
TIMEMACHINE ROAD
Built by Speed
BMC
SWITZERLAND

TIMEMACHINE ROAD

Built by Speed

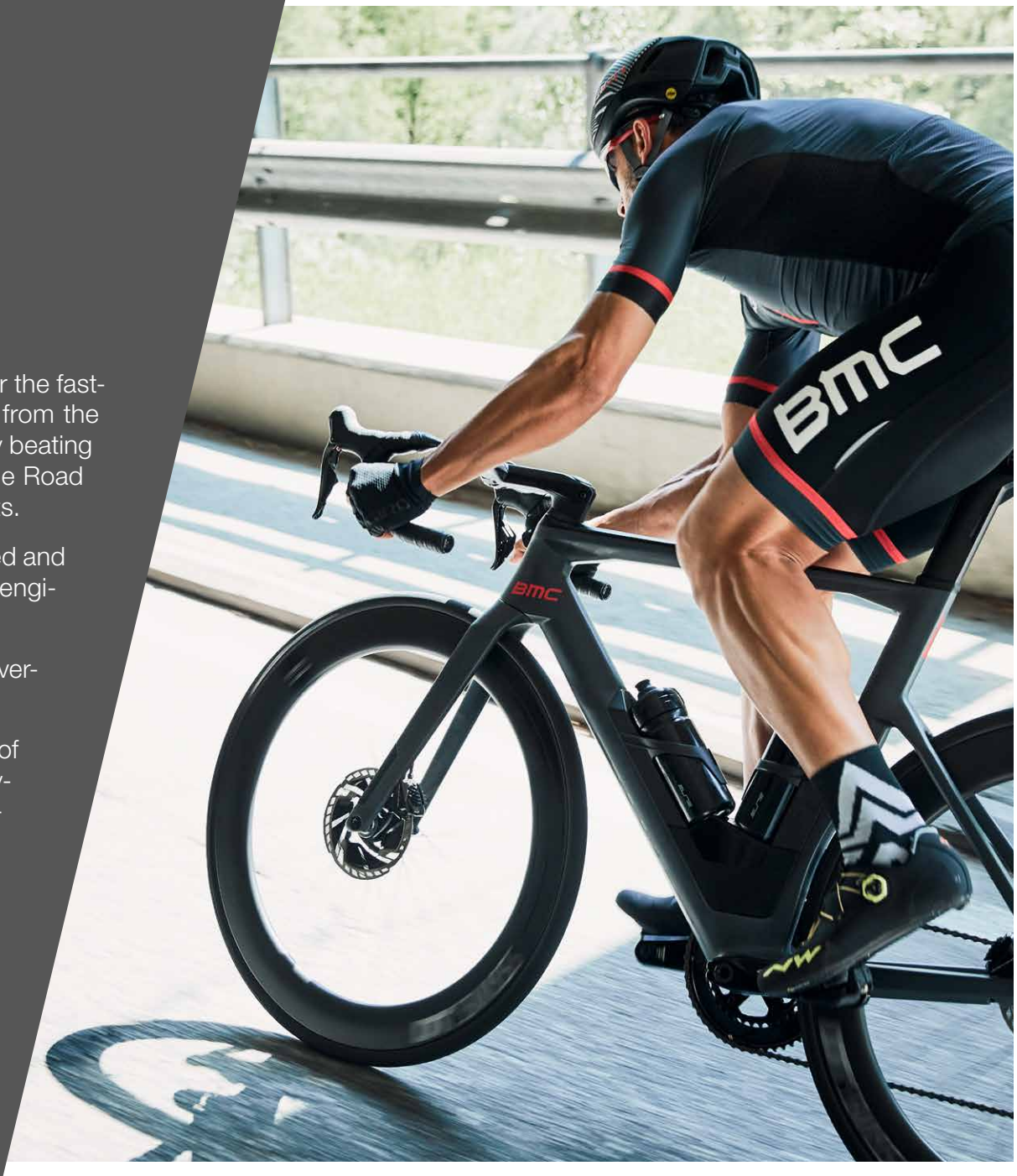
You're not looking for an ordinary race bike. You are looking for the fastest road bike ever. One that is your instrument to tear away from the pack. For beating the clock, beating the competition, or simply beating your best in style. The poise and prowess of the Timemachine Road give it impetus in breakaways, rolling terrain, and bunch sprints.

