2017

TECH & FACTS REPORT

–

SCOTT FOIL

SCOTT

SETTING A **MILESTONE**

Back in 2010, SCOTT introduced the Foil featuring the novel F01 Aero Technology. As an aerodynamically optimized road bike, the Foil featured truncated airfoils which are now used on most aero bikes today. SCOTT was one of the first bike manufacturers to file a patent for this specific airfoil shape. With the truncated airfoil, SCOTT's Aerodynamic Science unit intended to work around the drawbacks of UCI-regulations that give a limit of a 3:1 airfoil ratio. As a consequence of this regulation, aerodynamic tube shapes, with their traditional tear drop profile often lacked stiffness or were heavy resulting from additional material required to improve stiffness. The truncation of the airfoil solves this issue. While the aerodynamic performance of the airfoil is comparable to a traditional tear drop airfoil, stiffness and weight characteristics are substantially improved. The Foil is an aero bike to the core, maintaining impressively low weight and high stiffness values.

WIN EVERY RIDE!

Since its introduction back in 2010, heaps of races have been won on the Foil. To date (April 2015), the Foil holds 15 Grand Tour stage wins and three Classics. The Foil has been first across the finish line in 134 races at the highest level of cycling. The new Foil has been designed to win every ride! Regardless of whether you're competing, chasing a virtual segment or taking on your riding buddies in an imaginary sprint finale, the Foil is the ultimate machine for those striving to win.

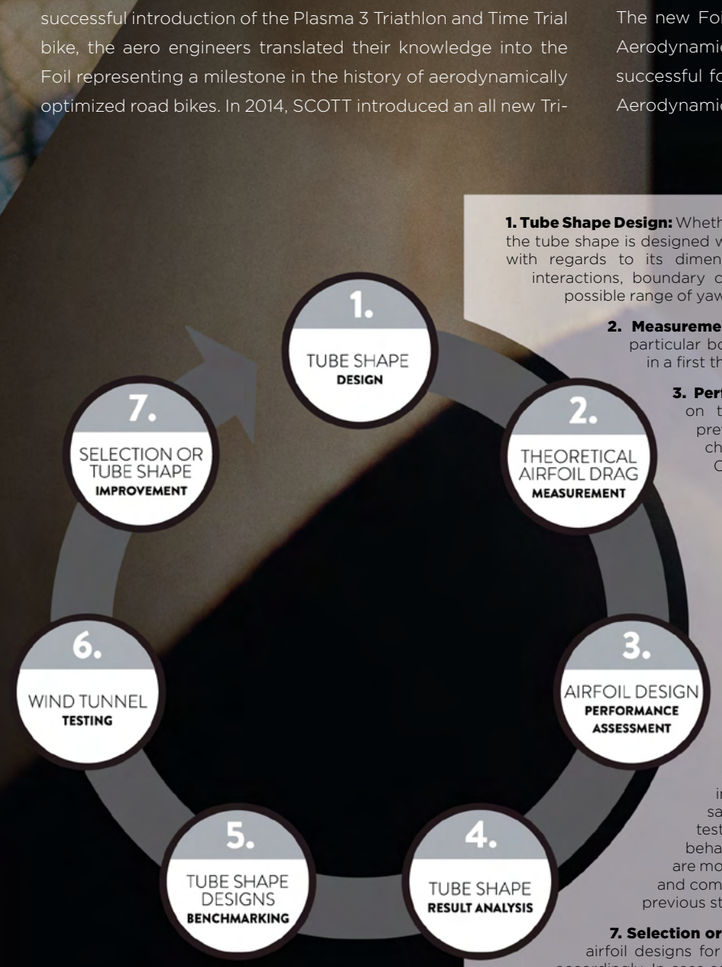
115	WORLD TOUR RACES WON
16	GRAND TOUR STAGE WINS
3	CLASSIC WINS

SPEED **UPDATE**

The new Foil features the same lightweight frame characteristics as its predecessor. With a frame weight of 945g and a fork weight of 335g (size Medium, including small parts) the new Foil is one of the lightest Aero Bikes on the market. Our World Tour riders count every gram. 6.8 kilograms is a magic number for them and despite its aerodynamic and stiff nature, it's actually not a challenge to build the complete bike below this regulatory threshold. It took no time for the first Foil to gain a reputation for being extremely stiff and responsive with regards to power transfer and handling. In favor of our Pro riders and the customer base that prefers a stiff and responsive bike, the new Foil exhibits even higher stiffness values than its predecessor. The frame aerodynamics of the bike have been reworked as a whole: all the vertical sections of the frame have been optimized independently and in conjunction with each other, component integration has been lifted to a new level and the bike features a fully integrated cockpit that saves precious watts. Aside from the visible design enhancements with regards to aerodynamics and integration, the riding comfort of the new Foil has been elevated noticeably. The new Foil keeps the much appreciated characteristics of the original model but adds novel and innovative solutions to make it faster as a whole: It's a Speed Update!

