

evolve®

**Performance  
Road Frameset  
Technical Whitepaper**



Whitepaper

CIMA

# PRODUCT SUMMARY

## CIMA

A Frameset Built To  
Defy Racing Norms

Three years ago, a revolutionary question sparked evolve®'s ambition:  
Can we reshape the performance limits of road bikes using our unique approach?  
This bold vision led to the birth of CIMA — a frameset designed to break racing norms  
and deliver an unparalleled riding experience. “CIMA,” meaning “summit” in Italian,  
reflects our pursuit of peak performance. The first rider to reach the highest point in the Giro d'Italia  
is honored with the Cima Coppi title — a symbol of triumph that inspired our frameset's name.

**「 CIMA IS DESIGNED TO 」**  
provide exceptional speed and a premium riding experience  
in any condition.

- Its ultra-lightweight construction even meets the UCI minimum weight standard effortlessly.
- Beyond performance, We hope CIMA could challenge conventional aesthetics with its unique design.

To achieve these groundbreaking innovations, we spared no effort over three years, investing in a new production line and bringing together top engineers. Guided by a shared vision, we constantly pushed the limits through innovation, testing, and relentless optimization. Finally, we succeeded in answering our initial question.



Just like our model name CIMA, evolve® shares relentless pursuit of the next peaks.

# CONTENT

Research  
&  
Development

evolve® R&D team is driven by a clear, unwavering goal: to deliver the ultimate performance advantage for our riders in ANY riding condition, which means CIMA can smooth out the bumps of a long Granfondo course, conserving energy for the riders, tackle steep climbs with ease, and take the lead in a weekend criterium race. When we finally achieved our 650g CIMA frame — saving 4.5W of power compared to other bikes in its class — we knew we had reached exactly what we set out to accomplish.

- |  |                |
|--|----------------|
| <p><b>a. 「 AERODYNAMICS 」</b></p> <ul style="list-style-type: none"> <li>• CFD simulations</li> <li>• KREUZA aerodynamic accessories: Apex one-piece handlebar, timing chip holder, water bottle</li> <li>• SSEH wind tunnel validation</li> </ul> | <p>03 ~ 11</p> |
| <p><b>b. 「 WEIGHT 」</b></p> <ul style="list-style-type: none"> <li>• FEA optimization</li> <li>• Materials and processes</li> <li>• Frameset weight performance</li> </ul>   | <p>12 ~ 14</p> |
| <p><b>c. 「 RIGIDITY AND STIFFNESS 」</b></p> <ul style="list-style-type: none"> <li>• Stiffness and quality</li> <li>• Standard and result of Zedler test</li> </ul>  | <p>15 ~ 17</p> |
| <p><b>d. 「 SIZES AND GEOMETRY 」</b></p> <ul style="list-style-type: none"> <li>• Geometry optimization for performance and comfort</li> </ul>  | <p>18 ~ 19</p> |

## Appendix

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# AERODYNAMICS

From Simulation  
to Tube Shape Optimization

When designing the frame tube shapes, we don't treat the head tube, fork, seat tube, down tube, and seatpost as isolated elements. Instead, we approach aerodynamic optimization from the perspective of the entire bicycle. Our goal is to achieve the best overall aerodynamic performance while maintaining a lightweight structure and high rigidity.

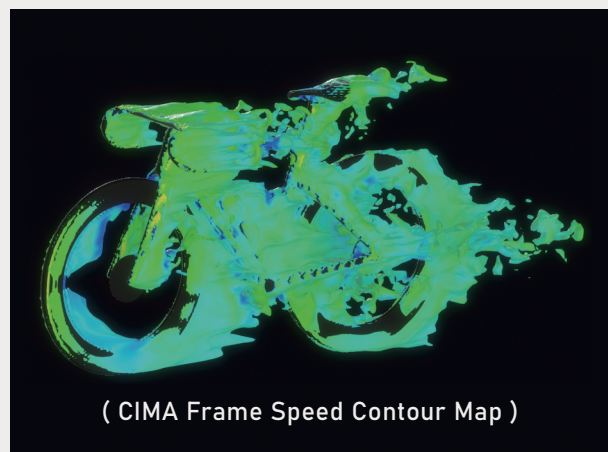


**CFD analysis shows that the frontal area of the seat tube/seatpost is a critical zone for aerodynamic improvement.**

While using a deep cross-section for the seatpost/head tube can enhance aerodynamics, in practice, this design often adds excessive weight with only marginal aerodynamic gains — something we aim to avoid. Instead, we opted for a narrower tube shape in the primary windward areas.

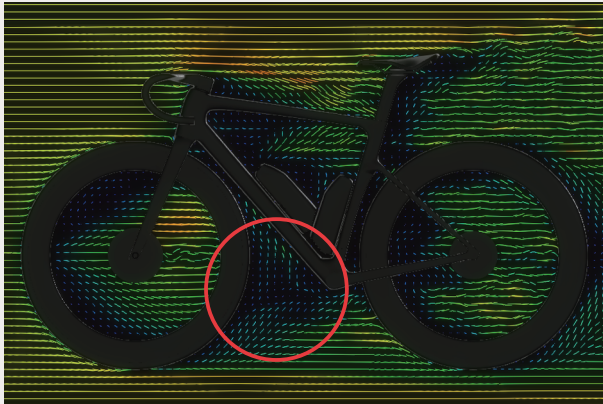
To enable a slimmer seat tube and seatpost, we integrated the battery into the seat tube.

This design not only reduces weight but also significantly enhances the aerodynamic performance of the CIMA frameset.





## Tube Shape Optimization Comparison



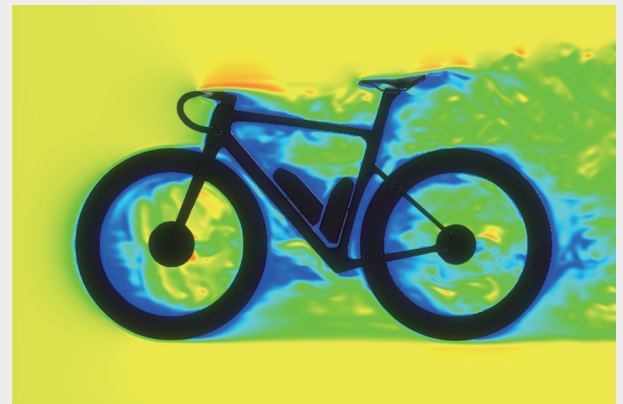
Airflow Visualization-before optimization



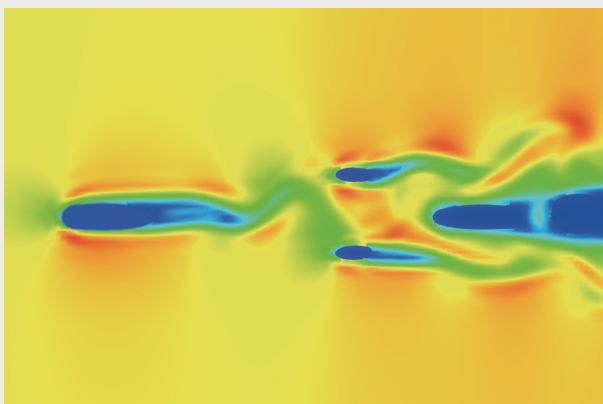
Airflow Visualization-after optimization