Inspired by all things fast, the Timemachine Road exudes speed and technology. A pure breed of sculptured design and stealthy engineering.

The Timemachine Road stakes ownership of the tarmac with overarching aero integration for WorldTour-winning speeds.

Aerodynamically perfected shapes, class-leading integration of the ICS Aero cockpit and the all-new Aero Module that turns hydration and storage requirements into an aerodynamic advantage; these are our key innovations to help the rider push through and keep up with the charging machine below for that bit longer.

You're not an ordinary rider and this bike is anything but ordinary. Timemachine Road, enter a new era of speed.



TIMEMACHINE ROAD

Swiss Engineering

An uncompromising machine ready to satisfy your desire for speed, quality and precision.

The result of extensive in-depth aero modeling, obsessively refined through CFD simulations, wind tunnel sessions, track and road testing.

Ultimate Integration

Integration is at the heart of BMC innovations: every component of the Timemachine Road is integrated into a stealth-looking system design, with the purpose of gaining free speed.

The new ICS Aero cockpit features a minimal frontal surface area and stealth cable routing for reduced drag with no limitations to functionality or fit.

Our Aero Module integrates functional components – hydration and storage – in the pursuit of the most aerodynamic configuration for real-world riding.

Power Transfer

The Timemachine Road has been designed to deliver maximum efficiency for the most powerful riders during all-out sprints and accelerations, courtesy of its exceptional bottom bracket and chainstay stiffness.

Speed Compliant

Meeting the demands of speed: our dedicated TCC Speed technology dampens road vibrations for a smooth and efficient ride.

TIMEMACHINE ROAD

Advanced Aerodynamics

Advanced tube profiles maximize its aerodynamic performance in real-life conditions

ICS Aero

Our most aerodynamic cockpit redefines integration with superb aerodynamics, complete cable integration and broad adjustability

Aero Post

Superbly aerodynamic through its Kamm tail profile, the Aero Post provides a wide range of adjustments

TCC Speed fork

The Timemachine Road fork marries the ultimate aerodynamic performance with the exact dosage of vertical compliance for improved control

Integrated Aero Cover

The minimal profile of the front caliper cover optimizes airflow at every yaw angle

Fast and Compliant

TCC Speed technology minimizes road vibration, improving rolling speed and power transfer

Core Stiffness

Exceptional bottom bracket and rear triangle stiffness for best-in-class power transfer

Aero Module

A modular system that combines hydration and storage elements into one seamless aerodynamic unit

ICS Aero
Maximum Integration

Maximum Integration
Maximum Aerodynamic

Our ICS technology with the flat fork steerer ensures a minimal frontal profile and dramatically improves its aerodynamic performance.

ICS Aero is a classic bar/stem system and allows for easy stack adjustment

ICS Aero technology takes integration to a new level:

- Minimal Frontal Surface Area
- Stealth Cable Routing
- Complete Adjustability
- Integrated Computer Mounts

Complete internal brakes and drivetrain routing

Integrated Garmin/GoPro interface

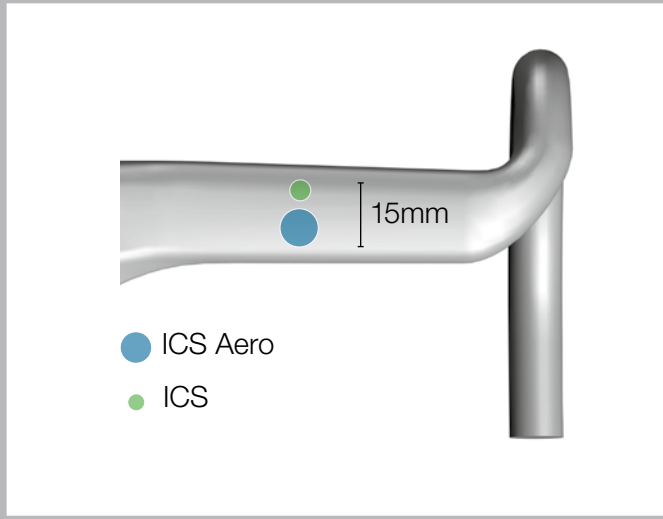
ICS Aero Ergonomics

ICS Aero is a cockpit system designed to provide the most ergonomic and adjustable aero cockpit solution.

