

White Paper

LOOK P24





This is our commitment to track cycling. Every 4 years it is defined by one week of competition.

Our commitment to you, your team, your nation and 4 years of preparation by athletes and federations around the world.

Our commitment to development driven by excellence through countless hours of R&D, engineering, prototyping and tests.

Our commitment to creating a new track bike that is dedicated to the highest level of competition every 4 years.

Our commitment to being the industry leader in track cycling with a range to inspire and perform at every level.

The result of this commitment is the brand-new LOOK P24. Committed to putting you on track for the win.





38 years
of partnership with the
French Federation of Cycling

100

World elite titles
(263 Medals)



Official partner
of the USA Track Cycling team



20 years
of partnership with the World
Cycling Center in Aigle (CH)

17

Olympics titles
(60 Medals)

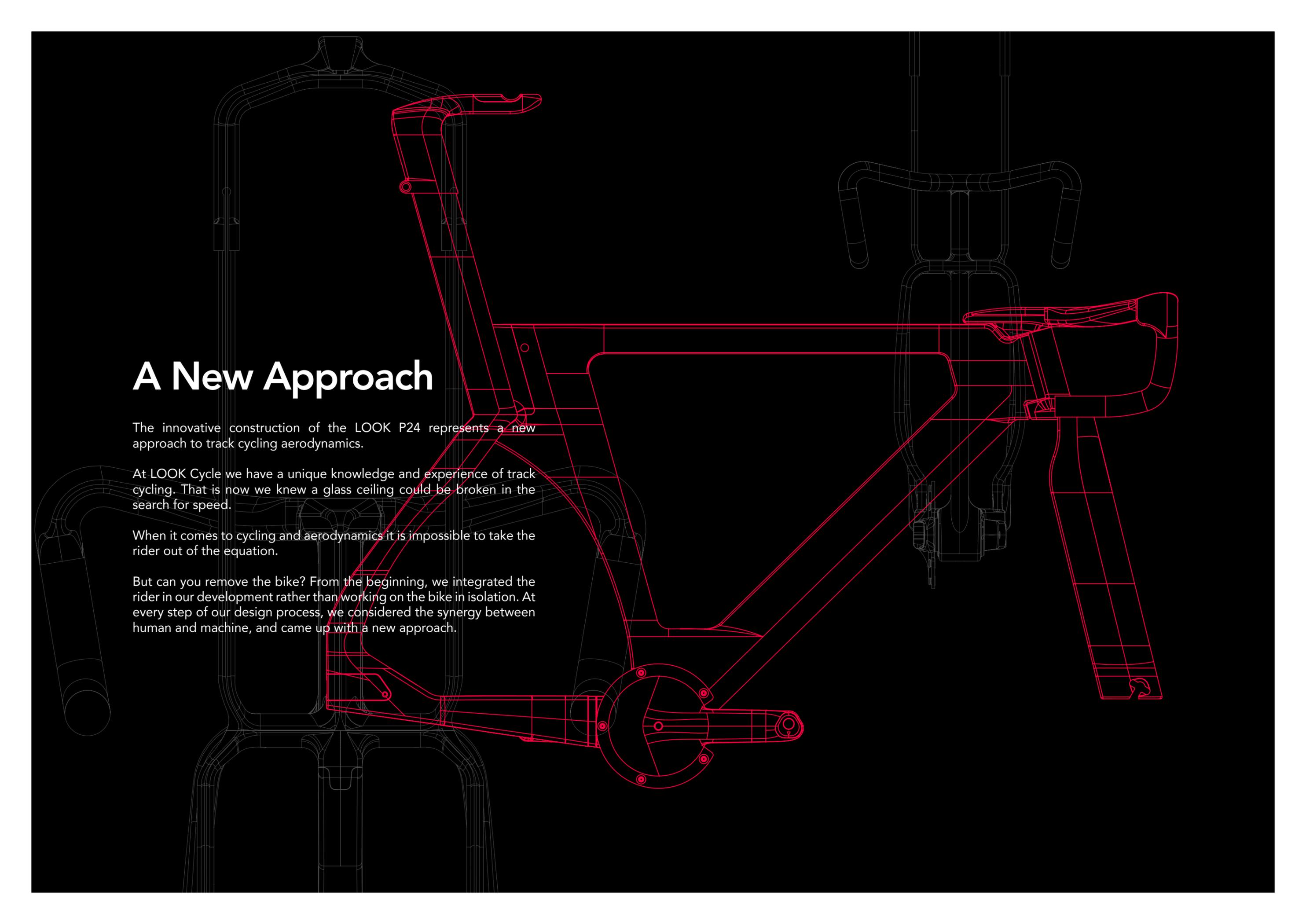


Official supplier
of the Chinese Track Cycling team



Part 1

The Process



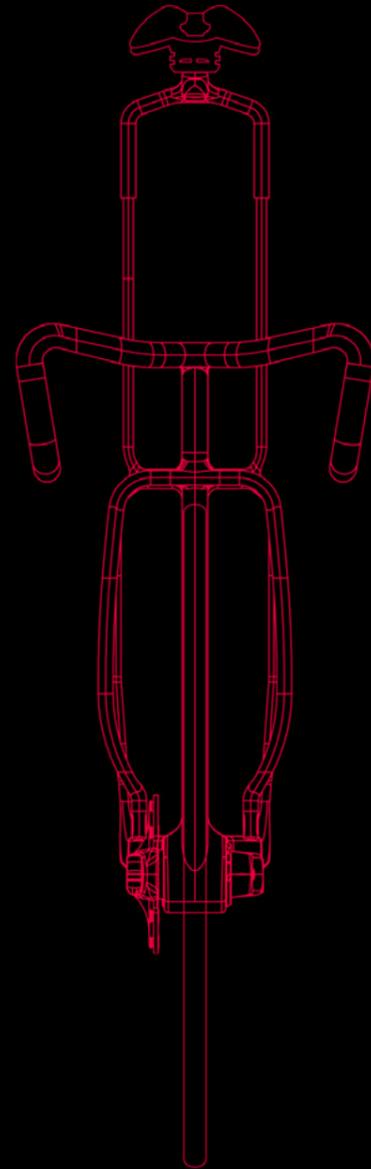
A New Approach

The innovative construction of the LOOK P24 represents a new approach to track cycling aerodynamics.

At LOOK Cycle we have a unique knowledge and experience of track cycling. That is now we knew a glass ceiling could be broken in the search for speed.

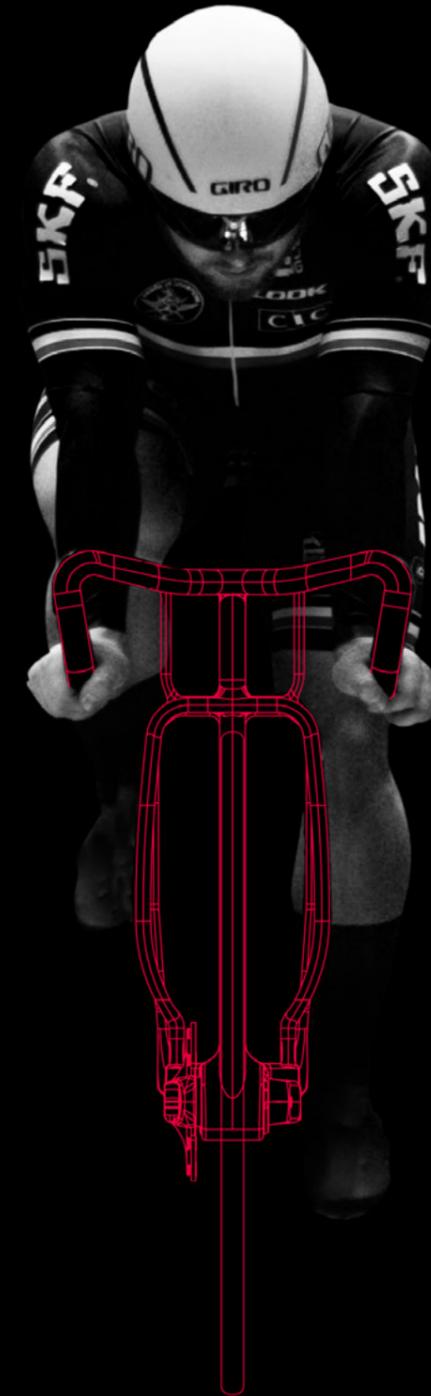
When it comes to cycling and aerodynamics it is impossible to take the rider out of the equation.

