



MY2017

NEW Potenza Groupset

Agenda

1. Ergopower
2. Front derailleur
3. Rear derailleur
4. Crankset
5. Cassette
6. Chain
7. Brakes



↙ Ergopower control levers



NEW Power-Shift mechanism

Starting from the current Power-Shift, our engineering has introduced a new material in the internal mechanism that improves the durability

NEW geometrics for the back (handlebar side) of the Ergopower

It interfaces perfectly with the vast range of curved handlebars available on the market, even with curved racing handlebars. Increased resistance to rotation

Undisputed Levers ergonomics

All the levers keep the design and the shape of current products in order to maintain the ergonomics levels to the top

Downshift lever position

Easy to find during the effort (climb attack)

Silver version available

↙ Ergopower control levers



NEW hood design

The Potenza groupset will have an optimized design of the hoods that increases the handling and the comfort

Hoods in silicon material with Vari-Cushion technology

High levels of comfort even after long training sessions

Hoods with grooved areas that improve the ergonomics

Water drains away, guaranteeing safe grip for the user in any conditions

Hand rest on the top of the Ergopower body

Allows the cyclist to hold on and pull on the top part of the Ergopower when going uphill

↙ Ergopower control levers



ErgoPower for rear derailleur

Power-Shift mechanism allows the multiple upshifting (till 3 gears)

Useful when you find an unexpected hard climb or before of a corner

Power-Shift mechanism allows single downshifting at each thumb action

Precise shifting and easy the adjustment of the rear derailleur, thanks to a new patented system

Front shifting - Upshifting



EP for front derailleur

NEW inner mechanism:

- Upward movement of the chain in one action with few clicks
- No adjustments required on the outer chainring

Big index bushing

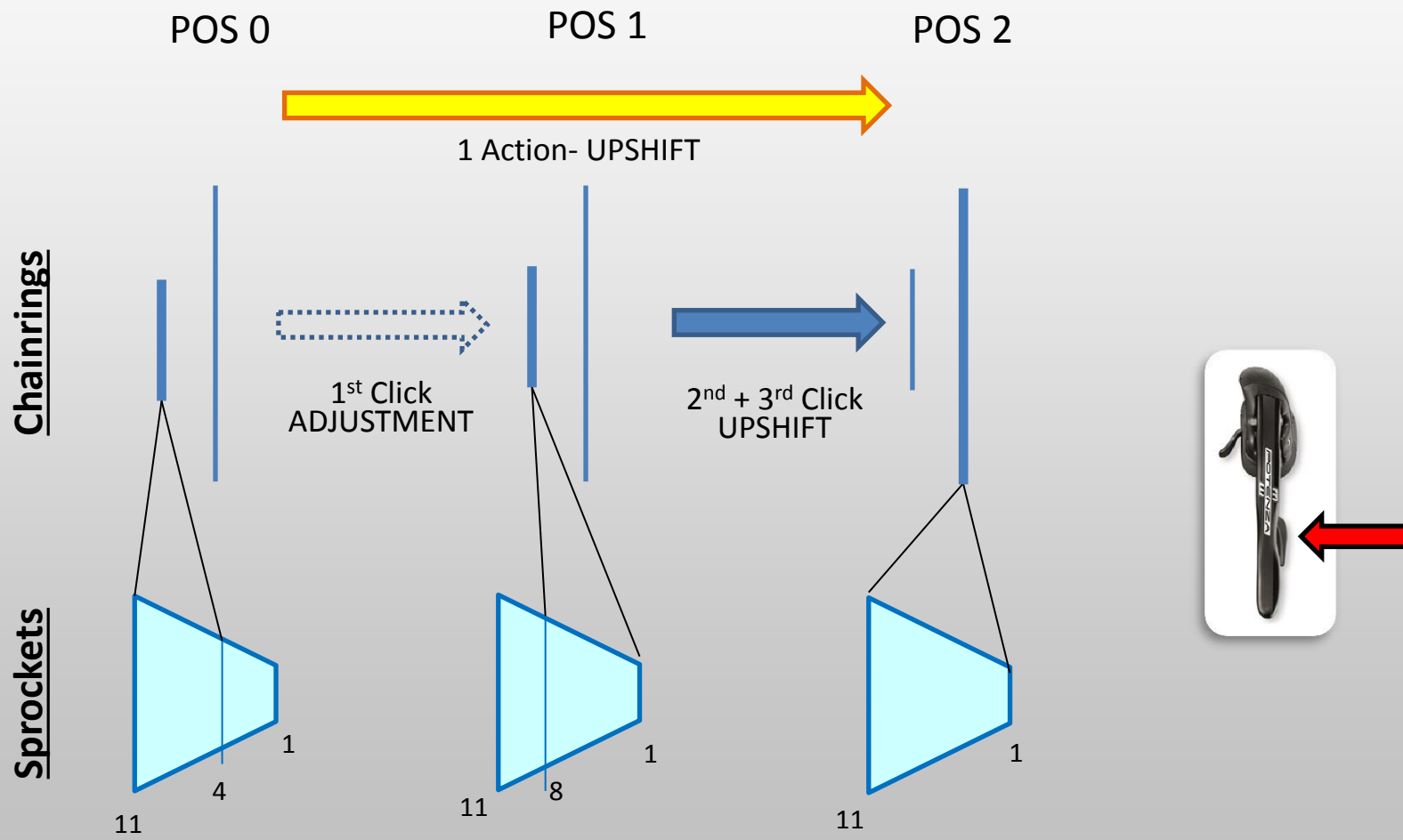
Together with the new derailleur, it reduces the effort on the upshifting lever, enabling a more effective shifting