ICS Aero Bar Ergonomics

- Ergonomic Aero top shape
- Ergonomic bend shape
- Ample wrist clearance on the drops

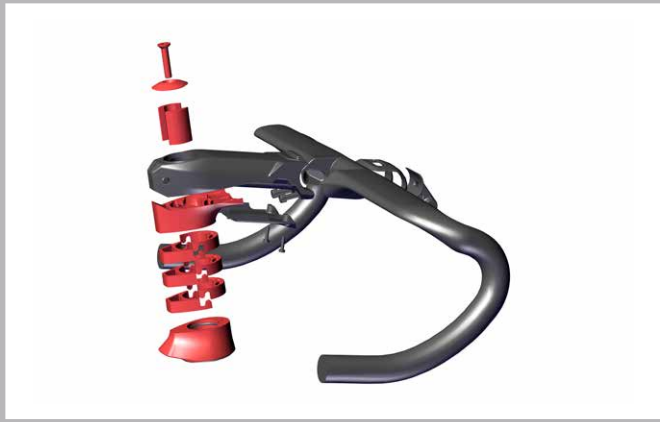
Ergonomics



Aero bars ergonomics were attentively considered when defining the dimensions of the ICS Aero cockpit.

ICS Aero replicates the fit of a standard cockpit with stem lengths adjusted to offset the shorter reach of Aero bars.

Adjustability



The modular, 2-piece design allows the rider to easily adjust bar rotation.

Stack and Reach can also be finely tuned:

- 4 stem lengths
- 3 handlebar widths
- 2 top cones
- Puzzle Spacer system

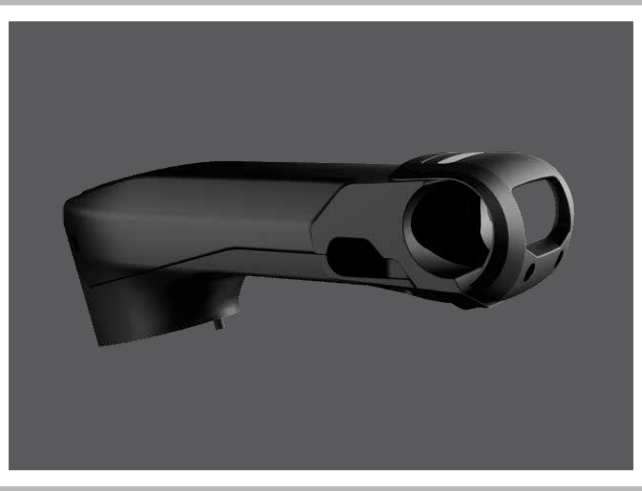
A no-compromise aerodynamic fit

ICS Aero Bar

A dedicated Aero bar designed for a minimal frontal surface to reduce aerdynamic drag.

- Ergonomic Aero top shape
- Minimal Leading Edge
- Ample wrist clearance on the drops
- 3 width: 400/420/440mm
- 66mm Reach, 125mm drop, 2.5 ˚ Flare

ICS Aero Stem



Aerodynamically optimized ICS technology stem, designed for minimal frontal surface and increased compliance.

- Aero shape reduces drag and improves vertical compliance
- Available in 4 sizes: 100, 110, 120, 130mm
- - 15˚ angle
- High Top Cone + Low Top Cone
- Garmin and Go-Pro mount
- Compatible with ICS Aero bar

Aero post

Kamm tail profile seatpost designed to match the aerodynamic performance of the Timemachine R01 and provide a wide range of adjustments.

- 3 Offset positions:
  0mm, 15mm, 30mm

- 2 Lenghts:
  210mm (48&51), 270mm (54,56,58,61)

Aero Module
Functional, Integrated

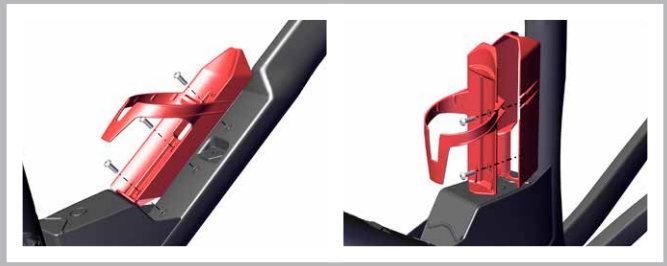
The Aero Module concept came to life when in-depth CFD analysis made it clear that using classic bottle cages is the biggest obstacle to creating an efficient Aero road bike because of airflow detachment starting at very low yaw angles.