SCOTT
AERODYNAMIC SCIENCE

When the Plasma 3 project was initiated back in 2009, a team of several engineers was created that was fully dedicated to scientific research in aerodynamics along with the development of products based on the gathered findings. Over the past few years, the engineering team has spent a lot of time turning their research into class-leading products. After the successful introduction of the Plasma 3 Triathlon and Time Trial bike, the aero engineers translated their knowledge into the Foil representing a milestone in the history of aerodynamically optimized road bikes. In 2014, SCOTT introduced an all new Triathlon and Time Trial line-up with the Plasma 4 and 5 models. In the same year, Sebastian Kienle won the most prestigious races in long distance Triathlon- the IM European Championships in Frankfurt and the IM World Championships in Hawaii on the Plasma 5. Matthias Brändle set a new hour record later in the year, riding on a Plasma 5 modified for the track. The new Foil constitutes the latest innovation from SCOTT's Aerodynamic Science unit and it's expected to follow in the successful footsteps of previous innovations from the SCOTT Aerodynamics Science Unit.



1. Tube Shape Design: Whether it is from scratch or from previous development, the tube shape is designed with the goal of optimizing the airfoil performance with regards to its dimensions, its direct environment (e.g. component interactions, boundary conditions or airflow type) and to the broadest possible range of yaw angles.

2. Measurement of Theoretical Airflow Drag: The input of particular boundary conditions into the CFD software results in a first theoretical measurement for each tested yaw angle.

3. Performance Assessment of Airfoil Design: Based on the air resistance values collected during the previous process step, typical airfoil aerodynamic characteristics such as Drag Coefficient, Lift Coefficient, and the overall tube drag values are calculated and assessed.

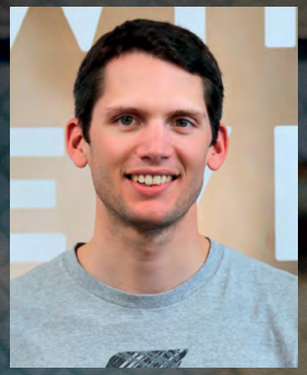
4. Analysis of Tube Shape Results: The obtained drag and lift results are summarized in graphs. Based on analysis of the graphs, airfoil design particularities such as low vs. high yaw angle performance, airflow separation points or wake are determined.

5. Benchmarking Tube Shape Designs: The drag and lift results of the different airfoils are compared to each other. SCOTT's proprietary A4 software allows for the simulation of real-world conditions in the process of analyzing the performance of the airfoils. Based on the benchmark results, a first airfoil selection is made.

6. Wind Tunnel Testing: All performing or interesting airfoil designs are selected and profile samples are manufactured. These samples are tested in the wind tunnel to analyze the airflow behavior at every yaw angle. If necessary, the profiles are modified with filling material. The results are collected and compared to the theoretical performances obtained in previous steps and are benchmarked once again.

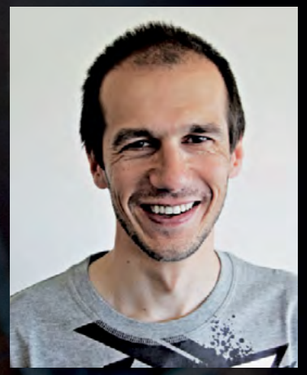
7. Selection or Tube Shape Improvement: The best performing airfoil designs for each frame area are selected and implemented accordingly. In case some of the airfoils have been modified during the wind tunnel test, the tube design is updated and another loop begins.

THE AERODYNAMIC SCIENCE UNIT



Paul Remy
Engineer

"The vertical frame sections of the Foil that are responsible for the vast majority of aerodynamic drag have been optimized aerodynamically both independently and in conjunction with each other using SCOTT's proven Aerodynamic Science process."

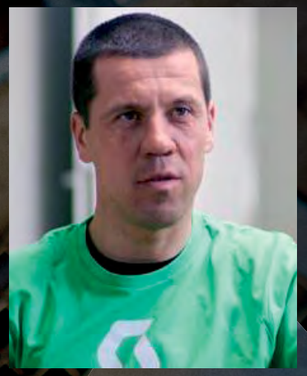


Benoît Grelier
Head of Engineering

"The Syncros RR1.0 Cockpit has been developed in conjunction with the new Foil. Aside from its excellent aerodynamic properties, this handlebar features state-ofthe- art integration possibilities, an ergonomic shape and incredibly low weight."

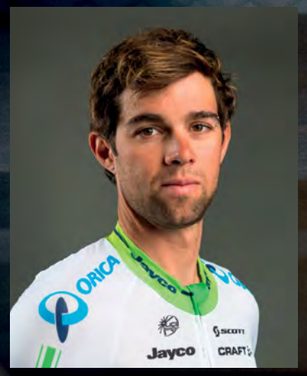
Frank Oberle
Product Manager

"The new Foil combines excellent aerodynamic properties, high lateral stiffness, a compliant rear triangle and a frame weight that is among the lightest in the aero roadbike segment."