But can you remove the bike? From the beginning, we integrated the rider in our development rather than working on the bike in isolation. At every step of our design process, we considered the synergy between human and machine, and came up with a new approach.



Bike & Rider Become One

Right from the start, we used a 3D mannequin in our CFD (Computational Fluid Dynamics) calculations, relying on the rider-machine combination as the best approach. The results have changed the way we look at the aerodynamics of frames and components.



1300 Hours
of CFD calculation

33 Versions
tested

In simulation, a riderless LOOK T20 and LOOK P24 require the same power input to complete a track lap at 70kph.

Once you introduce the rider, the LOOK P24 requires 31 less watts to reach the same speed.

31 Watts
saving compared to
the LOOK T20

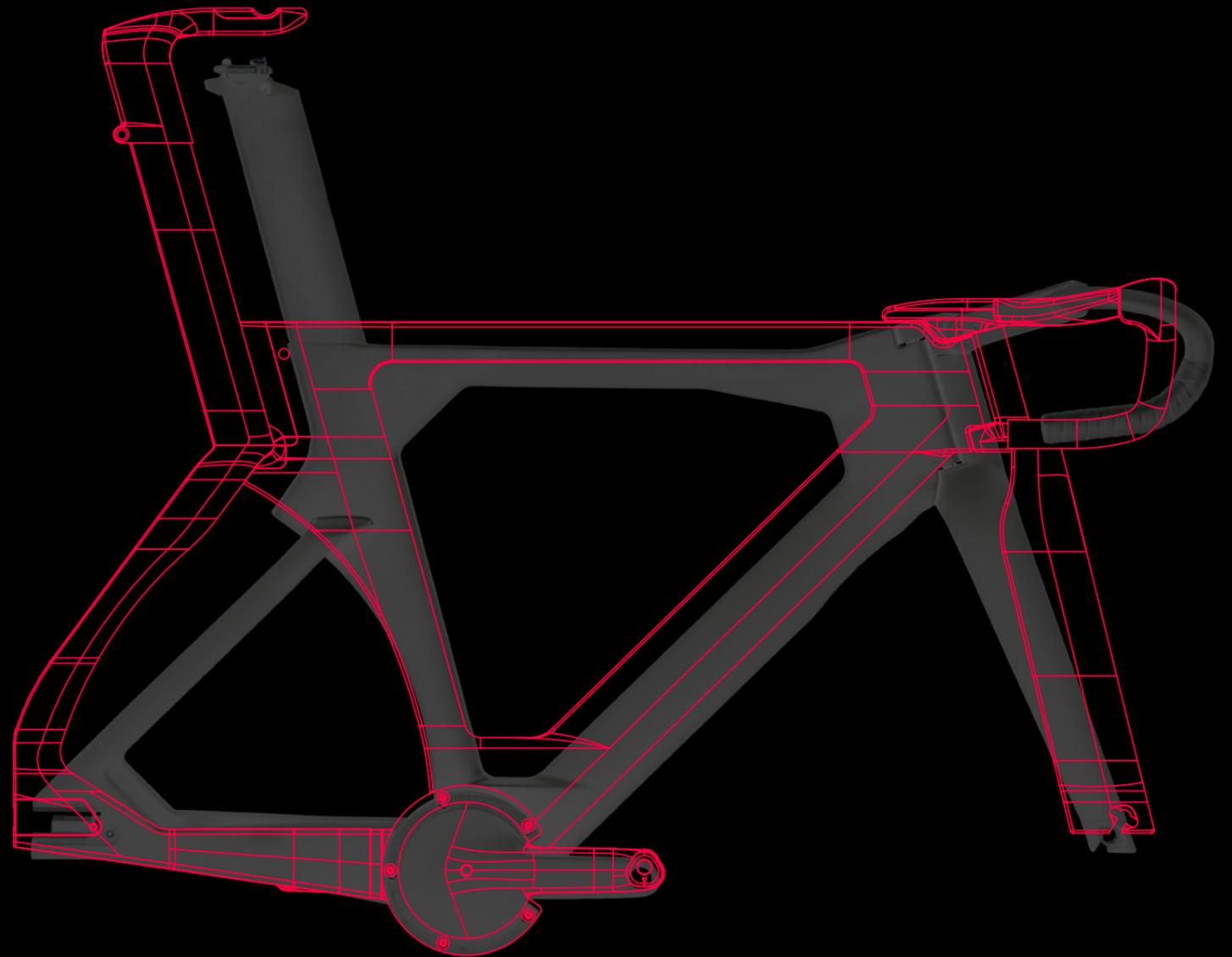
Unmatched Stiffness

An evolution of what has been before, the LOOK P24 utilizes the complex carbon lay-up of the LOOK T20 to provide the best stiffness values, offering incomparable power transfer on starts, sprints and turns.

Using the successful fibers mix of the LOOK T20 (UHM – HR – HM lay-up) as the foundation, the LOOK P24 is a completely new development of frame and parts.

Our unrivalled expertise in carbon and state of the art aerodynamic development, come together to create the fastest bike on the track.

52 Hours
carbon draping
for 1 frame



Stress resistant

HR

High Resistance + Fabric

11%

IM

Intermediate Modulus

36%

Optimized power transfer and lightness

HM

High Modulus

27 %

UHM

Ultra High Modulus