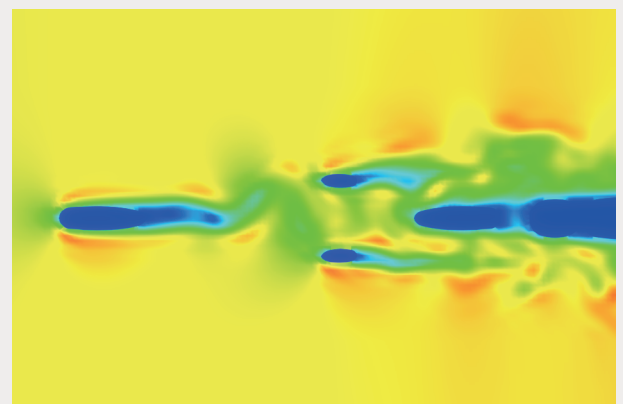
Speed Contour Map-before optimization



Speed Contour Map-after optimization



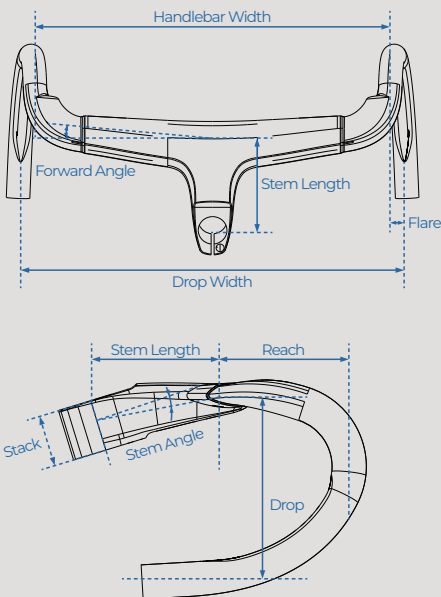
Speed Contour Map-before optimization



Speed Contour Map-after optimization

# AERODYNAMIC

Apex One-piece Handlebar



	36	38	40
Width Hood-to-Hood (mm)	360	380	400
Width Drop-to-Drop (mm)	390	410	430
Reach (mm)	80	80	80
Drop (mm)	128	128	128
Drop Flare	6.6°	6.6°	6.6°
Forward Angle	6°	6°	6°
Stem Angle	-6°	-6°	-6°
Stack (mm)	35.5	35.5	35.5
Length (mm)	90 / 100 / 110 / 120 / 130 / 140		

**CAD** analysis reveals that laminar airflow at the front of the bicycle plays a significant role in overall aerodynamic drag.

As a key component of the frame system, the handlebar was a primary focus in our optimization efforts, balancing

「 aerodynamics 」

「 weight 」

「 rigidity 」

the result is a one-piece aerodynamic handlebar weighing under **300g**(380\*110) ,

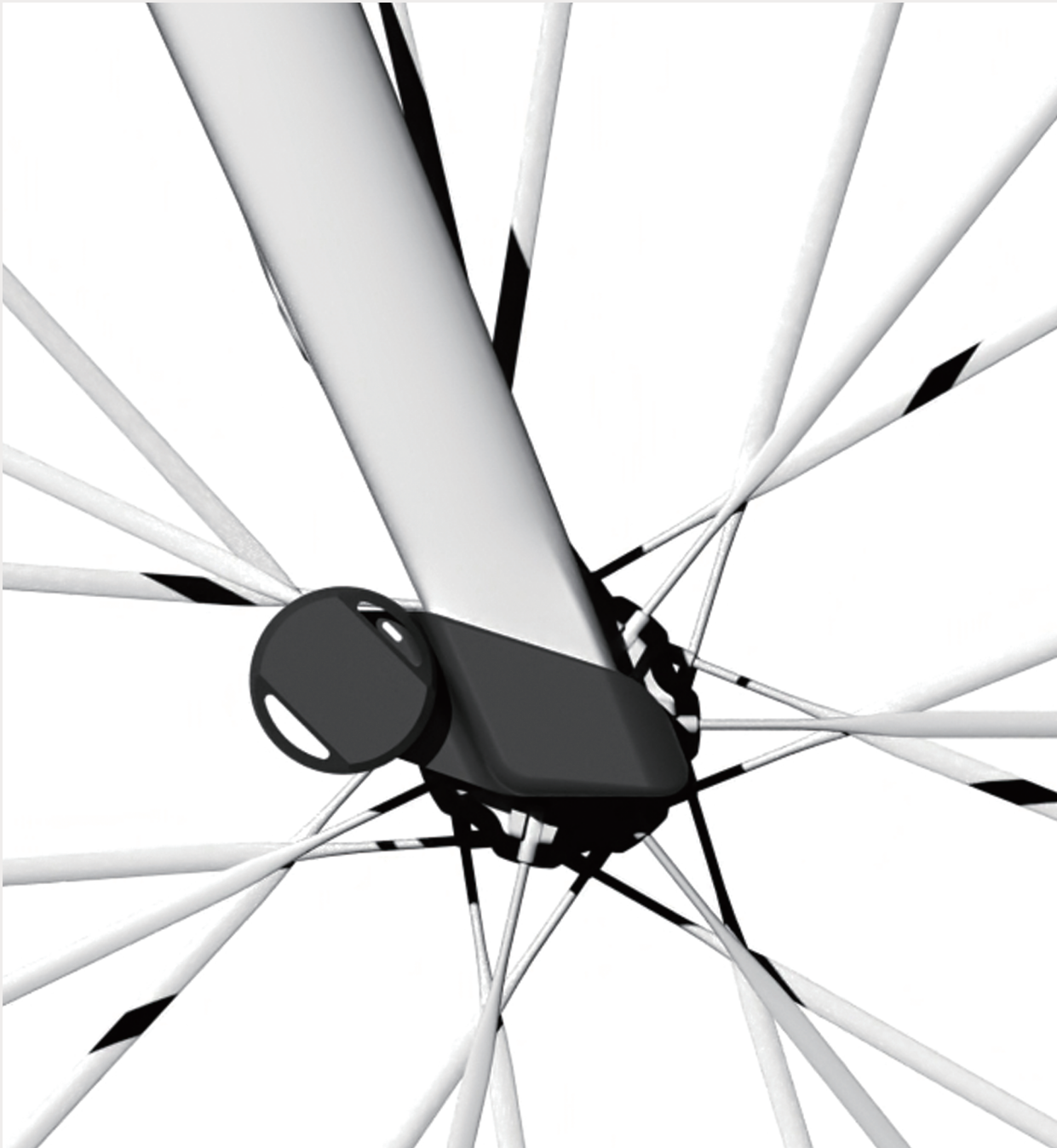
featuring a NACA-derived cross-sectional profile with a minimum thickness of just **16mm**.

Despite its lightweight and slim design, it delivers exceptional rigidity — **180N/mm**.