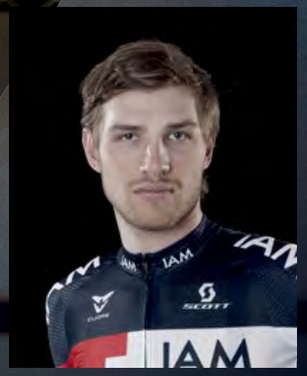
Lars Teutenberg
Tech Team Support

"The professional riders really liked the first edition of the Foil from the start. We made sure to maintain or even improve the characteristics of the first Foil that make it the ultimate race bike"



Michael Matthews
Athlete

"The Foil is what I would call a race bike to the core. It's incredibly stiff and responsive- it's fast but keeps a low weight. In a sprint final every watt and every speed gain counts- that's why the Foil is my first choice."

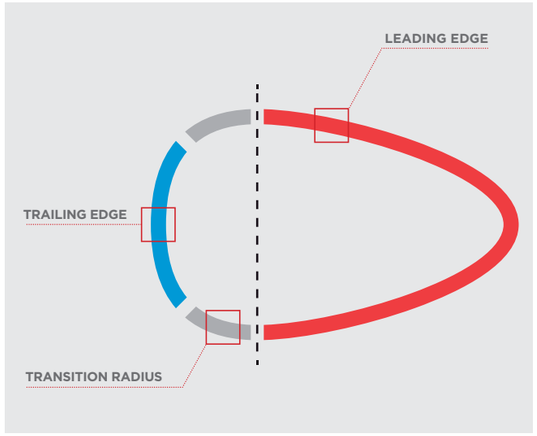


Matthias Brändle
Athlete

"While it's hard to determine how much more aerodynamic a bike has become while riding, the new Foil certainly feels much quicker. It looks built for speed."

F01 TECHNOLOGY

In the process of developing the first edition of the Foil, SCOTT patented a new airfoil design and introduced the F01 Technology. An airfoil consists of three sections that can be modified according to airflow conditions. F01 Technology defines the boundary conditions according to which the airfoil is modified. In theory, an infinite number of airfoils can be designed based on this concept. The following section explains the three crucial areas of an airfoil.



LEADING EDGE

This section of the airfoil first contacts the air. The leading edge is generally based on a 4-digit NACA profile. This type of profile offers particularly good characteristics with regards to airflow boundary conditions and tube dimensions generally encountered on a bicycle. The profile is entirely configurable thanks to equations that determine the cross-section of the airfoil. On the F01 airfoil, 10% to 60% of the NACA airfoil's front side portion is kept. The proportion of the used NACA airfoil on the F01 leading edge is also known as the Truncation Ratio. This portion represents 70% to 95% of the F01 airfoil depth.

TRAILING EDGE

This section consists of a convex shape, usually a circular-arc segment that either defines the best separation point location at high yaw angles or builds up an optimal airflow transition to components positioned behind.

TRANSITION RADIUS

This section consists of a convex shape, usually a circular-arc segment that builds a transition between the leading edge and the trailing edge. Its value has to be accurately defined and optimized because the separation point is located in this section at low yaw angles. The separation point has a direct impact on the wake and thus on the drag coefficient CD of the airfoil. From a construction perspective this section is of great relevance. While in theory the transition between the leading and trailing edge could be an edge, this is detrimental to the material characteristics of carbon. Edges within a carbon structure should be avoided as the material loses its strength and more layers are required in order to overcome this issue, resulting in a higher weight of the construction. In order to maximize the beneficial characteristics of carbon, the F01 Technology defines a round transition radius which requires no reinforcements and ads to a lightweight structure.

AERODYNAMIC CONSTRUCTION

The vertical frame sections of the Foil which include the fork, headtube, seattube, seatstays and seatpost have been optimized aerodynamically both independently and in conjunction with each other. CFD analysis shows that at low yaw angles the front area of the frame is responsible for up to 50% of total drag. The headtube and the front-end of the bike have consequently been of major importance when frame aerodynamics were optimized.

HEADTUBE

The headtube on the new Foil features a head-to-toe aero profile with excellent aerodynamic properties especially at low yaw angles. The shape of the leading edge has been optimized with additional carbon layers in order to be as aerodynamic as possible.

The new Foil features a smooth and aerodynamically optimized integration of the fork crown. An aero profile ensures the perfect transition between the frame and the fork for maximum aerodynamic performance. In addition, the transition between the frame and fork and the connection between downtube and headtube have been lowered. These changes in construction remove the gap behind the fork crown which results in air stagnation and increased aerodynamic drag.

Superposition of the Foil 1 (blue) and Foil 2 (red): lowered seatstays and downtube avoid air stagnation.