26 %



Assembling Perfection

Through the use of modularity and craftsmanship.

Building the fastest track bike is like building a Formula 1 car. Every section, every part and component play a very important role in the overall performance of the bike.

We divided the frame into sections and tested each of them individually, improving every little detail, using 3D printed parts assembled on a metallic skeleton.

380

Hours

of 3D printing and hundreds of versions tested in order to achieve exceptional manufacturing.

Unrivalled aerodynamics

When we put the LOOK P24 into a wind tunnel, we saw impressive aero gains compared to both its competitors and the LOOK T20, making it one of the highest performing track bikes in the world. We tested every promising CFD design, using interchangeable 3D printed parts, first with a mannequin then a human, in the process. The result is mind-blowing.

40 Hours
of wind tunnel testing



FAST: Flow Aero Section Technology

Perfectly aligned with the rider's body sections, the frame and the fork of the LOOK P24 are designed to disappear, having a very low impact on the CX while delivering a impressive power transfer and a precise handling of the bike.

Fork And Cockpit

The fork and cockpit match the rider aerodynamics. Associated with the AIR cockpit, the front wind resistance is drastically reduced.

Seat Stays And Post

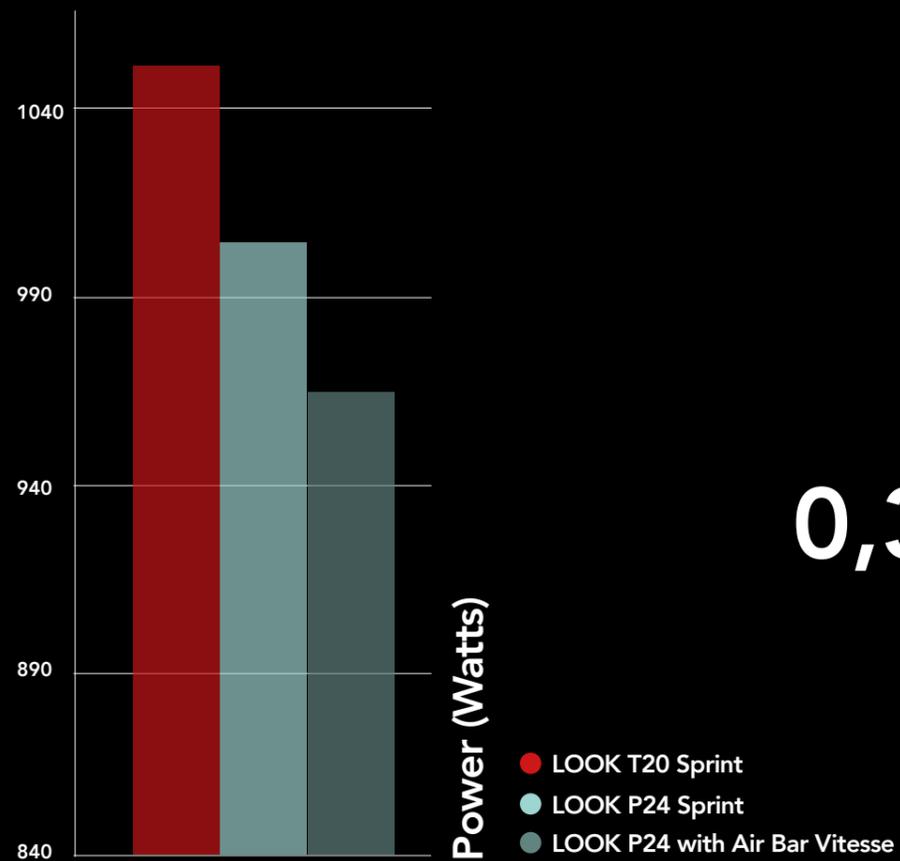
The seat stays and the double seat post mast are perfectly aligned with the rider's air drag, offering minimal interference enabling them to hit the straights and the corners with maximum speed.