# AERODYNAMIC

Timing Chip Holder

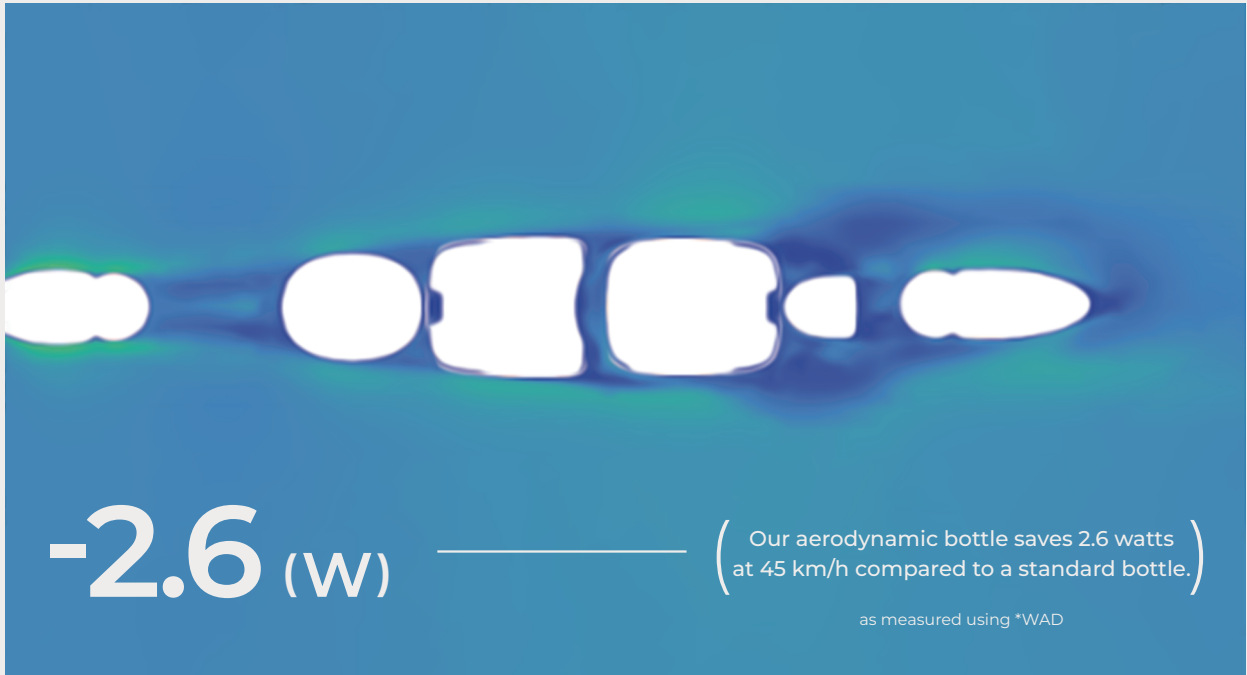


In response to rider needs, we designed a dedicated bracket to conceal the timing chip behind the fork.

According to our calculations, this design reduces the CdA by approximately **0.0008** — roughly equivalent to the aerodynamic advantage of **two tire widths** in a sprint to the finish line.

# AERODYNAMIC

Water Bottle



## Aerodynamic Water Bottle

Standard bottles are not aerodynamic by nature. With the Evolve CIMA, we've integrated bottles and bottle cages into the overall aerodynamic design, shaping the frame, wheelset, and water bottle to a cohesive aerodynamic profile that complies with UCI regulations.

At the same time, we recognize that standard bottles remain the lightest and most practical choice for both racing and training. That's why our bottle cages are fully compatible with standard bottles, while the aerodynamic design helps minimize their wind resistance.

Our aerodynamic bottle saves 2.6 watts at 45 km/h compared to a standard bottle (as measured using \*WAD).

**When using two aero bottles, the aerodynamic performance is even better than riding without any bottles at all.**

**This advantage means you no longer need to discard your bottle before the finish line — it can give you that crucial edge in the final sprint.**



## Wind Tunnel Testing

To validate our CFD analysis and design assumptions, we conducted wind tunnel testing at Silverstone Sports Engineering Hub in the UK.

### Parameter conditions:

**45 km/h**

Relative wind speed

**25 km/h**

Wheels Speed

**-20°→0°→20°**

Transient yaw angle simulation  
( frequency 100Hz )

## Test Subject

Wind Tunnel Testing Configuration	
Frameset	Water Bottle
evolve CIMA M	No water bottles
evolve CIMA M	Standard Water Bottle X2
evolve CIMA M	KREUZA aerodynamic water bottle X2
S*** Model-8 54	No water bottles
S*** Model-8 54	Standard Water Bottle X2

\*Other configuration: Roval Rapide CLX II wheelset, Continental Grand Sport Race 28c tire, other setups remain the same, the height is set as 72.5mm, the handlebar is 96mm high.

# Abstract

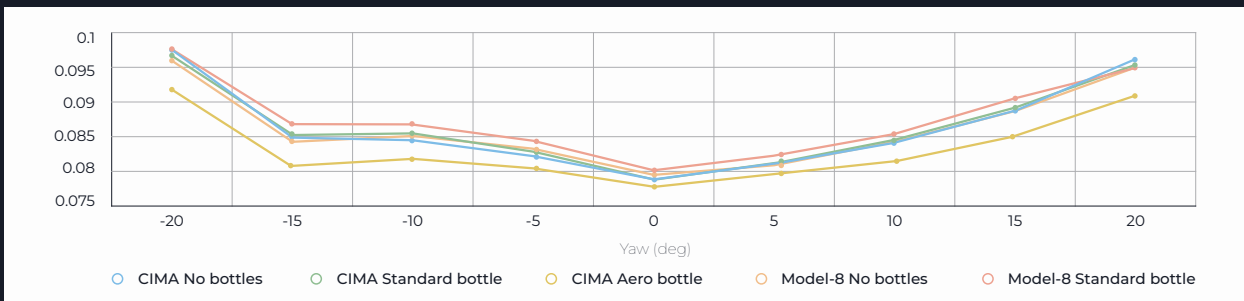
SSEH Wind Tunnel Testing

This white paper presents a comparative analysis of the aerodynamic performance of three road bikes, using controlled wind tunnel testing and a dynamic yaw-angle weighted model. The study quantifies differences in aerodynamic drag, energy efficiency, and time advantage. All tests were conducted on the same day, in the same wind tunnel, under consistent conditions to ensure accuracy and fairness. We performed statistical analysis on data collected from various test parameters. Each test covered nine yaw angles, with an average of approximately 3,000 data points per angle—resulting in around 27,000 data points per test. The drag coefficient (CdA) values from the nine yaw angles were then weighted using the Barry2018 method to generate the final comparative CdA results.