Downward movement of the chain blocked at 1st action

Prevents the chain drop off inside the small chainring stopping before of the rest position (following the EPS model)

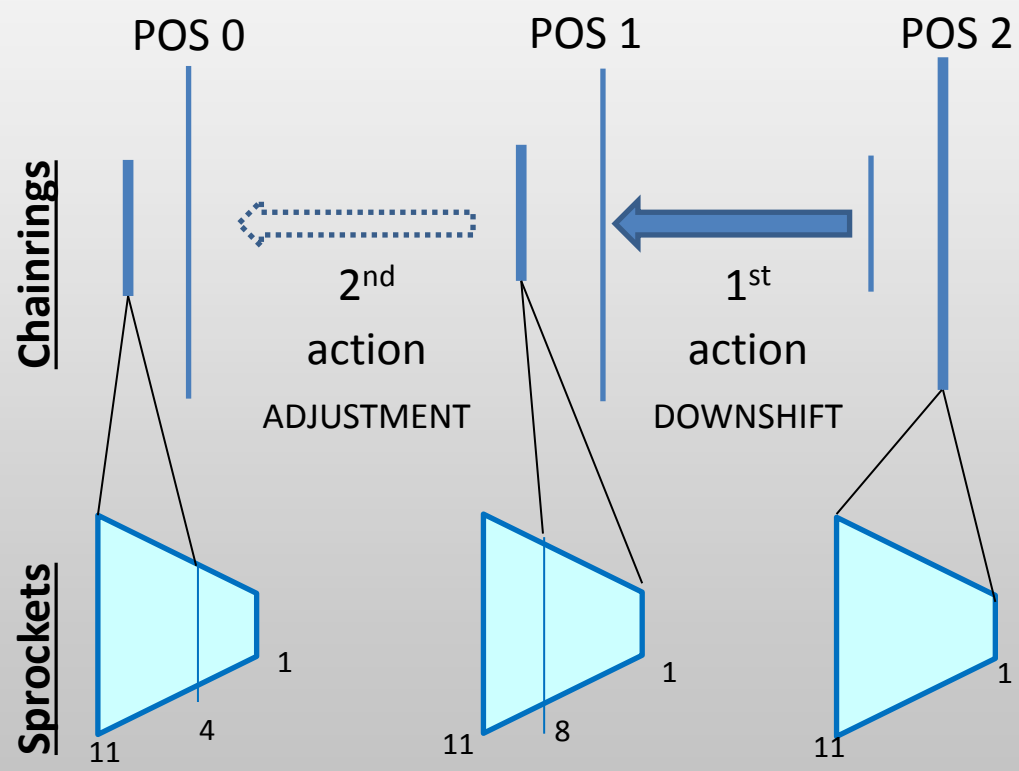
Front shifting - Upshifting

The **upshifting** phase is performing thanks to the **limited number of clicks**