Sprint

For short and mass start races, raw power is the key to victory. The LOOK P24 offers a stunning 91 watts saving and gives riders a never before seen 7 meter advantage per lap of the track.

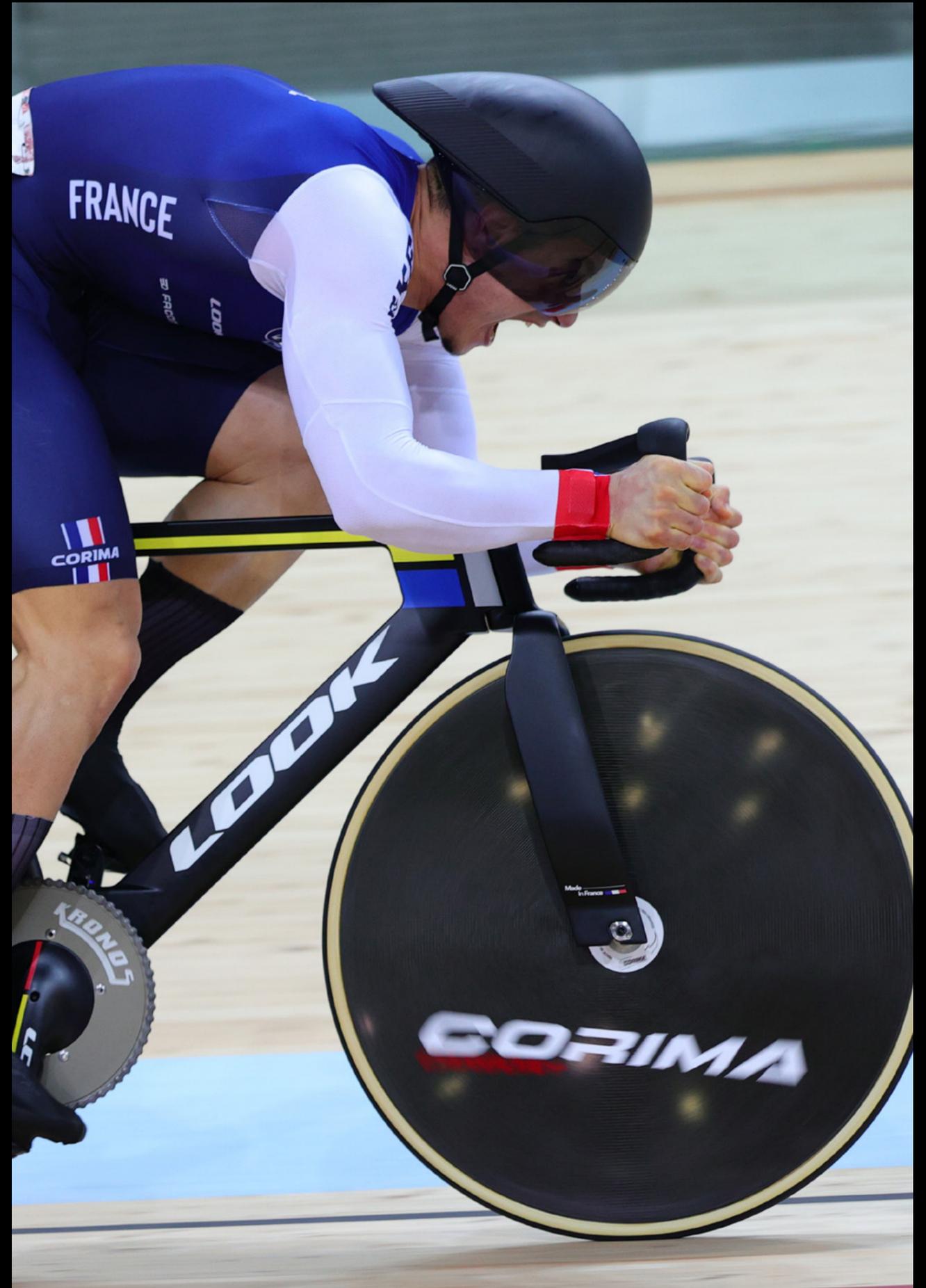
Power needed on a 70kmph lap in a sprint configuration