SEATSTAYS AND FORK BLADES

The new Foil features a Shimano Direct Mount rear brake which is fitted below the bottom bracket. The lowered seatstays and the removal of the caliper brake bridge between the seatstays decreases the gap behind the seat tube and the seatstays avoiding air stagnation and consequently drag. In addition, the seatstay attachment to the downtube has been carefully designed with regard to aerodynamics in order to improve the airflow around this area of the seatstays. The airflow that meets the fork blades and seatstays has been disturbed by the spinning wheels and in the case of the seatstays as well by the moving rider's leg. In-depth CFD analysis has shown that at low yaw angles the airflow is pushed away from the fork blades and seatstays if they exhibit a slight outward orientation. The fork blades and seatstays of the new Foil have been optimized in that regard resulting in an advantage at yaw angles between 3 and 5 degrees.

SEATPOST

As with the first model, the new Foil features a perfectly integrated seatpost clamp and a neat transition between the seattube and the seat post to maximize aerodynamic efficiency while maintaining utility. The proprietary seat post follows the aerodynamic tube shapes of the frame and features a setback of 5mm or 20mm.

DOWNTUBE

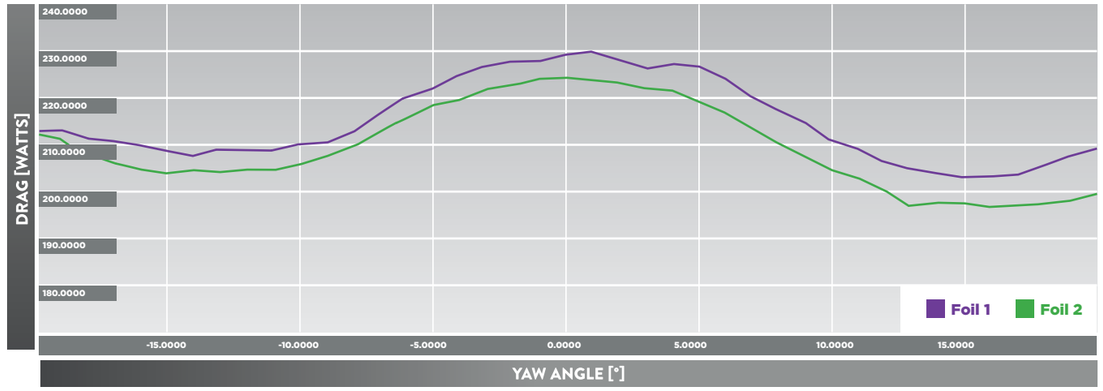
The downtube on the new Foil features the same characteristics as on the previous model, however, the new downtube's diameter increases towards the BB. While this positively affects the BB stiffness of the new Foil, wind tunnel tests have shown that these downtube characteristics improve the aerodynamic performance compared to a straight downtube. The use of a wide down tube results in further advantages: firstly, the water bottle is hidden from airflow and secondly, the seat tube has to split less air affecting frame aerodynamics positively.

TIRE CLEARANCE

Wheel makers are going for wider, more aerodynamic rim designs and tires. Professional and recreational cyclists prefer wider tires due to advantages related to aerodynamic performance, rolling resistance and comfort. The new Foil has been optimized for 25C tires resulting in maximum aerodynamic performance in combination with drag-efficient wide rim designs..

AERODYNAMIC TEST RESULTS

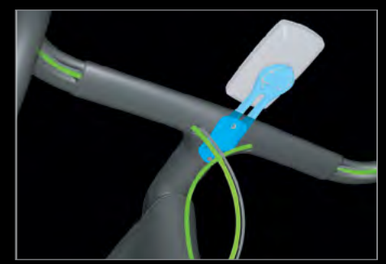
The final wind tunnel test was carried out applying the testing protocols of the renowned German TOUR Magazine. A dummy with moving legs simulates real world riding conditions and ensures high testing reproducibility. The measurements were conducted at 45 km/h air and wheel speed in a full sweep covering yaw angles from –20° to +20° with the leg dummy pedaling at 90 rpm. The test revealed that the new Foil saves 6 Watts on average over the tested yaw spectrum compared to its predecessor. This equals a gain of 27 seconds over 40 kilometers with an average speed of 45kph.