## Data Analysis and Result

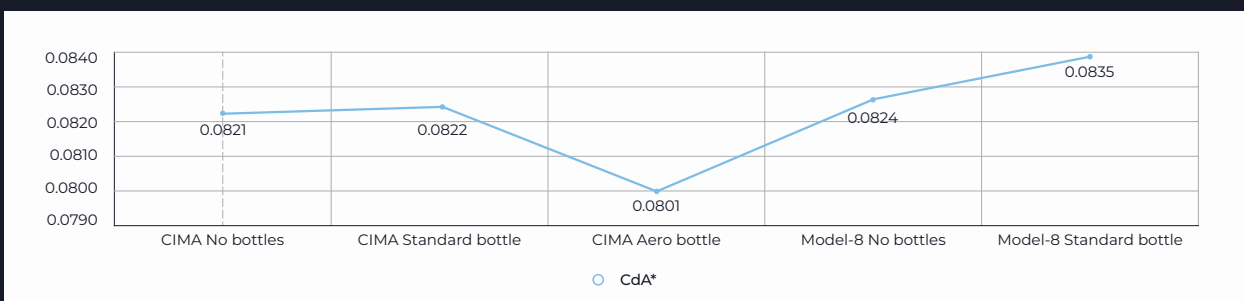
Yaw angle [°]	evolve CIMA M No bottles	evolve CIMA M Standard bottle	<b>evolve CIMA M KREUZA Aero bottle</b>	S*** Model-8 54/ No bottles	S*** Model-8 54/ Standard bottle
-20	0.09727	0.09649	<b>0.09169</b>	0.09588	0.09743
-15	0.08473	0.08510	<b>0.08065</b>	0.08417	0.08669
-10	0.08440	0.08541	<b>0.08158</b>	0.08509	0.08670
-5	0.08214	0.08272	<b>0.08044</b>	0.08318	0.08429
0	0.07888	0.07877	<b>0.07772</b>	0.07943	0.08006
5	0.08106	0.08094	<b>0.07965</b>	0.08086	0.08223
10	0.08399	0.08445	<b>0.08145</b>	0.08415	0.08528
15	0.08869	0.08900	<b>0.08513</b>	0.08860	0.09038
20	0.09594	0.09507	<b>0.09059</b>	0.09485	0.09478

The average CdA value of the five bicycles calculated by dynamic yaw angle weighting:



Average CdA: Calculated as the mean under standardized differential conditions.

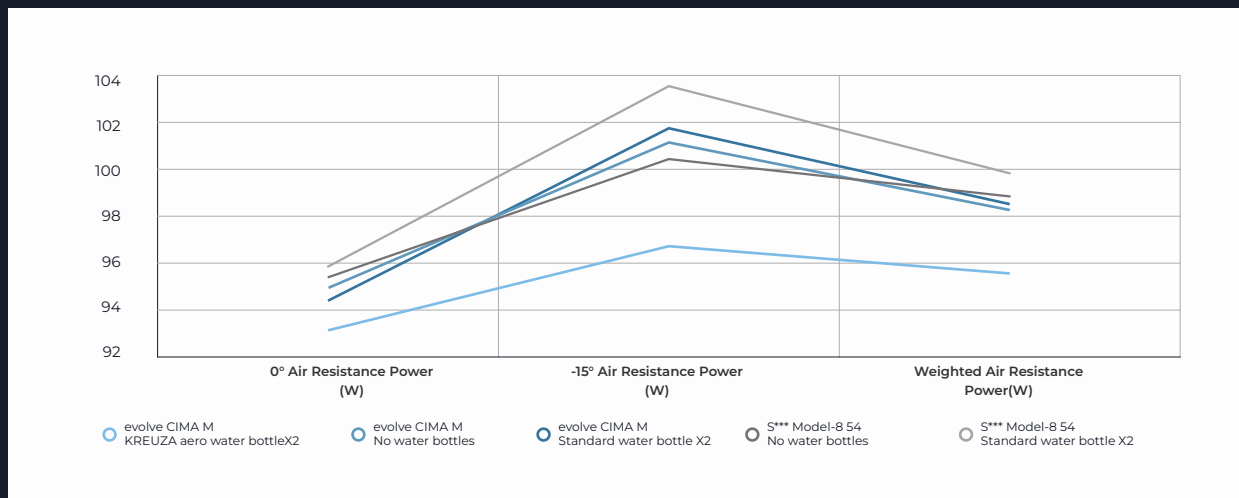
Yaw angle [°]	evolve CIMA M No bottles	evolve CIMA M Standard bottle	<b>evolve CIMA M KREUZA Aero bottle</b>	S*** Model-8 54/ No bottles	S*** Model-8 54/ Standard bottle
0	0.07888	0.07877	<b>0.07772</b>	0.07943	0.08006
5	0.06993	0.07013	<b>0.06860</b>	0.07029	0.07135
10	0.04572	0.04612	<b>0.04426</b>	0.04595	0.04669
15	0.02055	0.02063	<b>0.01965</b>	0.02047	0.02098
20	0.00869	0.00862	<b>0.00820</b>	0.00858	0.00865
Weighted Average CdA*	0.08106	0.08224	<b>0.08010</b>	0.08241	0.08351



The "Weighted Average CdA" is weighted using the Barry 2018 weighting method.

## Air Resistance Power Comparison

	0° Air Resistance Power (W)	-15° Air Resistance Power (W)	Weighted Air Resistance Power(W)	Weighted Power Savings(W)
<b>evolve CIMA M / KREUZA aero water bottle X2</b>	<b>93</b>	<b>96.5</b>	<b>95.8</b>	<b>-4.1</b>
evolve CIMA M / No water bottles	94.4	101.4	98.2	-1.7
evolve CIMA M / Standard water bottle X2	94.2	101.8	98.4	-1.5
S*** Model-854 / No water bottles	95	100.7	98.6	-1.3
S*** Model-854 / Standard water bottle X2	95.8	103.7	99.9	0.0



## Time Advantage In Competition Scenario

If the riders maintain the same riding power output, the speed/time differences are as follows :

	Speed(km/h)	Time(minute)	Second Saved/40KM 300W
<b>evolve CIMA M / KREUZA aero water bottle X2</b>	<b>44.1</b>	<b>54.4</b>	<b>48</b>
evolve CIMA M / No water bottles	43.8	54.8	24
evolve CIMA M / Standard water bottle X2	43.7	54.9	18
S*** Model-854 / No water bottles	43.7	54.9	18
S*** Model-854 / Standard water bottle X2	43.5	55.2	0

### Parameter list

Rider power total=300W

Riding distance=40 km

Ambient wind speed=0 m/s

CRR(Rolling resistance)=0.0032

mr(Total mass)=80 kg

Ec(Transmission efficiency)=97.7%

Rider CdA=0.20 m<sup>2</sup>

If the rider maintains the same sprint power output, the speed/distance differences are as follows

	Frameset CdA	Total CdA	Sprint Terminal Speed (km/h)	Sprint Distance (m)	Distance Gap (VS.Baseline Group)
<b>evolve CIMA M / KREUZAU aero water bottle X2</b>	<b>0.0810</b>	<b>0.2810</b>	<b>67.5</b>	<b>226.4</b>	<b>Baseline Group</b>
evolve CIMA M / No water bottles	0.0815	0.2815	67.4	226.2	-0.2
evolve CIMA M / Standard water bottle X2	0.0820	0.2820	67.3	226.0	-0.4
S*** Model-854 / No water bottles	0.0825	0.2825	67.2	225.8	-0.6
S*** Model-854 / Standard water bottle X2	0.0830	0.2830	67.1	225.6	-0.8

## Parameter list

Initial speed=55 km/h      Rider power total=1200 W      Time: 15 seconds      Ambient wind speed=0 m/s  
 CRR(Rolling resistance)=0.0032      mr(Total mass)=80 kg      Ec(Transmission efficiency)=97.7%      Rider Cda=0.20 m<sup>2</sup>

## Reference :

- Barry N, 2018, A new method for analysing the effect of environmental wind on real world aerodynamic performance in cycling proceedings MDPI, 2(211),doi:10.3390/proceedings2060211
- Martin JC, Douglas ML, Cobb JE, McFadden KL and Coggan AR,1998, Validation of a mathematical model for road cycling power,Journal of Applied Biomechanics,14,p 276-291

## Appendix: Items and Formula

CdA(Drag Area): The effective projected area of the frame in contact with the air (m<sup>2</sup>). The smaller the value, the better the aerodynamics.