Front shifting - Downshifting

The downshifting phase prevents the chain drop off inside of the small chainring

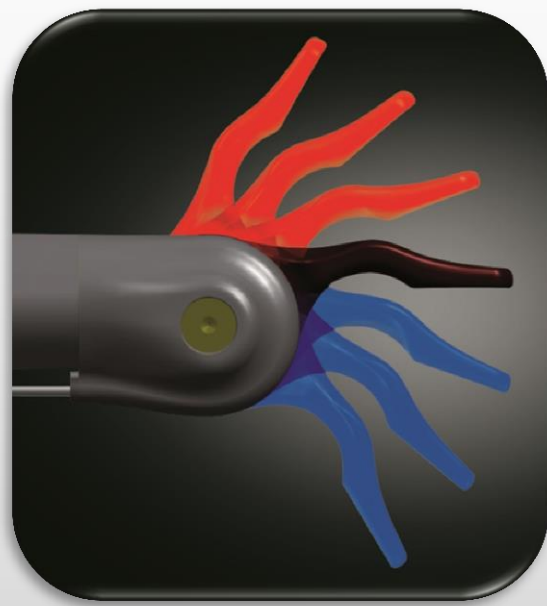


Ergopower control levers



MATERIALS	
EP body	Ultra-light technopolymer reinforced with carbon fiber
Hoods	Natural silicon material
Braking lever	Aluminum alloy
Upshifting lever	Composite with long fiberglass
Downshifting lever	Filled composite with long fiberglass

Bar-End shifters



Campagnolo 11 Bar End
Full compatibility with all the
Campagnolo 11 speed groupsets

Lever in aluminum alloy
Enables the best possible
ergonomics

Body in composite material
Extreme lightness

Expander in aluminum
Maximum grip in the bars with no
other components that would
increase the weight

Screws in steel
Maximum resistance for tightness
torque

«Campagnolo 11» Bar-End shifters



<i>MATERIALS</i>	
Lever	Aluminum alloy
Body	Composite material with carbon fiber
Expander	Aluminum
Screws	Steel

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Front derailleur



NEW Product design

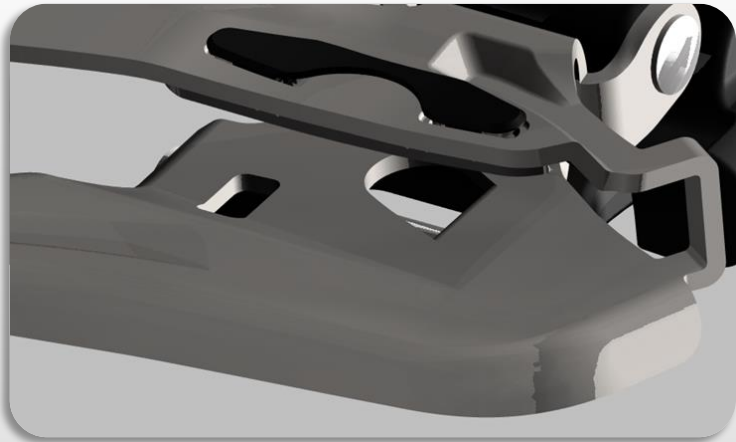
The new Potenza front derailleur has the same shape of the Super Record one, in order to obtain similar performances.

NEW steel cage

The Potenza front derailleur will have a one-piece cage with a design similar to the Super Record one in order to assure the same shifting performances.

Silver version available

Front derailleur



New cage design

The outer semi-cage tip is shaped to improve the downshifting and the chain containment during the upshifting.

The front derailleur cage is positioned further back to allow the use of large sprockets range without friction on the bridge connector