Drag Power [W] vs. Yaw Angle [°] at vapp = 45 km/h (Bike with moving legs / Shimano Dura Ace Di2 / Zipp 404 / 1 Bottle on Downtube)

SYNCROS **AERO RR1.0 COCKPIT**

The all-new, fully integrated RR1.0 cockpit from Syncros was developed in conjunction with the new Foil and adds to the aerodynamic excellence of this bike. Its superior aerodynamic properties stem from its aero-optimized shape which includes an F01 profile on the horizontal part of the bar along with state-of-the-art integration possibilities. Full integration of brake cables, mechanical and electronic shifting cables and Shimano's Di2 junction box ensure a smooth transition between the cockpit and the frame, a clean look and aerodynamic cable routing. Despite the aerodynamic bar design which even features a recess to ensure a smooth transition between the bar tape and the grippy top area of the bar where no bar tape is needed, the Syncros Aero RR1.0 Cockpit has been designed following ergonomic principles. Another major advantage of this integrated carbon cockpit is the ability to specifically tailor the performance of the carbon structure on one piece. Towards the connection with the bar, the stem flares out into a triangulated section which offers a larger contact point 13 for the bar to maximize rigidity and resist twisting. Removing the junction between stem and bar, in addition, increases the stiffness of the cockpit to a level that is impossible to achieve for a conventional setup. At the same time, the carbon cockpit weighs in at an impressively low 395g (42cm bar width/110mm stem length). While the bar angle is predetermined due to the one-piece cockpit construction, the engineering team has conducted an in-depth analysis of handle bar positions in order to create a neutral position. Two different mount options make sure Garmin head units can be perfectly positioned in front of the cockpit and the rider has his data easily visible at all times. The Syncros Aero RR1.0 Cockpit is also available as an aftermarket piece. Thanks to a reducer shim it is compatible with both 1 1/4" and 1 1/8" steerers. Specific Aero Spacers have been designed for the new Foil in order to achieve a smooth transition between the stem and the frame. The Aero Spacers are available in 2mm, 5mm, 10mm and 20mm in order to fine tune the stack of the cockpit.



9 DIFFERENT COMBINATIONS AVAILABLE AS AFTERMARKET PIECES

395G
WEIGHT (AT 42CM / 110MM)

2 GARMIN MOUNT OPTIONS

INTEGRATION

CABLE INTEGRATION

The new Foil features one single entry for cables on the upside of the downtube. This solution has multiple benefits. First of all it is more aerodynamic than cable entries on the side of the head or downtube as the protrusion is not exposed to airflow due to its position behind the headtube. Additionally, this solution goes for an entry on the upside of the tube and not on the side of the structure which is important for maintaining high lateral stiffness. Furthermore, this solution requires only one opening in the frame, fewer reinforcements are needed and the added extra weight is lower compared to solutions where multiple openings are required. Lastly, a single port facilitates the use of one frame for both mechanical and electronic group sets as there is only a simple exchange of the adaptor required.

BRAKE INTEGRATION

Shimano Direct Mount brakes provide reliable braking thanks to their symmetrical dual pivot design while not compromising the aerodynamic performance of the bike. Additionally, the brakes can be unhinged quickly and easily for rapid wheel changes in races. The positioning of the rear brake below the bottom bracket offers benefits with regards to aerodynamic performance as outlined above.

INTERNAL BATTERY MOUNT

Thanks to a proprietary adaptor, Shimano's internal battery can be mounted in the seat post and easily accessed by removing the seat post. The internal battery position adds to the high degree of integration on the new Foil.

SEAT CLAMP INTEGRATION

The removable seat clamp is located in a recess on the top tube and therefore hidden from the wind. Rips on both sides of the recess keep the seat clamp safely in place when the seat post is removed. The new seat clamp offers twice the contact surface between clamp and seatpost compared to the previous model. Consequently, fewer reinforcements are required on the seatpost due to the reduced torque needed to safely fix the seatpost. Thanks to this small detail the weight savings on the seatpost amount to 6-7g.

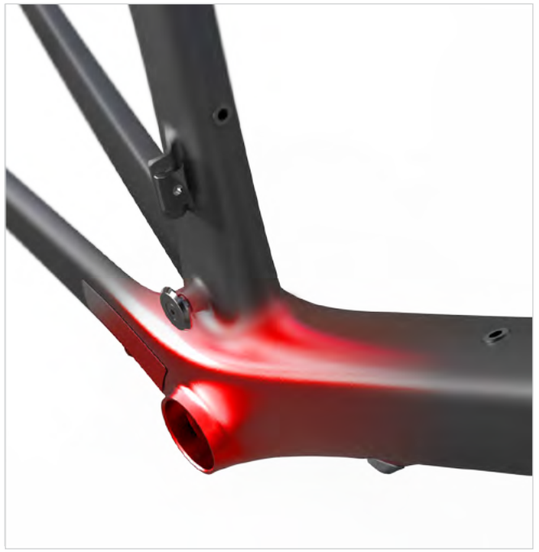
INTEGRATED CHAIN GUARD

The new Foil features a nicely integrated, removable chain guard.

POWER TRANSFER AND HANDLING

BB STIFFNESS

The PF86 bottom bracket allows for a wide connection of the downtube and the tapered seattube to the BB box. Together with a stiffness-optimized lay-up and SCOTT's patented carbon manufacturing process, the BB stiffness of the new Foil has increased by 13%.



