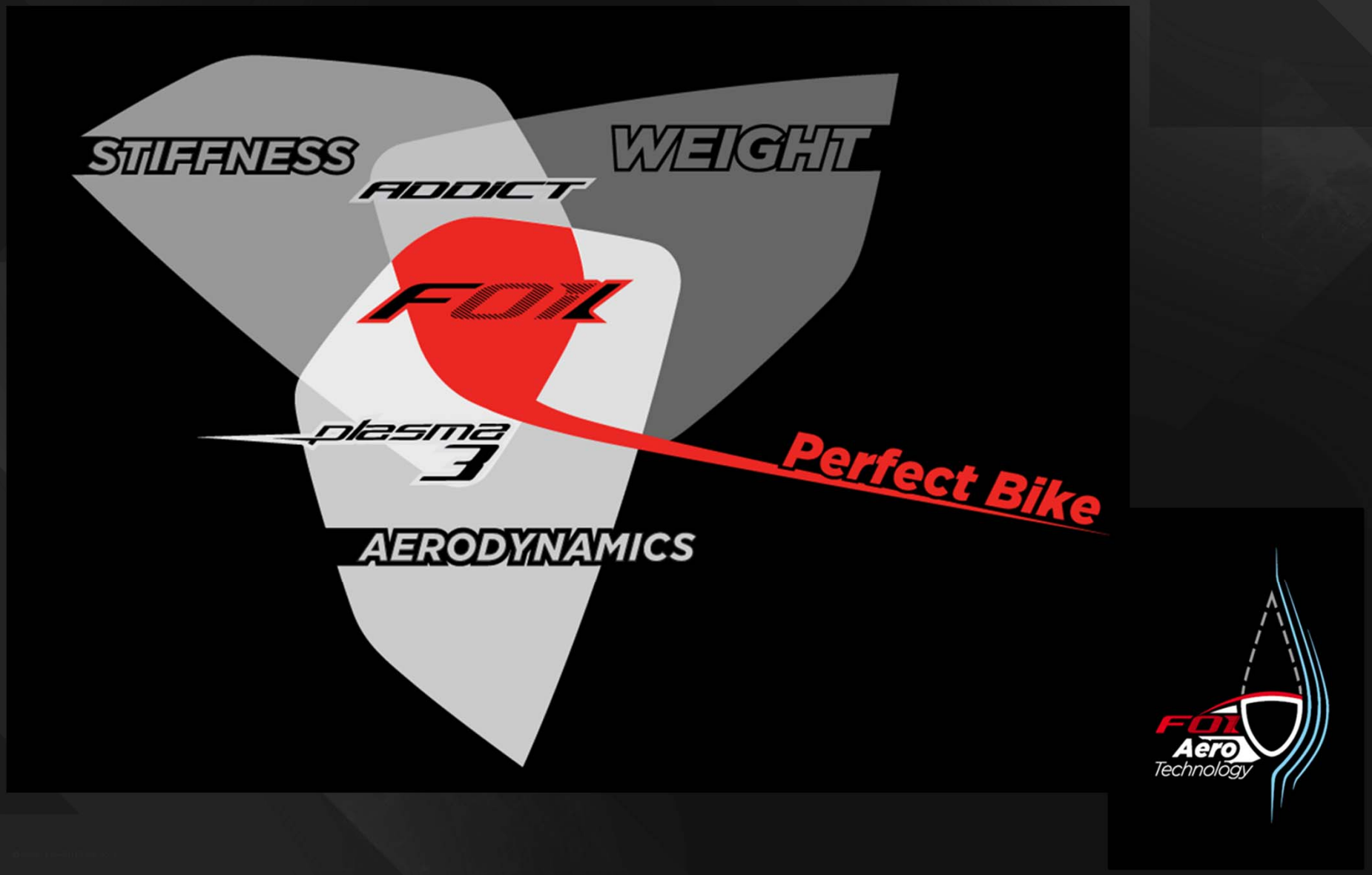
SCOTT

SPEEDSTER

WORKSHOP

BIKE 13

Foil Aero Technology Concept



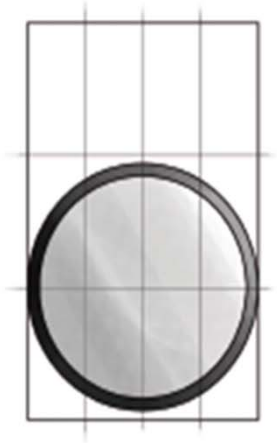
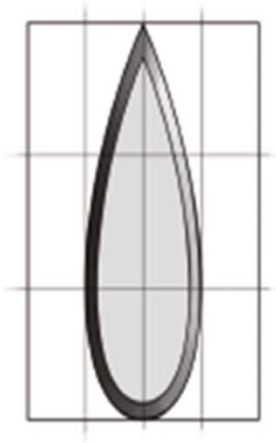
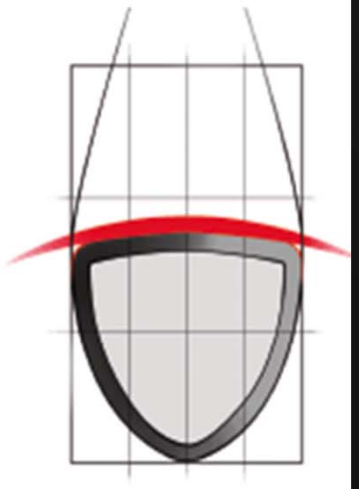
2013 Speedster Concept

Geometry

- No change to proven and successful comfort geometry of the CR1 and 2012 Speedster.
- Shorter top tube and longer head tube than Foil for more relaxed ride.