Aero Module literally closes the gap, blending hydration and storage elements in a modular system and re-purposing them to improve aerodynamic performance while adding functionality.

Bottle Cage Integration

We partnered with the experts at Elite to design reliable hydration units that not only match our design requirements but also provide durability in every riding condition.

- Developed alongside Elite
- Designed for 550ml bottles
- Compatible with standard bottle cage



Storage Integration

Designed in collaboration with Elite, the Aero box improves airflow and aesthetics while providing essential storage. The low center of gravity ensures improved handling when compared to saddle bag storage. The Aero box can be removed to comply with UCI regulations.

Electronic Integration

The Shimano Di2 junction box is integrated into the downtube and easily accessible.

The internal pouch allows to store all the essentials:

- Tire levers
- Spare tube
- 16g Co^2 & head
- Multi-tool

Aero Module
Modular, Aerodynamic

Aero Module is a modular system that allows different configurations

The bike's performance is at its most aerodynamic when all of the Aero Module components are installed: 2 bottle cages + bottles, Aero box.

The Aero box can be removed to comply with UCI regulations.

CONFIGURATION	AERODYNAMICS
1. Bottle with Aero Box	
2. Bottles w/out Aero Box (UCI compliant configuration)	
3. Complete Aero Module (2 Bottles + Aero Box)	

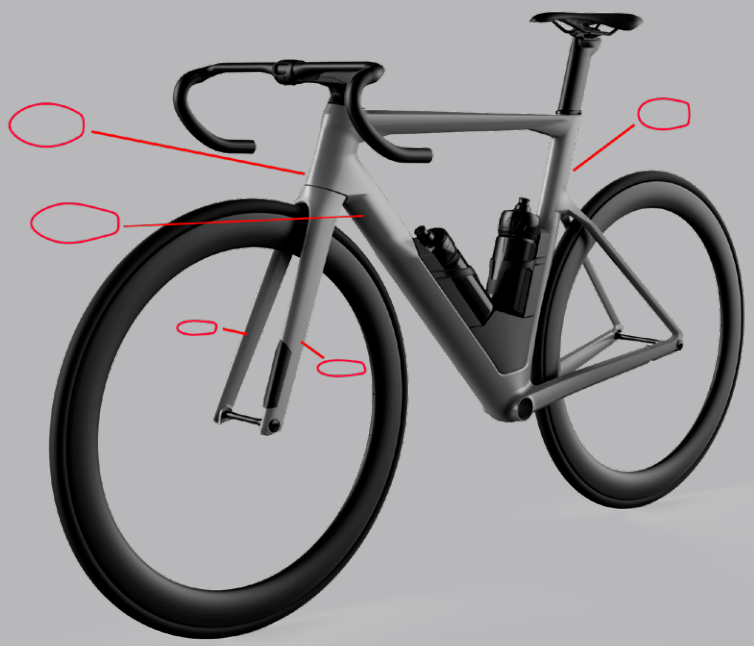
1. Bottle with Aero Box

2. Bottles w/out Aero Box
(UCI compliant)

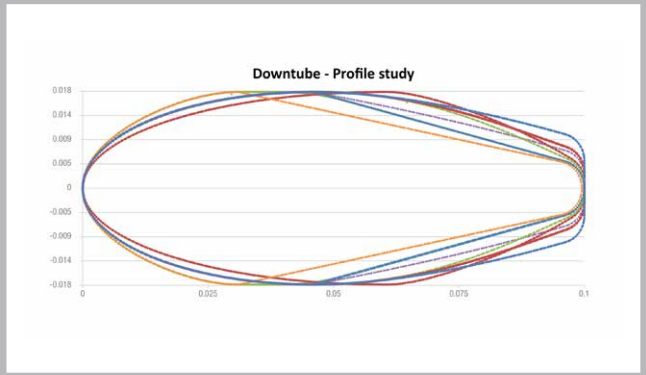
3. Complete Aero Module
(2 Bottles + Aero Box)

Timemachine Road Aerodynamic Performance

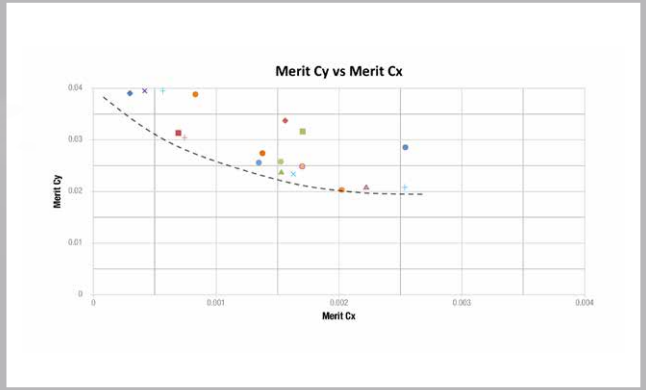
The tube shapes of the Timemachine Road have been developed on the basis of performance parameters defined to produce a perfect balance of aerodynamics, stiffness and weight for the fastest ride experience on the road.