HEADTUBE STIFFNESS

The Foil achieves a perfect balance between quick and stable handling. The fork of the new Foil exhibits excellent stiffness values thanks to its tapered 1 ¼ to 1 ½ steerer tube which features an increased diameter compared to the first Foil. However, the new Foil features an identical headtube width with an increased bearing size compared to the first edition given that the alloy insert for the bearing that was used on the previous model has been removed and frees space that is used for the larger steerer. Overall, an increase of torsional headtube stiffness by 13.5% compared to the first edition of the Foil has been achieved. Additionally, the lateral fork stiffness has been increased by 6%. The one-piece Syncros cockpit in combination with the increased diameter of the tapered steerer tube and the increased bearing size make the new Foil respond directly to steering inputs and communicates clearly the condition of the road surface and how much grip is available in turns.

COMFORT ZONE CONSTRUCTION

While the first Foil has been praised for its direct power transfer, responsive handling, low weight and aerodynamic excellence, some riders yearned for more comfort. So we increased vertical compliance, making comfort a key point in the requirements specification of the new Foil. The new Foil features a low seatstay attachment which in combination with a modified and noticeably thin seatstay shape leads to a smooth riding experience even on rough roads. The focused approach to improve comfort on the new Foil resulted in an increase in vertical compliance by 86% of the seattube area compared to its predecessor. Additionally, the fork compliance has been increased by 11% compared to the first edition of the Foil.

LIGHTWEIGHT IMP CONSTRUCTION

Lightweight is the shared bloodline connecting all SCOTT product segments. Early on, SCOTT invested heavily in the development of new carbon manufacturing technologies, the use of exclusive raw materials and the optimization of development processes. The continuous advancement of SCOTT's carbon expertise enables the release of stunningly lightweight products on a regular basis. The new Foil is no exception to this rule. The frame uses an HMX carbon fiber blend that has inherently excellent stiffness-to-weight characteristics. Thanks to SCOTT's proprietary IMP Technology and carbon expertise, complex frame areas can be manufactured while maintaining a low weight. The new Foil remains one of the lightest bikes in the Aero Bike segment.

6W
AVERAGE DRAG REDUCTION COMPARED TO FIRST FOIL

-27SEC
OVER 40KM AT 45KPH

+13.5%
HT STIFFNESS CP. TO PREVIOUS FOIL

+13%
BB STIFFNESS CP. TO PREVIOUS FOIL

+89%
BB STIFFNESS CP. TO PREVIOUS FOIL

FOIL PREMIUM 249637

FRAME	FOIL HMX / IMP, F01 AERO Carbon tech. Road Race geometry Replaceable Dropout STD Seattube / INT BB
FORK	FOIL HMX 1 1/4" - 1 1/2" Carbon steerer Integrated Carbon Dropout
HEADSET	Syncros Integrated
REAR DERAILLEUR	Shimano Dura-Ace RD-R9150 22 Speed Electronic
FRONT DERAILLEUR	Shimano Dura-Ace FD-R9150 Eletronic Shift System

SHIFTERS	Shimano Dura-Ace ST-R9150 Dual control 22 Speed Electronic Shift
BRAKES	Shimano Dura Ace BR-R9110 Super SLR Dual pivot / Direct mount
CRANKSET	Shimano Dura-Ace FC-R9100 Hollowtech II 52x36 T
BB-SET	Dura Ace BBR9100-PB
HANDLEBAR	Syncros Carbon FOIL Combo
SEATPOST	Syncros FOIL aero Carbon
SEAT	Syncros RR1.0 Carbon
HUB (FRONT)	Zipp 303

HUB (REAR)	Zipp 303
CHAIN	Shimano Dura-Ace CN-HG901-11
CASSETTE	Shimano Dura-Ace CS-R9100 11-28
SPOKES	Zipp 303
RIMS	Zipp 303 Firecrest Carbon Clincher 18 Front / 24 Rear
TIRES	Continental Grand Prix 4000 S II 700x25C
WEIGHT	Check website

FOIL RC 249638

FRAME	FOIL HMX / IMP, F01 AERO Carbon tech. Road Race geometry Replaceable Dropout STD Seattube / INT BB
FORK	FOIL HMX 1 1/4" - 1 1/2" Carbon steerer Integrated Carbon Dropout
HEADSET	Syncros Integrated
REAR DERAILLEUR	Shimano Dura-Ace RD-R9100 22 Speed
FRONT DERAILLEUR	Shimano Dura-Ace FD-R9100

SHIFTERS	Shimano Dura-Ace ST-R9100 Dual control 22 Speed
BRAKES	Shimano Dura Ace BR-R9110 / 9110 rear Super SLR Dual pivot / Direct mount
CRANKSET	Shimano Dura-Ace FC-R9100 Hollowtech II 53x39 T
BB-SET	Dura Ace BBR9100-PB
HANDLEBAR	Syncros Carbon FOIL Combo
SEATPOST	Syncros FOIL aero Carbon
SEAT	Syncros RR1.0 Carbon
HUB (FRONT)	Zipp 30 Course