91 Watts saved

0,340 Seconds gain per Lap

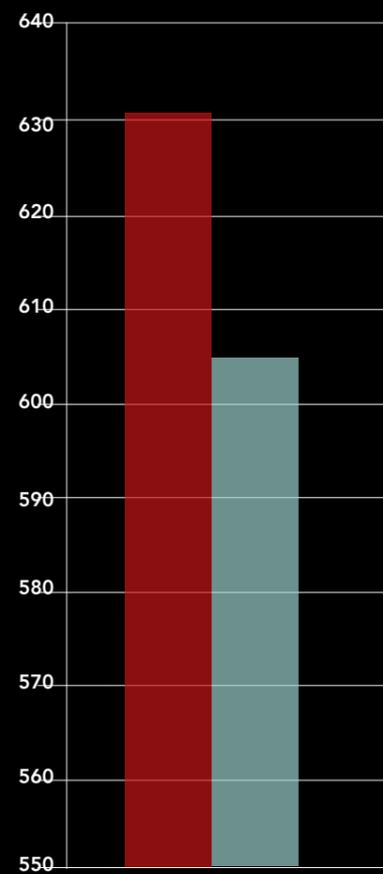
7 Meters advantage per Lap



Pursuit

When it comes to endurance efforts, the LOOK P24 aero gains mount up and give the rider a race-winning 61 meters advantage.

Power needed on a 60kmph lap in Pursuit configuration



Power (Watts)