A wide range of aerodynamic profiles has been assessed through CFD simulations for its aerodynamic performance at different yaw angles and wind speeds, defining specific shapes for each tube.



Only the profiles that match the performance parameters developed to simulate real-world riding conditions are finally selected for Timemachine Road.



Integrated Aero Cover

The minimal profile of the Aero cover optimizes the fork's aerodynamic profile through seamlessly integration and reduces the turbulence caused by the front brake caliper.

Speed Compliant:

Tuned Compliance Concept (TCC) Speed is all about performance, a compliance system designed to optimize power transfer and rolling resistance on every road surface, achieving peak speeds for extended periods of time.

The carbon layup of the Timemachine Road filters road vibration through the fork and the dropped seatstays design to improve power transfer efficiency while the flattened shapes of the ICS Aero stem deliver comfort and control without affecting aerodynamic performance.

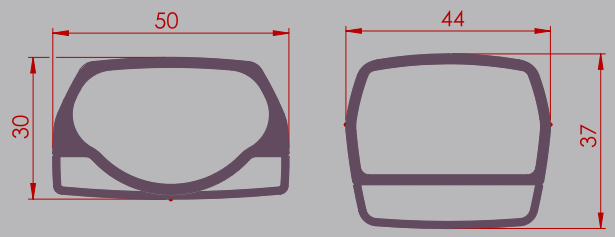
- Optimized power transfer
- Improved rolling speed
- Reduced fatigue
- Sharp and confident handling

CC Speed is a key feature of Timemachine Road, a solution built to minimize fatigue and help riders produce consistent power outputs over extended efforts.

1. ICS Aero - Stem Cross Section

• The reduced stem height offers increases vertical compliance for improved control on rough surfaces, while the increased width supports lateral stiffness.

ICS Aero **ICS**

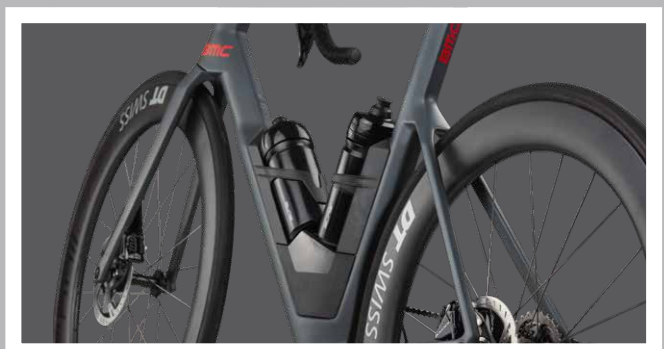


2. TCC Speed fork

• The narrow fork blades reduce aero drag and provide vertical compliance to filter-out vibrations and road imperfections at high speeds. Clearance for 28mm tires provides freedom of choice.

3. Dropped Seatstay Design

• BMC's iconic seatstay design improves vertical compliance and wheel traction retaining lateral stiffness for comfort over long efforts and sharp accelerations on every terrain.



Aerodynamic performance: track testing

We performed several track testing sessions with different rider profiles to get a comprehensive assessment of the aerodynamic performance of the Timemachine Road 01 in a controlled environment.

A scientific testing protocol was defined to ensure all variables would be taken into account in order to produce a consistent set of data that would define the performance of the new Timemachine Road 01.

We compared Timemachine Road 01 with Teammachine SLR01 using identical setups (including 2 water bottles), with the Timemachine Road 01 module the only differentiating factor.

Over the course of 40 hours and over 1700km of track testing the new Timemachine Road 01 produced consistent and measurable power savings for all rider profiles.