HUB (REAR)	Zipp 30 Course
CHAIN	Shimano Dura-Ace CN-HG901-11
CASSETTE	Shimano Dura-Ace CS-R9100 11-28
SPOKES	Zipp 30 Course
RIMS	Zipp 30 Course 18 Front/24 Rear
TIRES	Continental Grand Prix 4000 S II 700x25C
WEIGHT	Check website

FOIL 10 249642

FRAME	FOIL HMF / IMP, F01 AERO Carbon tech. Road Race geometry Replaceable Dropout STD Seattube / INT BB
FORK	FOIL HMF 1 1/4" - 1 1/2" Carbon steerer Integrated Carbon Dropout
HEADSET	Syncros Integrated
REAR DERAILLEUR	Shimano Ultegra RD-6870 22 Speed Electronic
FRONT DERAILLEUR	Shimano Ultegra FD-6870 Eletronic Shift System

SHIFTERS	Shimano Ultegra ST-6870 22 Speed Electronic Shift
BRAKES	Shimano Ultegra BR-6810 / 6810 rear Super SLR Dual pivot / Direct mount
CRANKSET	Shimano Ultegra FC-6800 Hollowtech II 52x36 T
BB-SET	Ultegra SM-BB72-41
HANDLEBAR	Syncros RR2.0 Anatomic 31.8mm
HANDLEBAR STEM	Syncros FOIL 1 1/4"
SEATPOST	Syncros FOIL aero Carbon
SEAT	Syncros RR2.0

HUB (FRONT)	Syncros RR2.0
HUB (REAR)	Syncros RR2.0
CHAIN	Shimano CN-HG701-11
CASSETTE	Shimano Ultegra CS-6800 11-28
SPOKES	Syncros RR2.0
RIMS	Syncros RR2.0 20 Front / 24 Rear
TIRES	Continental Grand Sport Race Fold 700x25C
WEIGHT	Check website

FOIL 20 249643

FRAME	FOIL HMF / IMP, F01 AERO Carbon tech. Road Race geometry Replaceable Dropout STD Seattube / INT BB
FORK	FOIL HMF 1 1/4" - 1 1/2" Carbon steerer Integrated Carbon Dropout
HEADSET	Syncros Integrated
REAR DERAILLEUR	Shimano Ultegra RD-6800 22 Speed
FRONT DERAILLEUR	Shimano Ultegra FD-6800

SHIFTERS	Shimano Ultegra ST-6800 Carbon Dual control 22 Speed
BRAKES	Shimano Ultegra BR-6810 / 6810 rear Super SLR Dual pivot / Direct mount
CRANKSET	Shimano Ultegra FC-6800 Hollowtech II 52x36 T
BB-SET	Ultegra SM-BB72-41
HANDLEBAR	Syncros RR2.0 Anatomic 31.8mm
HANDLEBAR STEM	Syncros FOIL 1 1/4"
SEATPOST	Syncros FOIL aero Carbon
SEAT	Syncros RR2.0

HUB (FRONT)	Syncros RR2.0
HUB (REAR)	Syncros RR2.0
CHAIN	Shimano CN-HG701-11
CASSETTE	Shimano Ultegra CS-6800 11-28
SPOKES	Syncros RR2.0
RIMS	Syncros RR2.0 20 Front / 24 Rear
TIRES	Continental Grand Sport Race Fold 700x25C
WEIGHT	Check website

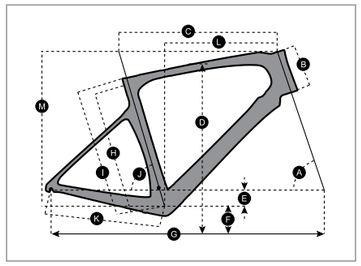
FOIL 30 — 249644

FRAME	FOIL HMF / IMP, F01 AERO Carbon tech. Road Race geometry Replaceable Dropout STD Seattube / INT BB
FORK	FOIL HMF 1 1/4" - 1 1/2" Carbon steerer Integrated Carbon Dropout
HEADSET	Syncros Integrated
REAR DERAILLEUR	Shimano 105 RD-5800 22 Speed
FRONT DERAILLEUR	Shimano 105 FD-5800

SHIFTERS	Shimano 105 ST-5800 Dual control 22 Speed
BRAKES	Tektro T531 / T541 rear Direct mount
CRANKSET	Shimano 105 FC-5800 Compact Hyperdrive 52x36 T
BB-SET	Shimano BB-RS500-PB
HANDLEBAR	Syncros RR2.0 Anatomic 31.8mm
HANDLEBAR STEM	Syncros FOIL 1 1/4"
SEATPOST	Syncros FOIL aero Carbon
SEAT	Syncros RR2.0