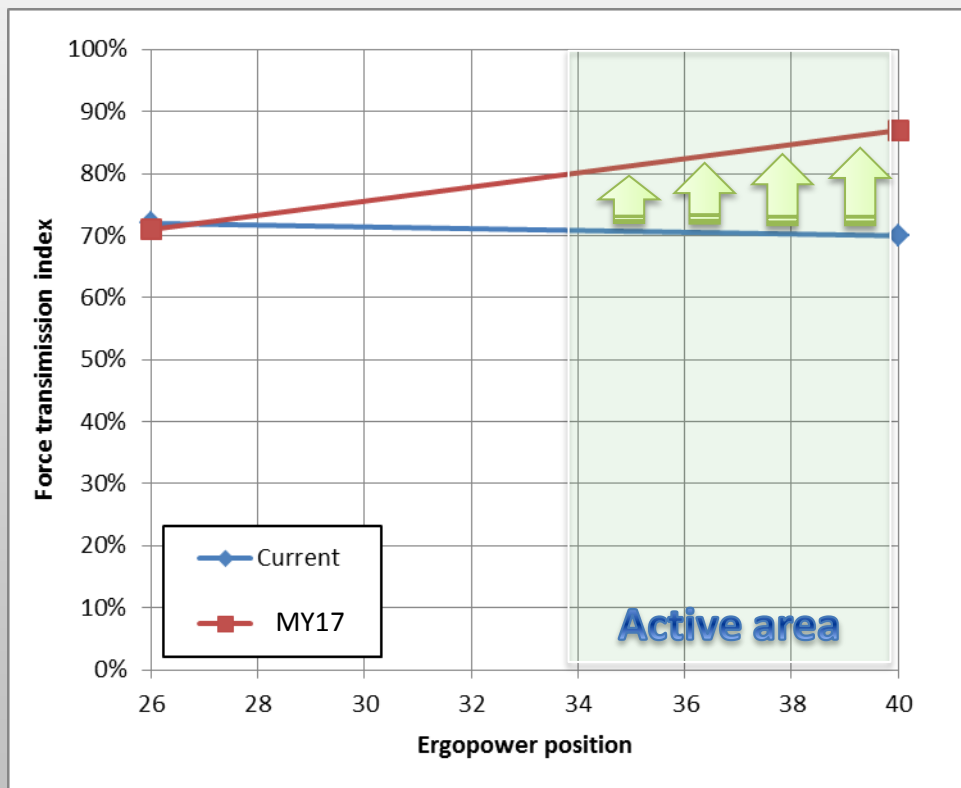


New linear design of the monolithic cage

Great fluency and smoothness during the upshifting.

The fork angle allows to have a silent transmission even for extreme crossovers.