Yaw angle: The angle between the wind direction and the riding direction. 0° is facing the wind direction, and ±20° is the crosswind limit.

$$\text{Sprint acceleration power : } P_{acc} = P_{effective} - (P_{air} + P_{roll} + P_{bearing})$$

$$\text{Kinetic energy change : } \Delta KE = \frac{1}{2} m(v_{final}^2 - v_{initial}^2) + \frac{1}{2} I_{wheel} \left( \left( \frac{v_{final}}{r} \right)^2 - \left( \frac{v_{initial}}{r} \right)^2 \right)$$

$$\text{Total Power : } P_{total} = \frac{1}{E_c} \left( \frac{1}{2} \rho C_D A V_G^3 + V_G \cdot C_{RR} \cdot m_r \cdot g \right)$$

$$\text{Rolling Resistance Power : } P_{roll} = C_{RR} \cdot m \cdot g \cdot v$$

$$\text{Sprint acceleration : } a = \frac{P_{acc} \cdot \Delta t}{m \cdot v + \frac{I_{wheel}}{r^2} \cdot v}$$

$$\text{Sprint Distance : } d = \sum_{t=0}^T \left( v_t \Delta t + \frac{1}{2} a_t (\Delta t)^2 \right)$$

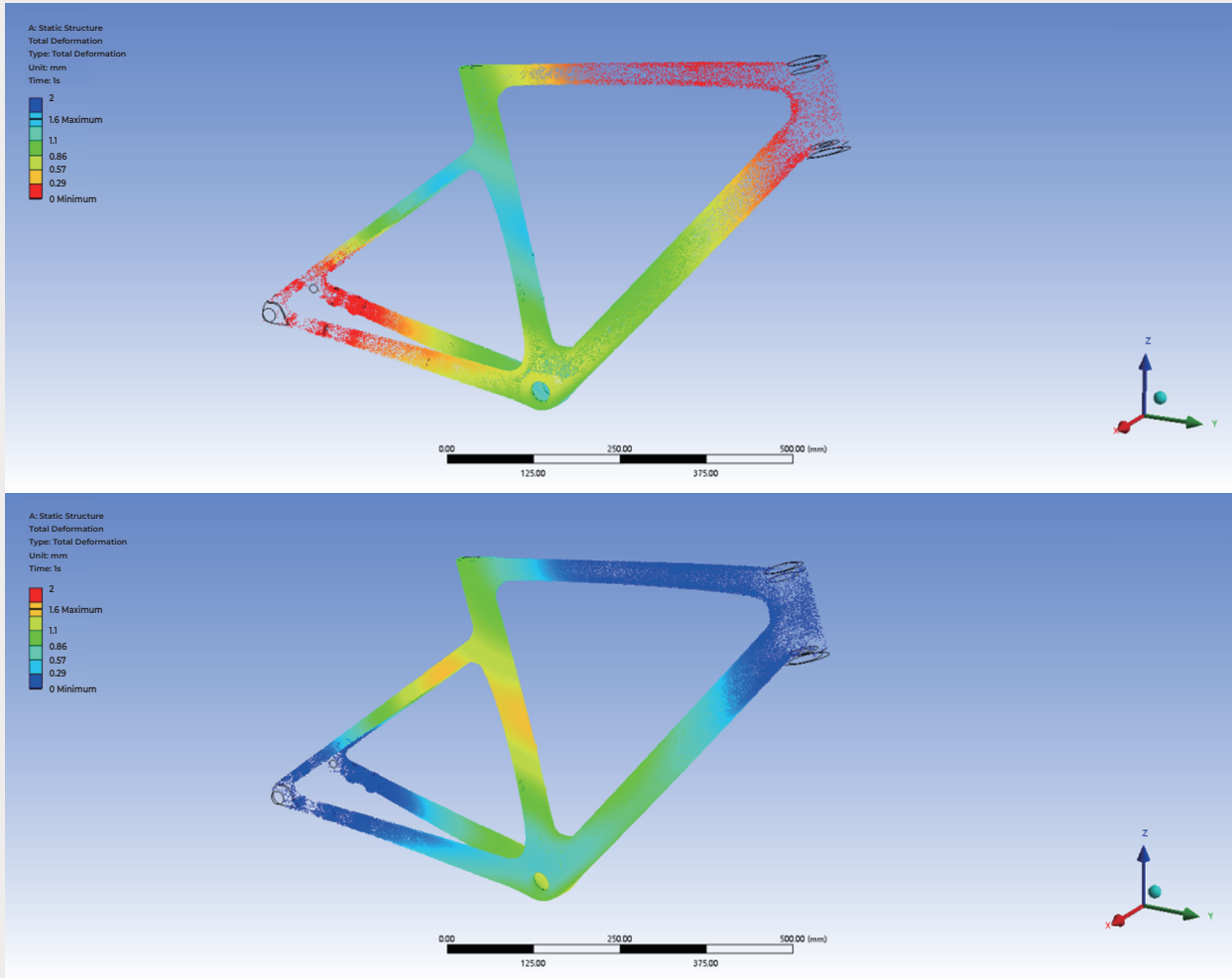
$$\text{weighted average CdA : } C_{D,A}^* = \frac{\sum_{j=1}^n \omega_j \cdot C_{D,A_j}}{\sum_{j=1}^n \omega_j}$$

$$\text{Air Resistance Power : } P = \frac{1}{2} \rho v^3 C_d A$$

$$\text{Air Resistance : } F = \frac{1}{2} \rho v^2 C_d A$$

# WEIGHT

FEA Optimization



FEA (Tube Shape Optimization, Head tube/BB Stiffness, Seatpost comfort)

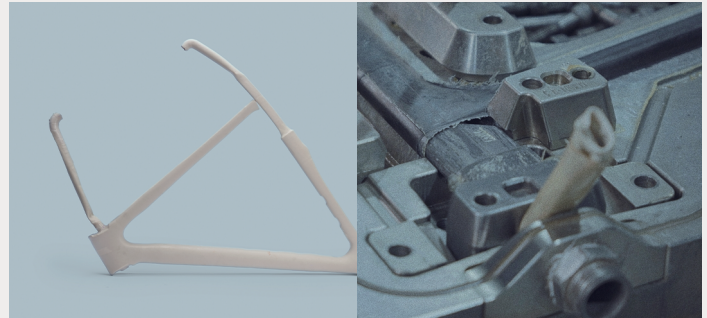


## Frame Stiffness

Developing a lighter frame with more aerodynamic tube shapes is a challenging task, as it requires a careful balance between the two. Once the overall aerodynamic design of the frame was confirmed, we first focused on optimizing the connection points and shapes. We then applied finite element analysis (FEA) to refine the carbon fiber layup. Using FEA, we can simulate the frame's behavior under specific load conditions. By testing multiple designs through simulation, we were able to achieve the desired performance.

# WEIGHT

Materials & Processes



**RIGIDITY** **12%<sup>↑</sup>**

evolve CIMA uses T1100 & M40 carbon fiber, a specially formulated resin that increases rigidity by 12% compared to traditional resins.