- LOOK T20 Pursuit
- LOOK P24 Pursuit

0,210 Seconds
gain per Lap

4 Meters
advantage per Lap

3,5 Seconds
gain over 16 Laps

61 Meters
advantage on 16 Laps



Part 2

The Bike

Bike Tech Points

Air Carbon double seat post
Adjustable angle, height and depth

Air Carbon Stem
Available in 65 mm / 75 mm / 85 mm / 95 mm / 105 mm / 115 mm

Air Carbon Fork
FAST Design

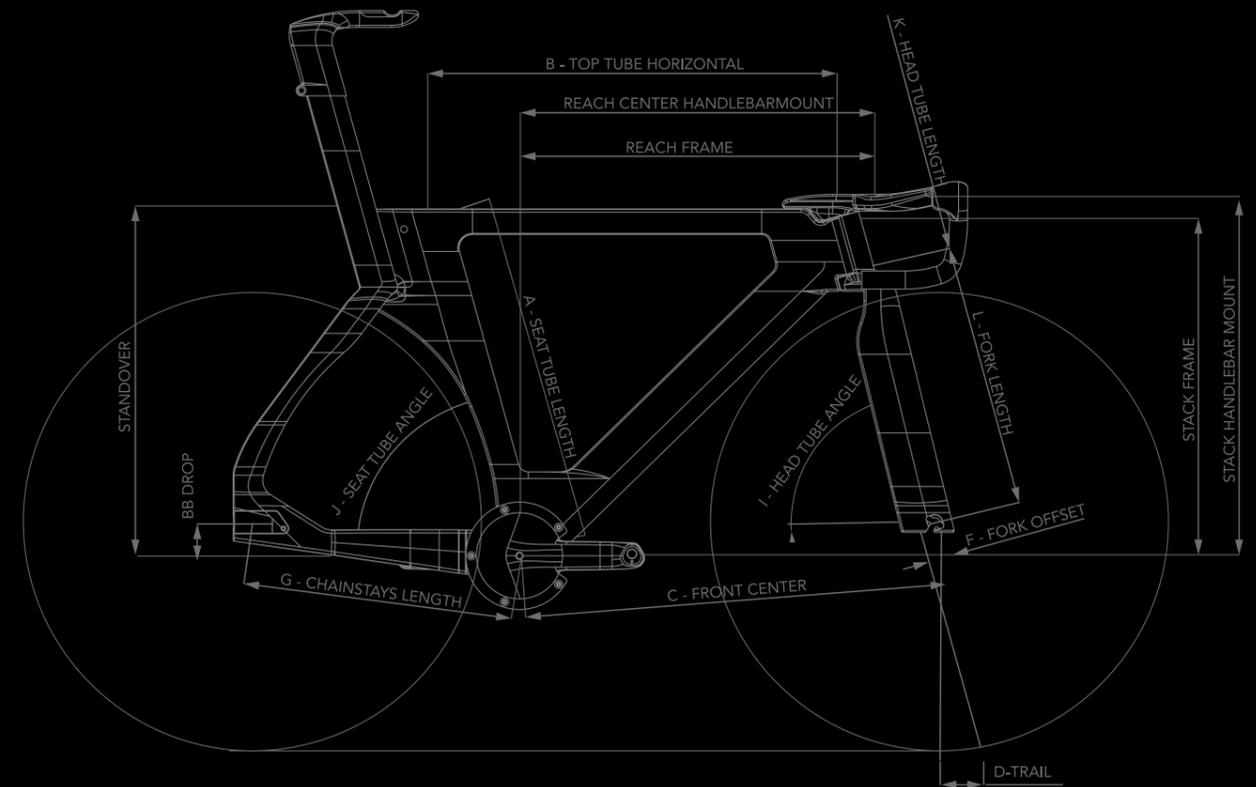
Standard axle and thru-axle compatible

Wide Seat and chainstay
FAST Design

LOOK ZED TRACK Crankset
Short version adjustable length 165 / 167.5 / 170 mm
Medium version adjustable length 172.5 / 175 / 177.5 mm
Chain ring not included

Geometry and Position

- + Perfect aero drag
- + Geometry developed for speed and endurance disciplines
- + Multiple cockpit configurations



LOOK P24

	XS	S	M	L
Stack	466	483	500	517
Reach	412.6	438.6	464.6	490.6
center handlebar mount (65mm stem)	469.6	495.6	251.6	547.6
Min stack center handlebar mount	494.2	511.2	528.2	545.2
Max stack center handlebar mount	544.2	561.2	578.2	595.2
I - Head tube angle (°)	74.7	74.7	74.7	74.7
J - Seat tube angle (°)	74.5	74.5	74.5	74.5
A - Seat tube length	483.3	501	518.7	536.4
B - Top tube length	541.9	572.6	603.3	634
C - Front center	560	590.5	621	651.6
D - Trail	61.4	61.4	61.4	61.4
F - Fork offset	30	30	30	30
G - Chain stays length	399	399	399	399
K - Head tube length	48.9	66.5	84.1	101.7
L - Fork length	390.6	390.6	390.6	390.6
BB Drop	50	50	50	50
Standover	482.5	499.5	516.5	533.5

*Frameset includes 5 individuals' spacers from 10 to 50mm

More than just a frame

The cockpit itself is a masterpiece of engineering, offering a massive gain compared to our former bars and competition models. We tested the cockpit on a **LOOK T20**, to fully understand the gain of the bars versus a **LOOK P24**.