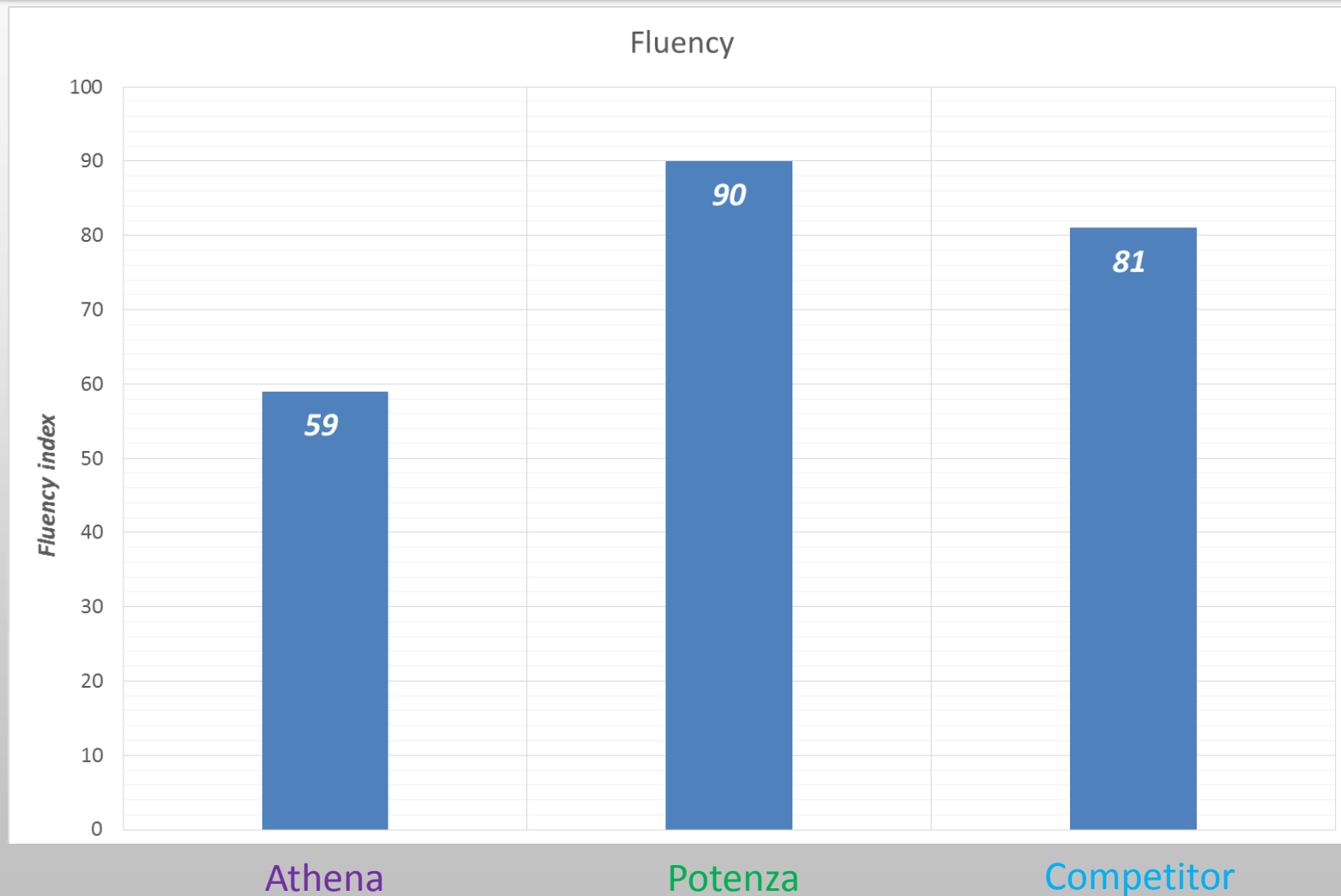
Front derailleur



NEW rod design

The outer rod is redesigned in order to improve the force-displacement curve allowing to have higher shifting forces and increasing the performances also in high power conditions.

Benchmarking



FRONT DERAILLEUR



MATERIALS	
Inner plate	Forged aluminum
Outer plate	Forged aluminum
Derailleur body	Die-cast aluminum
Fork	Steel
Hardware	Steel

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Product design

The Potenza rear derailleur has the same shapes of the Super Record one in order to obtain similar shifting performances.

Two different rear derailleurs

The Potenza groupset will introduce the new 11-32 cassette. To use it with all chain-rings combination is necessary to have a medium cage (72,5 mm) instead of the standard one (55 mm). So two derailleurs will be available at the same price.

Silver version available

Rear derailleur



NEW Upper body in Ultra-light technopolymer reinforced with glass fiber

Low weight with high stiffness and great resistance to impacts

Limit screws positioned on the back of the upper body

Same system already used in Super Record derailleur

Upper and lower pulley wheels with bushings

Perfect alignment of the derailleur cage



Embrace Tecnology

This new technology increases the number of sprocket teeth wrapped by the chain, allowing smooth, fast and prompt shifting.

Studied for optimising the functionality of the rear derailleur while using extreme cassettes as 11-32

Rectangular cross-section springs of the upper body and parallelogram

Better use of the material and increment in the return load of the spring

Rear derailleur



55 mm cage



72,5 mm cage



Two different derailleurs

The new Potenza group-set will introduce the new 11-32 sprocket.

To use it with all chain-rings it's necessary to have a medium cage (72,5 mm) instead of standard one (55 mm). So two derailleurs will be available.

Rear derailleur



MATERIALS

Outer plate	Forged aluminum - black anodizing
Inner plate	Punched aluminum - black anodizing
Upper body	Ultra-light technopolymer reinforced with glass fiber
Lower body	Ultra-light technopolymer reinforced with glass fiber
Pulley wheel	Technopolymer
Upper pulley wheel bushing	Bushings in sintered material
Lower pulley wheel bearing	Bushings in sintered material
Pivots	Steel

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NEW hollow crank-set

New design (the same shape of the high end groupsets)

Both cranks in hollow forged aluminum

One single crankset for all different chainrings

All chainrings combinations capability

Ergonomics

Design and mechanical performances are aligned to Super Record crankset

Chainrings

53x39, 52x36 and 50x34 sets to cover all market requests

Silver version available



NEW right crank four-arm Design

Greater stiffness in shifting areas.
Better transmission of power from crank to chainring

