversize hub axle	hub finishing	QR type	compatible (9/10)	requires special sprocket set
--	------------------------------------	--	-----------------------------------	------------------------------------	------------------	-----------------	-----------------	------------	-------------------------	----------------------------------	---------------------	-------------	-------------------	-------------------	---------------	---------	-------------------	-------------------------------

HIGH-PROFILE WEELS

BORA™ ULTRA™ front tub. 28″ BORA™ ULTRA™ rear tub. 28″ BORA™ ULTRA™ rear tub. 28″(HG)	565 740 740	carb carb carb	50/20 50/20 50/20			carb carb carb	18 21/G3™ 21/G3™	•	SS SS SS	AE DB AE DB AE DB		alu alu alu	100 130 130	carb carb carb	•	carb carb carb	20 20 20	9/10 10	
GHIBLI™ rear road 28" GHIBLI™ front track 26"	995 860	alu alu	D/19 D/19	-	-	-	-	-	Aramide Aramide	-	-	-	100 120	alu alu	•	-	20 -		•
GHIBLI™ front track 28″ GHIBLI™ rear track 28″	955 995	alu alu	D/19 D/19	-	-	-	-	-	Aramide Aramide	-	-	-	100 120	alu alu		-	-		
PISTA™ front tub. 28″ PISTA™ rear tub. 28″	995 1110	alu alu	38/20 38/20		-	black black	20 24		SS SS	AE AE		alu alu	100 120	alu alu		black black	20 20		

The weight of the wheels does not include the quick release. * only 10s sprockets of Shimano Inc. starting from 11 and 12.