The bikes:

Timemachine Road 01

- Aero Module (with bottles)
- ICS Aero Cockpit

Teammachine SLR01

- Standard bottle cages
- ICS Cockpit

The riders:

Damien
BMC Switzerland R&D Team

170cm, 63Kg

Michael Schär
BMC Racing Team

198cm, 77Kg

Stefano
BMC Switzerland R&D Team

178cm, 69Kg

Aerodynamic performance: track testing results

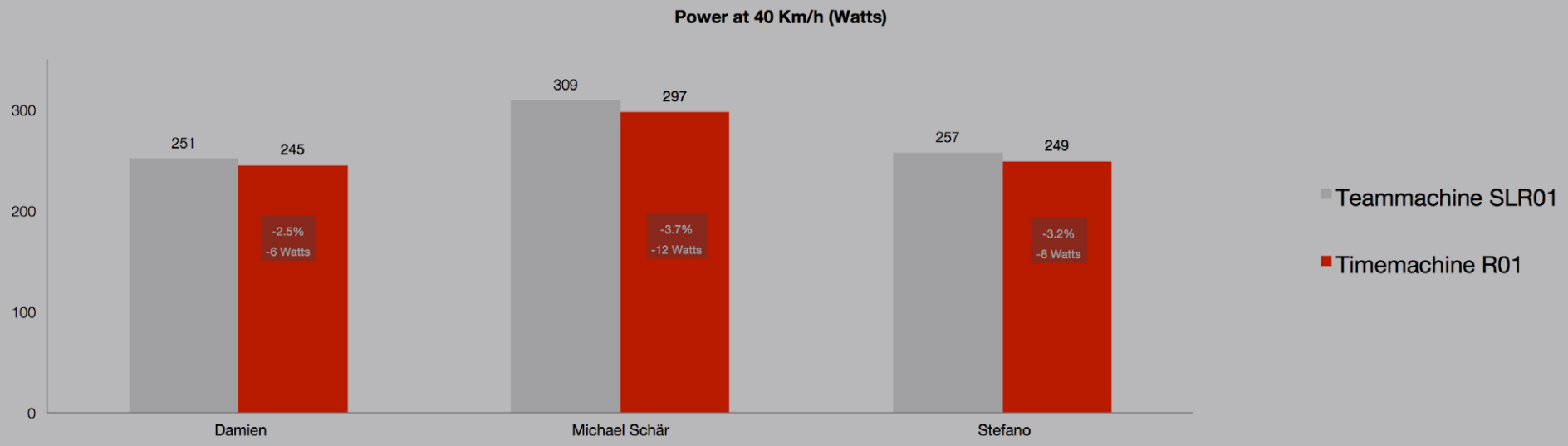
Designed for aerodynamic excellence, Timemachine Road 01 is fast regardless of your favorite metrics:

Power: 8 Watts gains

Speed: 1.5 Km/h faster

Time: 2:10 minutes saved over 40 Km

All measurements based on the power input of an average rider.



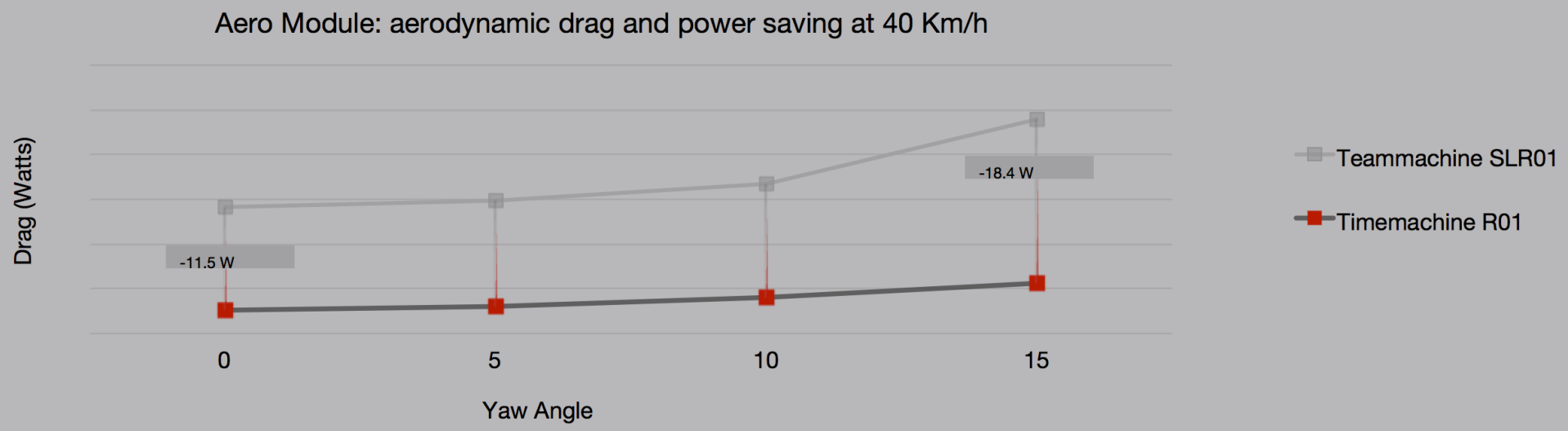
Aero Module – Aerodynamics and Functionality