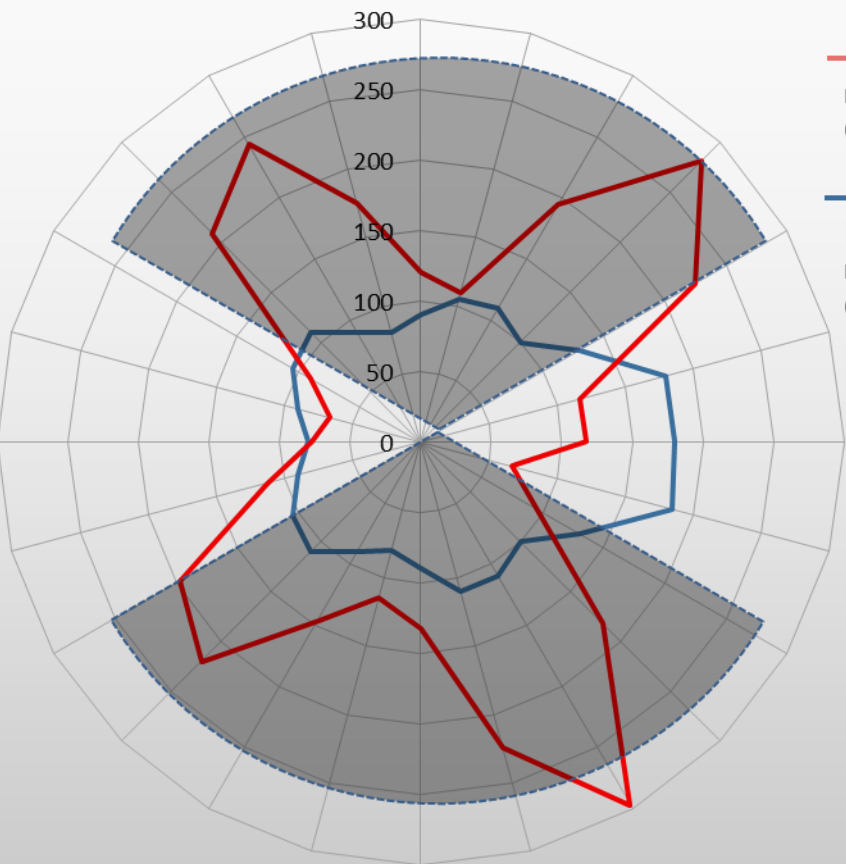
Double standard bolt circle diameter (112 mm and 145 mm, 4 + 4 fixing screws)

Compatibility with Super Record chainrings and bolts.
Increased stiffness thanks to fixing bolts closer to the outer diameter of the chainring

New “Power Torque +” System

It maintains the appreciated “Power Torque” system, that allows to maximise stiffness and power transmission, improving the disassemble phase

↙ Crank-set



- NEW CRANKSET measured stiffness (index)
- PREVIOUS 5 ARMS CRANKSET measured stiffness (index)
- Dedicated sectors for the front upshifting



For improving the frontshifting we needed to have a stiffer connection between the right crank and the chainrings focusing on the areas where you can upshift

The new crankset, with the 4 arms, increases the flexural stiffness in the sectors where the front shifting happens with a bigger torque