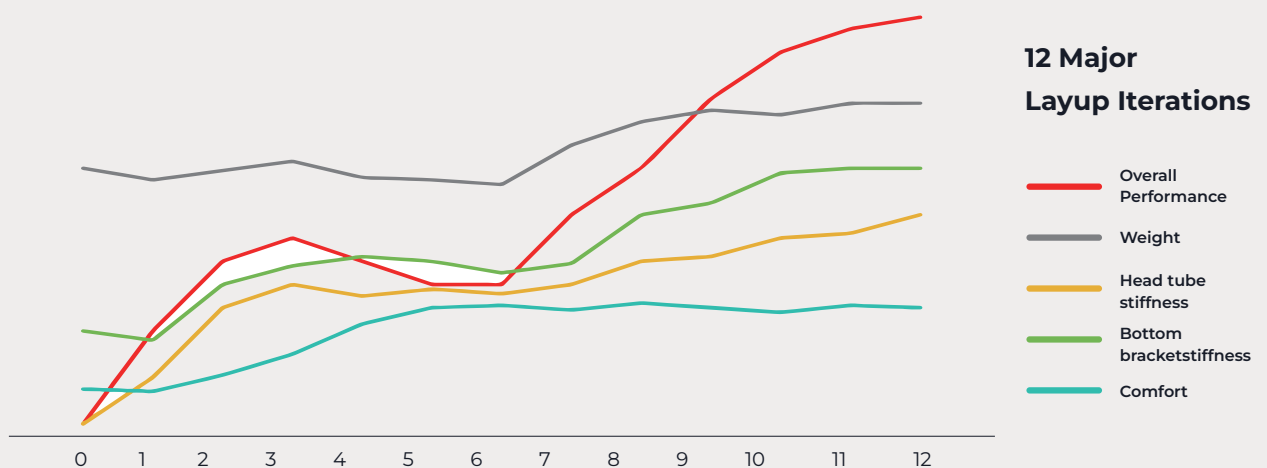
## LATEX inner film+ vacuum outer film

The latex inner film can effectively enhance the internal smoothness and thus improve the rigidity. The vacuum outer film can better control the resin loss rate, reduce product defects and thus improve product stability.



## Carbon Fiber Layup

Based on the results from FEA and the measured data, the initial bike we produced weighed only about 620g. However, this frame did not meet our performance requirements. Throughout the development process, CIMA underwent 12 major iterations of the first size layup. Each material proportion was meticulously calculated, and the size and shape of each carbon fiber layer were rigorously tested and validated by our engineering team. This iterative process ensured that every size and angle of carbon fiber maximized its performance, eliminating unnecessary layup that offered no performance benefits.



# WEIGHT

Is it just the frameset that's light?  
That's far from enough.

## Weight by Size (Raw, Unpainted)

Frame size	CIMA frames	Fork (300mm steerer)
XS	640g	355g
S	643g	
M	650g	
ML	666g	
L	699g	
XL	720g	

## Complete Bike Weight List

Category	Components	evolve CIMA M-Mist
Frameset	Frame (without components)	704.5g
	Fork (uncut Steerer)	367.5g
	Seatpost set	141.0g
	Seatpost clamp	17.5g
	DI2 Battery mount	5.2g
	Front derailleur hanger	6.1g
	Rear derailleur hanger (standard)	26.8g
	Axles (F&R)	48.9g
	Headset bearing	41.5g
	Headset compression ring	5.1g
	Headset cover	10.3g
	Expansion hanging core	15.0g
	Water bottle cage mounting bolts	3.8g
One-piece Handlebar	One-piece handlebar (380*110)	305.0g
	Top cover (with bolts)	10.0g
	Computer mount (with Garmin base and bolts)	15.0g
	Light holder (with bolts)	4.3g
Weight	Frameset (without handlebar) total weight	<b>1393.2g</b>
	Frameset (with handlebar) total weight	<b>1727.4g</b>

# STIFFNESS AND QUALITY

CIMA  
Frameset

## Overall Durability and Maintenance

We prioritized long-term durability in every component of the frame. At the head tube, we incorporated a new bearing from CeramicSpeed, utilizing their SLT technology — a unique combination of solid polymer and stainless steel components that significantly enhances bearing longevity. For the bottom bracket, we adopted BSA thread specifications and offered CeramicSpeed's highest-quality bottom bracket options. At the derailleur hanger, we implemented UDH specifications, making the derailleur hanger both universal and easy to maintain.



BSA Threaded  
Bottom Bracket



Ceramicspeed SLT  
Headset Bearings



Sram UDH  
Rear Derailleur Hanger

# ZEDLER

Standard and Result



Prüfberichte und Prüfmuster müssen mindestens elf Jahre aufbewahrt werden. | Store test samples and test reports for at least eleven years.  
 Prüfberichte dürfen nur vollständig und nicht nur in Auszügen wiedergegeben werden. | The test reports must be reproduced only as a unit.

Prüfbericht | Test report 25-19863-P

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Ausstellungsdatum   Date of issue 10.04.2025	



**Zedler-Institut Performance 2022-11 Prüfungen | Zedler-Institut Performance 2022-11 Testing**

Eingangsdatum der letzten Information / Zubehör Teile   Receipt date of last information and equipment parts 02.04.2025	Datum Prüfbeginn   Date start of testing 03.04.2025
--	--

Zedler-Institut 2022-11 Normiertes Rahmengewicht   Standardized frame weight	Test Nr.	Ergebnis   Result
-	7	738 g
Bemerkungen   Notes		
-		

Zedler-Institut 2022-11 Lenkkopfstiftigkeit (LKS)   Head tube stiffness (LKS)	Test Nr.	Ergebnis   Result
-	1	82 Nm / °
Bemerkungen   Notes		
-		

Zedler-Institut 2022-11 STW Lenkkopfstiftigkeit (Stiffness-to-Weight-Factor)   STW Head tube stiffness (Stiffness-to-Weight-Factor)	Test Nr.	Ergebnis   Result
-	8	111,6 Nm / ° / kg
Bemerkungen   Notes		
-		

Zedler-Institut 2022-11 Treteigenstiftigkeit (TLS II)   Bottom bracket stiffness (TLS II)	Test Nr.	Ergebnis   Result
-	2	53 N / mm
Bemerkungen   Notes		
Test was performed with original fork 25-19864.		

Zedler-Institut 2022-11 Komfort (KOM)   Comfort stiffness (KOM)	Test Nr.	Ergebnis   Result
-	3	147 N / mm
Bemerkungen   Notes		
Test was performed with 690 mm seat height. This corresponds to 210 mm seat post extension length. Test was performed with original fork 25-19864 and original seat post 25-19866.		

Zedler-Institut 2022-11 Gabel Bremsstiftigkeit (GST)   Fork brake stiffness (GST)	Test Nr.	Ergebnis   Result
-	4	103 N / mm
Bemerkungen   Notes		
-		



Zedler-Institut 2022-11 Gabel Seitenstiftigkeit (GST)   Fork lateral stiffness (GST)	Test Nr.	Ergebnis   Result
-	5	48 N / mm
Bemerkungen   Notes		
-		

Zedler-Institut 2022-11 Gabel Komfort (GST)   Fork comfort (GST)	Test Nr.	Ergebnis   Result
-	6	103 N / mm
Bemerkungen   Notes		
-		



By applying high-modulus carbon fiber layups in key stress zones of the frame, the evolve® CIMA's sturdy downtube delivers exceptional torsional stiffness. As a result, the frame achieves industry-leading bottom bracket torsional stiffness, significantly enhancing overall ride quality.