Real-world riding is different from the controlled environment of the track; different factors influence aerodynamic performance, from side winds to the gear that every rider carries during a ride.

During our research we realized that standard water bottle cages have significant impact on aerodynamic performance, especially with side winds.

This was the inception of our vision for the Aero Module, an integrated and modular solution for hydration and storage that would improve both aerodynamic performance and functionality.

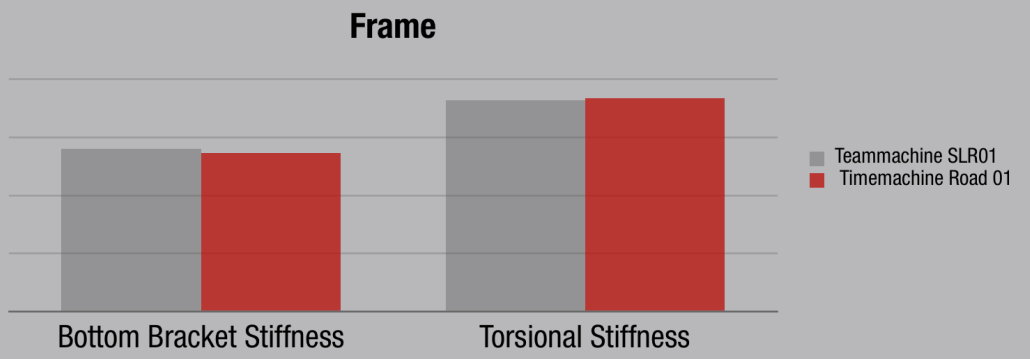
This core technology sets apart Timemachine Road 01 and produces up to 18 Watts gains at 15° yaw angles.



Timemachine Road 01 Performance:

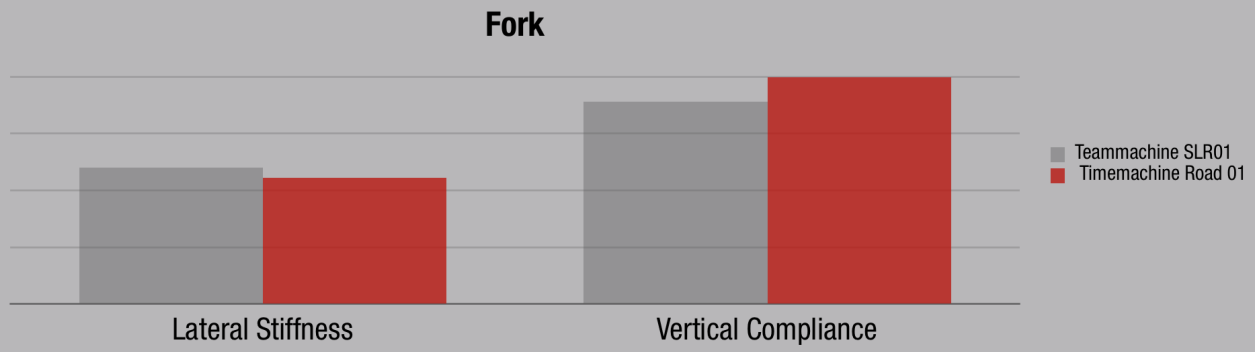
Power Transfer and Handling

The Timemachine Road 01 frame is designed to deliver the incredible stiffness of the Teammachine SLR01 for incredible accellerations and sharp handling.



Control and Compliance

The Timemachine Road 01 features an extremely capable fork, able to deliver the stiffness needed for perfect control while delivering compliance to adapt to every terrain at high speeds.



TIMEMACHINE ROAD

01 ONE

01 TWO

01 THREE

01 Module