HUB (FRONT)	Shimano WH-RS330
HUB (REAR)	Shimano WH-RS330
CHAIN	Shimano CN-HG601-11
CASSETTE	Shimano 105 CS-5800 11-28
SPOKES	Shimano WH-RS330
RIMS	Shimano WH-RS330 16 Front / 20 Rear
TIRES	Continental Grand Sport Race Fold 700x25C
WEIGHT	Check website

GEOMETRY



FOIL

FOIL: PREMIUM, RC, 10, 20, 30

		XXS/47		XS/49		S/52		M/54		L/56		XL/58		XXL/61	
A	HEAD TUBE ANGLE	70.5 °		71.0 °		72.0 °		72.5 °		73.0 °		73.3 °		73.3 °	
B	HEAD TUBE LENGTH	110.0 mm	4.3 in	115.0 mm	4.5 in	130.0 mm	5.1 in	150.0 mm	5.9 in	170.0 mm	6.7 in	190.0 mm	7.5 in	210.0 mm	8.3 in
C	TOP TUBE HORIZONTAL	510.0 mm	20.1 in	520.0 mm	20.5 in	535.0 mm	21.1 in	550.0 mm	21.7 in	565.0 mm	22.2 in	580.0 mm	22.8 in	595.0 mm	23.4 in
D	STANDOVER HEIGHT	715.9 mm	28.2 in	729.4 mm	28.7 in	753.6 mm	29.7 in	773.5 mm	30.5 in	798.8 mm	31.4 in	812.9 mm	32.0 in	837.3 mm	33.0 in
E	BB OFFSET	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in	-67.0 mm	-2.6 in
F	BB HEIGHT	272.0 mm	10.7 in	272.0 mm	10.7 in	272.0 mm	10.7 in	272.0 mm	10.7 in	272.0 mm	10.7 in	272.0 mm	10.7 in	272.0 mm	10.7 in
G	WHEEL BASE	972.0 mm	38.3 in	978.0 mm	38.5 in	980.0 mm	38.6 in	987.0 mm	38.9 in	994.2 mm	39.1 in	1'002.9 mm	39.5 in	1'012.0 mm	39.8 in
H	BB CENTER TO TOPTUBE CENTER	400.0 mm	15.7 in	420.0 mm	16.5 in	450.0 mm	17.7 in	470.0 mm	18.5 in	490.0 mm	19.3 in	510.0 mm	20.1 in	540.0 mm	21.3 in
I	BB CENTER TO TOP OF SEATTUBE	410.0 mm	16.1 in	430.0 mm	16.9 in	460.0 mm	18.1 in	480.0 mm	18.9 in	500.0 mm	19.7 in	520.0 mm	20.5 in	550.0 mm	21.7 in
J	SEAT ANGLE	74.5 °		74.5 °		74.0 °		73.6 °		73.3 °		73.0 °		72.5 °	
K	CHAINSTAY	405.0 mm	15.9 in	405.0 mm	15.9 in	405.0 mm	15.9 in	405.0 mm	15.9 in	405.0 mm	15.9 in	405.0 mm	15.9 in	405.0 mm	15.9 in
L	REACH	370.6 mm	14.6 in	378.8 mm	14.9 in	384.0 mm	15.1 in	388.9 mm	15.3 in	394.5 mm	15.5 in	400.0 mm	15.7 in	403.4 mm	15.9 in
M	STACK	502.6 mm	19.8 in	509.0 mm	20.0 in	526.7 mm	20.7 in	547.5 mm	21.6 in	568.3 mm	22.4 in	588.5 mm	23.2 in	607.7 mm	23.9 in
N	STEM LENGTH	100.0 mm	3.9 in	100.0 mm	3.9 in	100.0 mm	3.9 in	110.0 mm	4.3 in	110.0 mm	4.3 in	120.0 mm	4.7 in	120.0 mm	4.7 in

TECH & FACTS REPORT FOIL
http://mdb.SCOTT-sports.com/pindownload/login.do?pin=LGX54XOZDNIX
PIN-Code: LGX54XOZDNIX

STUDIO SHOTS FOIL
http://mdb.SCOTT-sports.com/pindownload/login.do?pin=383F112MVSAZ
PIN-Code: 383F112MVSAZ

DETAIL SHOTS FOIL
http://mdb.SCOTT-sports.com/pindownload/login.do?pin=WM8FDLZS9SSE
PIN-Code: WM8FDLZS9SSE

ACTION SHOTS FOIL
http://mdb.SCOTT-sports.com/pindownload/login.do?pin=A2HS1L5LCLW4
PIN-Code: A2HS1L5LCLW4

For more information please contact:
jochen.haar@SCOTT-sports.com
PR & Communication Manager

TECH AND FACTS REPORT

2017 SCOTT FOIL LINEUP

IMAGERY: FRED LEISER, JOCHEN HAAR, ARMIN M. KÜSTENBRÜCK

SCOTT-SPORTS.COM