# ZEDLER

Safety and Performance

Prüfbericht   Test report		25-19864
<b>Auftraggeber   Principal</b>		
Firma   Company Xiamen Yuan An Composite Technology Co., Ltd Straße   Street No. 183 Xingguilian Road	Ansprechpartner   Contact person Pinjian Xia (Summer) Postleitzahl + Stadt   ZIP code + city ROC-Xiamen	
<b>Road Racing fork bike category 1 – DIN EN ISO 4210:2023-05 and Advanced 2022-11 test</b>		
Prüfnummer Gabel   Test number fork 25-19864	Prüfnummer Lenker/Vorbau   Test number handlebar-stem-combination 25-19865	
Hersteller Gabel   Manufacturer fork evolve	Hersteller Vorbau   Manufacturer handlebar-stem-combination evolve	
Modellbezeichnung extern Gabel   Model name external fork cima	Modellbezeichnung extern Vorbau   Model name external handlebar-stem-combination cima	
Modellbezeichnung intern Gabel   Model name internal fork -	Modellbezeichnung intern Vorbau   Model name internal handlebar-stem-combination -	
Seriennummer Gabel   Serial number fork FCX01-44 // 24120737	Seriennummer Vorbau   Serial number handlebar-stem-combination -	
Bemerkungen   Notes Categories see last pages.		
<b>Fotodokumentation   Photo documentation</b>		
		
<small>Prüfberichte und Prüfnummern müssen mindestens 48 Jahre aufbewahrt werden.   Test reports and test numbers must be kept for at least 48 years. Prüfberichte dürfen nur vollständig und nicht nur in Auszügen wiedergegeben werden.   The test reports must be reproduced fully or not.</small>		
Prüfbericht   Test report 25-19864	© www.zedler.de	Seite 1 von 20   Page 1 of 20
Freigebe durch:   Authorized by B. Eng. Norman Thalheimer Ausstellungsdatum   Date of issue 29.04.2025		Unterschrift   Signature <i>Norman Thalheimer</i>
		

Zusammenfassung   Summary		
Eingangsdatum der letzten Information / Zubehör Teile   Receipt date of last information and equipment parts 02.04.2025	Datum Prüfbeginn   Date start of testing 10.04.2025*	
Prüfgrundlage   Test based on DIN EN ISO 4210:2023-05		Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut Advanced 2022-11		Ergebnis   Result ok
Prüfgrundlage   Test based on DIN EN ISO 4210:2023-05	- Brake	Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut Advanced 2022-11	- Brake	Ergebnis   Result ok
Prüfgrundlage   Test based on DIN EN ISO 4210:2023-05	- Fork steerer fatigue	Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut Basic 2022-11	- Fork steerer fatigue	Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut End of Life 2022-11		Ergebnis   Result no
Bemerkungen   Notes *Start of testing delayed due to previous performance test. See test report 25-19863-P. Fork was partially tested with frame 25-19863, handlebar-stem-combination 25-19865 and stem 18-7234. Further details see test report 25-19863.		

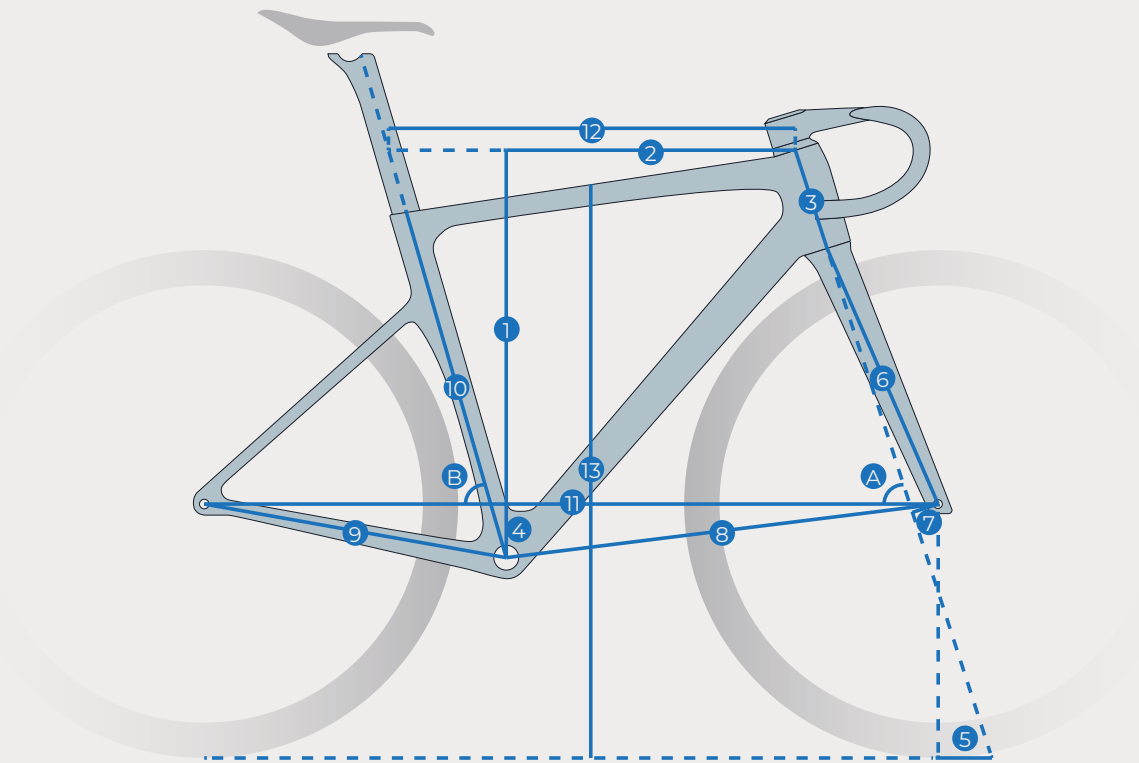
Prüfbericht   Test report		25-19863
<b>Auftraggeber   Principal</b>		
Firma   Company Xiamen Yuan An Composite Technology Co., Ltd Straße   Street No. 183 Xingguilian Road	Ansprechpartner   Contact person Pinjian Xia (Summer) Postleitzahl + Stadt   ZIP code + city ROC-Xiamen	
<b>Road Racing frame bike category 1 – DIN EN ISO 4210:2023-05 and Advanced 2022-11 test</b>		
Hersteller   Manufacturer evolve	Modellbezeichnung extern   Model name external cima	Modellbezeichnung intern   Model name internal -
Seriennummer   Serial number -	Postleitzahl + Stadt   ZIP code + city CCK01-M/FT 25021931	Postleitzahl + Stadt   ZIP code + city CCK01-M/ML-CSR 25022192
Bemerkungen   Notes Categories see last pages.		
<b>Fotodokumentation   Photo documentation</b>		
		
<small>Prüfberichte und Prüfnummern müssen mindestens 48 Jahre aufbewahrt werden.   Test reports and test numbers must be kept for at least 48 years. Prüfberichte dürfen nur vollständig und nicht nur in Auszügen wiedergegeben werden.   The test reports must be reproduced fully or not.</small>		
Prüfbericht   Test report 25-19863	© www.zedler.de	Seite 1 von 19   Page 1 of 19
Freigebe durch:   Authorized by B. Eng. Norman Thalheimer Ausstellungsdatum   Date of issue 29.04.2025		Unterschrift   Signature <i>Norman Thalheimer</i>
		