↙ Crank-set



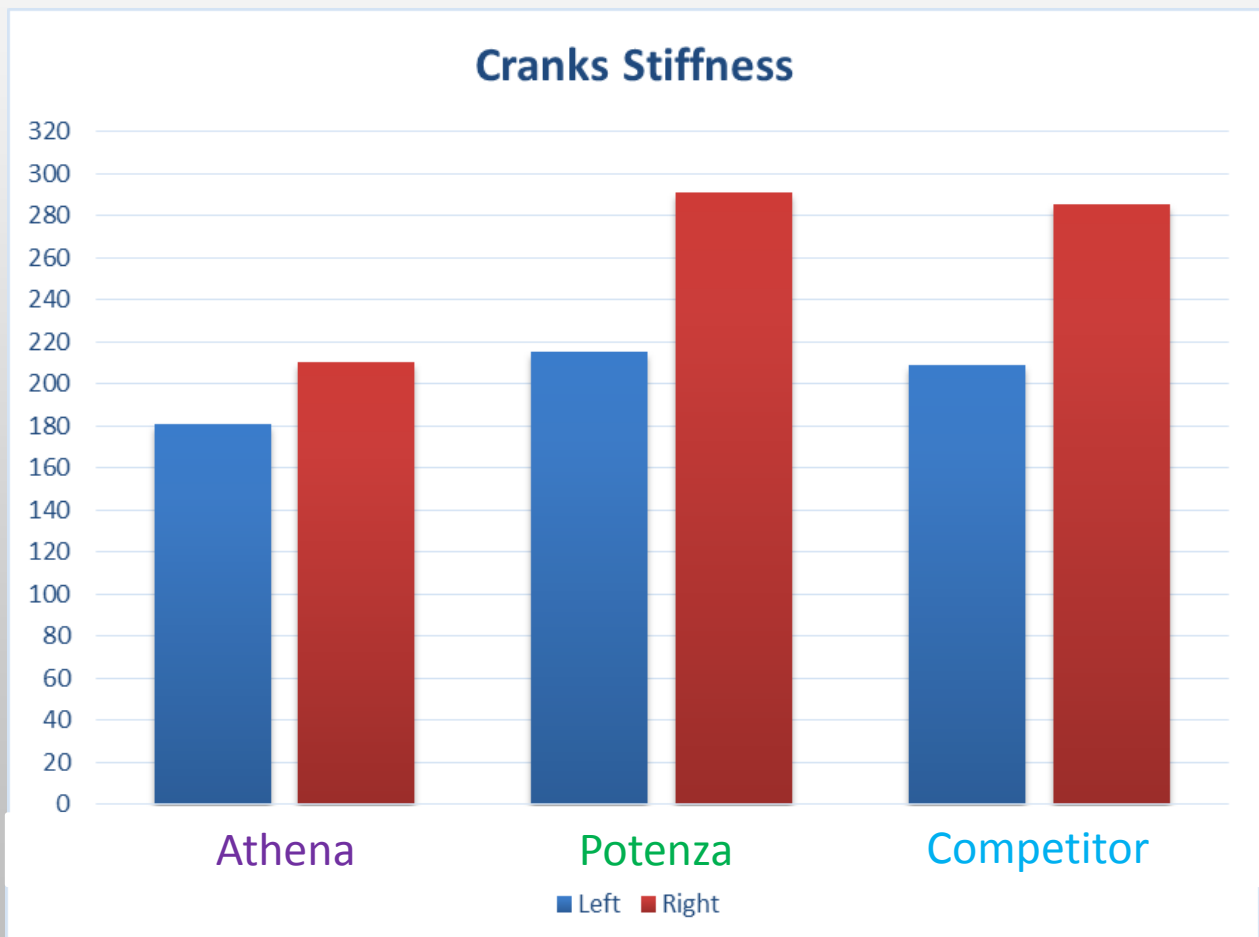
NEW left crank Design
Greater stiffness

New disassemble phase studied for the «Power Torque +» system
Allows the left crank disassembling without additional extractor.
Quicker and easier than the previous Power Torque tech.

↙ Crank-set

The flex-torsional stiffness of the new left crank increased 22% compared with the 5 arms Athena 2014 aluminum one and it is slightly better than the Ultegra one.

The flex-torsional stiffness of the new right crank increased 42% compared with the 5 arms Athena 2014 aluminum one and it is slightly better than the Ultegra one.



↙ Crank-set



MATERIALS	
Right crank	Hollow forged aluminum (black anodizing)
Left crank	Hollow forged aluminum (black anodizing)
Axle	High performance steel (same material of previous version)
Bearings	Same bearings of previous version
Chainrings	Aluminum with special anodizing

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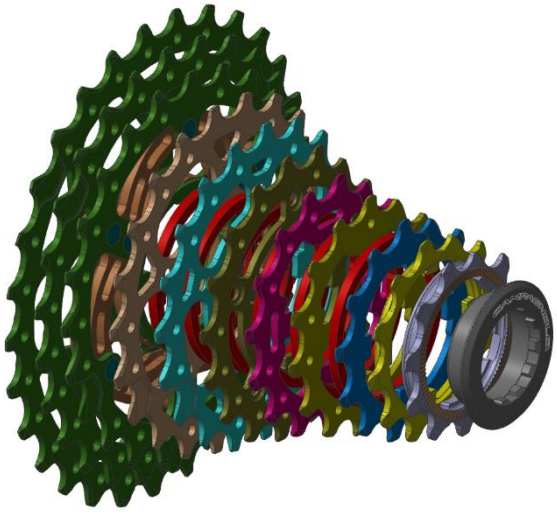
NEW 11-32 «Campagnolo 11» cassette

New wide range cassette in order to support multiuser experience

NEW cassette layout

The new “Campagnolo 11” cassettes enable consistently responsive, fast and precise shifting at only 249 g (11-25 spec)

Cassettes



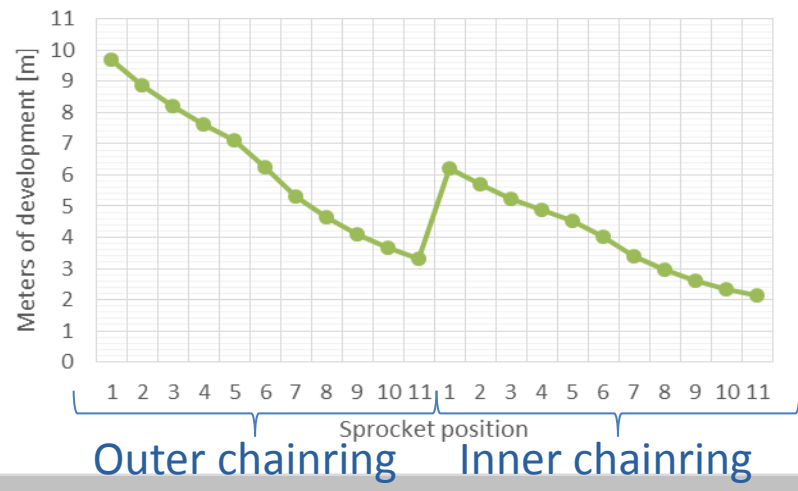
NEW 11-32 cassette

The sprockets sequence:

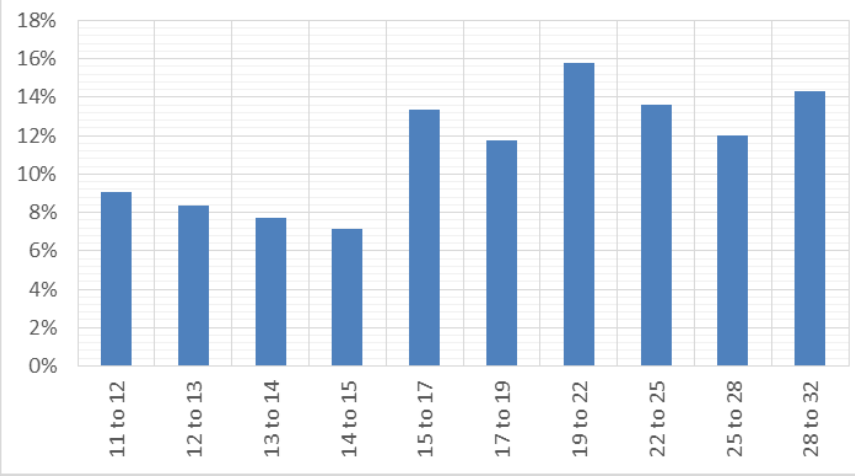
11 – 12 – 13 – 14 – 15 – 17 – 19 – 22 – 25 – 28 – 32

This cassette is based on one triplet (25-28-32) and 8 single sprockets with aluminum spacers.

Meters of Development



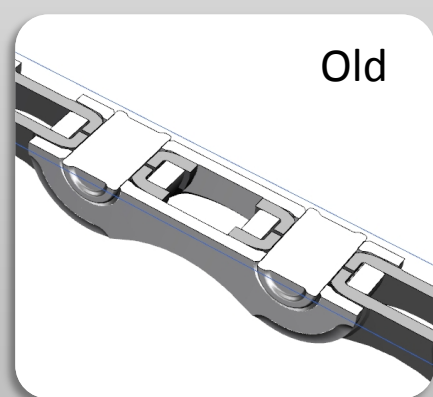
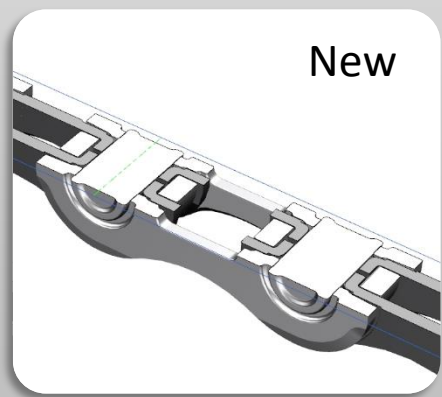
Meters of development - delta



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NEW Chain

The new "Campagnolo 11" chain will:

- increase the performance of the shifting
- reduce the noise of the chainring and sprocket engagements
- adapt the chain to OEM requirements.



NEW Chain

The new "Campagnolo 11" chain will be available in two versions:

1. OEM
2. AM

OEM Chain

Main specifications:

1. Different sizes for easier Customer management (106, 108, 110, 112, 114)
2. Specific packaging for OEM

AM Chain

Main specifications:

1. Fixed size (114)
2. Standard packaging

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Updated standard rim brakes

The new Potenza groupset will have a new “Potenza” branded rim brake available also in the Silver version

Direct Mount option

The Potenza groupset will have also a new medium range direct mount brake, “Direct” branded

Group weight

Component	Potenza
<i>Front derailleur</i>	94
<i>Rear derailleur</i>	211
<i>Shifters</i>	370
<i>Crankset</i>	754
<i>Chain</i>	235
<i>Cups</i>	69
<i>Brakes</i>	321
<i>Cassette</i>	249
Total	2.303