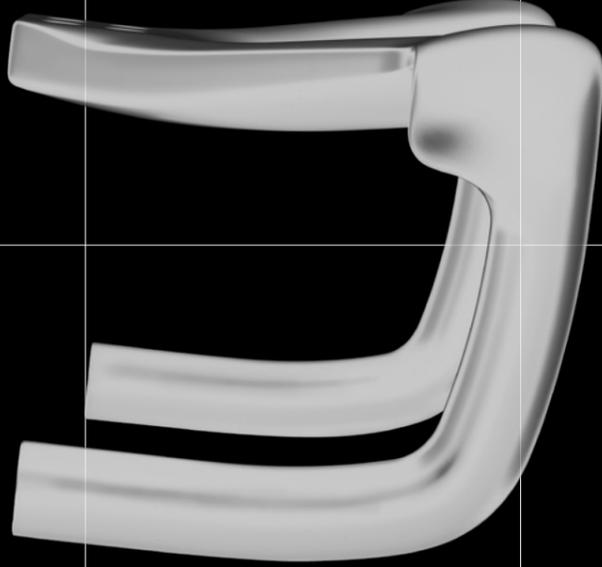
		Air Bar Madison		
		Size	300mm & 350mm (C-C)	Diameter starter
	Reach	105mm	Diameter Stem	LOOK Specific - Compatible with LOOK Air Stem
	Drop	117.5mm	Weight	280g (300mm) / 300g (350mm)

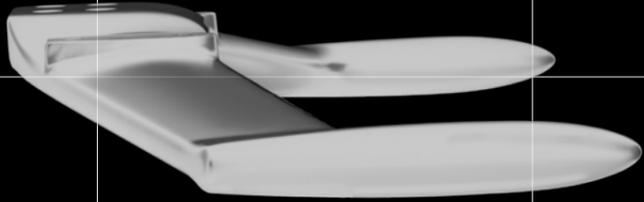
The Madison handlebar is a work of art: not only is it ergonomically designed for multiple precise hand placements, but it also offers savings of up to 35 watts compared to the competition.

35 Watts
saving with
the **Madison cockpit**

Accessories and Wheels

We designed a complete range of handlebars for all track disciplines. Like our Madison Air Bar, the Vitesse and Pursuit Air Bars benefit from reduced aero drag, perfect ergonomics and impressive stiffness ensuring optimal power transfer. The Pursuit Air Bar can be further enhanced with Aergo extenders, offering a wide range of positioning options.

		Air Bar Vitesse	
Size	300mm & 340mm (C-C)	Diameter starter	27mm
Reach	85 mm (300mm) 135mm (300mm & 340mm)	Diameter Stem	LOOK Specific - Compatible with LOOK Air Stem
Drop	117.5mm	Weight	280 g (reach 85mm) / 300 (reach 135mm)

		Air Bar Poursuite	
Size	350 mm (C-C)	Diameter Stem	LOOK Specific - Compatible with LOOK Air Stem
Reach	155mm (starter center)	Weight	220 g
Drop	32.5mm		

Accessories and Wheels

Our fastest bike deserves the fastest wheels. The number one choice for many riders around the world, CORIMA is the recognised industry leader when it comes to track wheels. That is why we equipped the LOOK P24 with the new Decisiv C+ and the Decisiv 3-spoke wheels and they've proved to be the perfect addition to our record-breaking bike, giving our athletes the best setup to win.

DECISIV C+

Ultra stiff lenticular wheel



- + Best for stiffness and drivability
- + New carbon composition with a specific external wrapping pattern (22% stiffer vs Disc C+ (paracular))
- + 1000gr (FR) 1270gr (RR)

DECISIV 3

Lightest front wheel



- + As stiff as a 4 spokes wheel
- + Reduces aerodynamic drag vs 4 spokes wheel 3.5W saved at 70km/h vs 4 SPOKES)
- + Lightest in the range at 770gr

To complete your Bike

Air Bar Pursuit
LOOK P24



Air Bar Vitesse
LOOK P24



DECISIV C+
Front & Rear



DECISIV 3
Front only



Air Bar Madison
LOOK P24



Aergo Extensions
LOOK P24



DISC C+
Front & Rear



5 SPOKES
Front only





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