Zusammenfassung   Summary		
Eingangsdatum der letzten Information / Zubehör Teile   Receipt date of last information and equipment parts 02.04.2025	Datum Prüfbeginn   Date start of testing 10.04.2025*	
Prüfgrundlage   Test based on DIN EN ISO 4210:2023-05		Ergebnis   Result (ok)
Prüfgrundlage   Test based on Zedler-Institut Advanced 2022-11		Ergebnis   Result (ok)
Prüfgrundlage   Test based on JIS D 9401:2005   7.2 b)		Ergebnis   Result no
Prüfgrundlage   Test based on DIN EN ISO 4210:2023-05	- Brake	Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut Advanced 2022-11	- Brake	Ergebnis   Result ok
Prüfgrundlage   Test based on Zedler-Institut End of Life 2022-11		Ergebnis   Result no
Bemerkungen   Notes *Start of testing delayed due to previous performance test. See test report 25-19863-P. Frame was tested with fork 25-19864, seat post 25-19866 and handlebar-stem-combination 25-19865. Further details see test report 25-19864.		

CIMA passed the Zedler adv test and even added mountain bike testing standards in key parts of the frameset.

# GEOMETRY

CIMA competition-level  
geometry



	XS	S	M	ML	L	XL
HEIGHT/CM	<163	161-170	168-177	175-184	182-192	>190
1.STACK/MM	506	528	544	562	580	608
2.REACH/MM	371	378	384	390	397	406
3.HEAD TUBE LENGTH/MM	103	122	138	153	173	203
A.HEAD TUBE ANGLE	71.1°	72.2°	73°	73.8°	73.8°	73.8°
4.BB DROP/MM	74	74	72	72	70	70
5.TRAIL/MM	70	63	58	57	57	57
6.FORK LENGTH FULL/MM	372	372	372	372	372	372
7.FORK RAKE/OFFSET/MM	44	44	44	40.2	40.2	40.2
8.FRONT CENTER/MM	571	573	579	579	591	608
9.REAR CENTER/MM	410	410	410	410	410	410
10.SEAT TUBE LENGTH/MM	443	465	481	499	517	540
B.SEAT TUBE ANGLE	75°	75°	74°	74°	73.5°	73.5°
11.WHEELBASE/MM	969	973	978	978	991	1008
12.TOP TUBE LENGTH/MM	507	519	540	551	569	586
13..STANDOVER HEIGHT/MM	727	749	767	785	805	829

# GEOMETRY

CIMA competition-level geometry



**The frameset consists of over 80 components, both large and small.**

worked tirelessly — from building a dedicated supply chain and independently designing and developing each part, to incorporating feedback from professional cyclists. Drawing on years of experience in carbon fiber bicycle design, we turned an ambitious idea into reality: CIMA.

Every detail, from the frame's contours to the aerodynamic water bottle, reflects our team's dedication and pursuit of perfection, embodying our uncompromising standards for quality. True to our brand motto, we remain committed to constant evolution.

Axles x 2	Other accessories x 3	Seatpost clamp accessories x 4	***Timing chip holder on forks
**Fork x 2	Headset accessories x 6	Computer mount accessories x 7	***Seatpost number plate holder
Bar tape *1	Seatpost accessories x 8	D12 Battery mounting accessories x 3	***CeramicSpeed Bottom Bracket
**Seatpost x 4	Handlebar accessories x 5	Front derailleur hanger accessories x 3	***Aerodynamic water bottle cage
**Frameset x 6	**One-piece handlebar x 18	***Seatpost radar holder	***UDH direct mount rear derailleur hanger
Rubber plugs x 5	UDH rear derailleur hanger x 1	***Aerodynamic water bottle	***Fixing Bolts for Flat Mount Disc Brake Calipers

The items with \*\* are accessories with optional specifications and do not need to be purchased separately. The ones with \*\*\* are optional accessories and need to be purchased separately.

# APPENDIX



To meet our rigorous standards for quality and craftsmanship, evolve has established its own dedicated supply chain.

01 **2,000,000\$**

Investment of over USD 2,000,000  
in carbon fiber molding

02 **800,000\$**

Investment of over USD 800,000  
in precision machining for metal components

03 **3000 m<sup>2</sup>+**

Self-built supply chain  
spanning over 3,000  
square meters

04 **6**

Equipped with 6  
advanced testing  
machines

05 **10+**

10+ precision machining  
equipment



## Appendix:

01. Introduction to Silverstone Sports Engineering Hub

02. Introduction to Zedler

03. Introduction to Ceramicspeed

- CdA: (Coefficient of drag\*Frontal Area) represents the resistance an object experiences while moving through the air.
- FEA (Finite Element Analysis) simplifies complex continuous systems by dividing them into small elements and using numerical methods to approximate behavior, bypassing difficult differential equations.
- CFD (Computational Fluid Dynamics): is a branch of fluid mechanics that, thanks to specific software, uses numerical analysis to solve problems that involve fluid flows. Related to cycling, it is useful to simulate the airflow around the bike and drag force of different design solutions.

## SSEH

Introduction to  
Silverstone Sports Engineering Hub

Silverstone Sports Engineering Hub (SSEH) is home to one of the few wind tunnels in the world specifically built for bicycle aerodynamic testing and research.



The Wind Tunnel at Silverstone, a core facility within the Silverstone Sports Engineering Hub (SSEH), is a state-of-the-art low-speed wind tunnel designed to support equipment testing and rider position optimization for elite cyclists.



With a precisely controlled wind speed range of 36–180 km/h and a uniquely designed test section (2.5m wide × 2.0m high), it accurately replicates real-world cycling conditions. Equipped with a 3D motion capture system and a six-component force balance, the tunnel can precisely measure drag coefficients across various riding positions.

This cutting-edge facility has contributed to the success of the British Cycling Team in both the Rio and Tokyo Olympics and is widely regarded as a benchmark in the field of bicycle aerodynamics due to its precision and professionalism.

## ZEDLER INSTITUT

Introduction to  
Zedler



The German Zedler Institut is a leading independent testing and certification organization specializing in the performance, safety, and durability assessment of bicycles and their components. It conducts rigorous evaluations of frames, wheels, braking systems, helmets, and other products in accordance with international standards such as ISO, EN, and DIN. Its testing scope includes fatigue resistance, rigidity assessment, and material analysis.

Equipped with advanced laboratory facilities and a highly experienced technical team, the Zedler Institut provides reliable test reports and certification services to manufacturers, brands, and industry bodies — helping enhance product compliance and market competitiveness.

## CERAMICSPEED

Introduction to  
CeramicSpeed

CeramicSpeed is a Danish company specializing in high-performance bearing technology. Founded in 2009, the brand has become widely recognized for its innovative ceramic bearing solutions across the cycling, industrial, and aerospace sectors. Its core products feature silicon nitride ceramic balls combined with low-friction lubrication technology, delivering significantly reduced friction and improved transmission efficiency — exemplified by the ultra-efficient DrivEn drivetrain system. Known for their lightweight construction, durability, and energy-saving benefits, CeramicSpeed products are the top choice of professional cycling teams and high-performance industries, continually pushing the boundaries of mechanical and sports equipment performance.



**evolve®**

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**Boundaries Get Faded While  
Passion Ignites.**