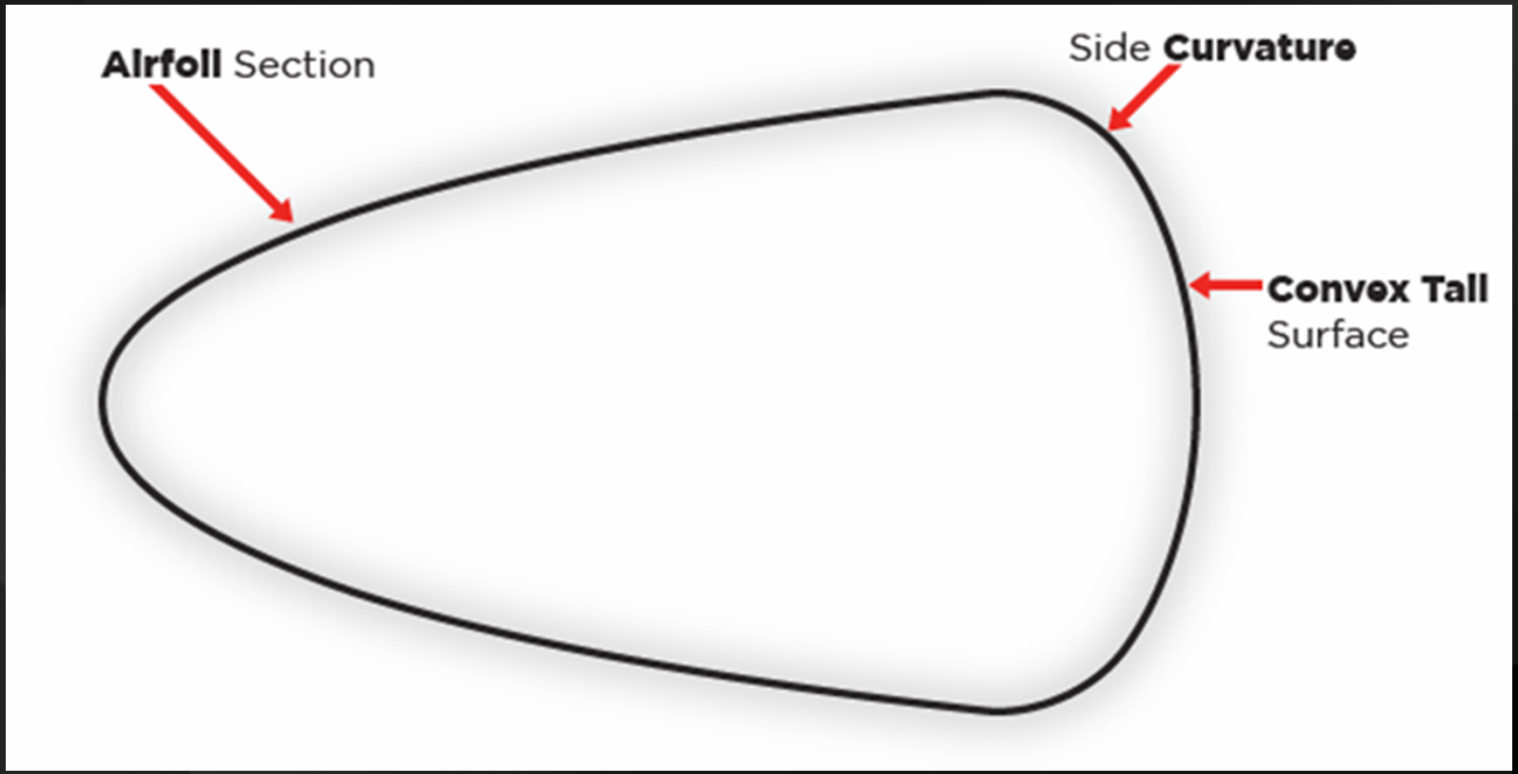
		XX Small	X Small	Small	Medium	Large	X Large	XX Large
Fork rake	mm	45.0	45.0	45.0	45.0	45.0	45.0	45.0
Head angle	°	70.5°	71°	73°	73°	73°	73°	73°
Head tube	mm	111.0	116.0	136.0	156.0	176.0	196.0	216.0
Top tube horizontal	mm	505.0	515.0	530.0	545.0	560.0	575.0	595.0
Seat angle	°	75°	75°	74.5°	74°	73.5°	73.3°	73.3°
Centre to top of seat tube	mm	470.0	490.0	520.0	540.0	560.0	580.0	610.0
Centre to top tube centre	mm	410.0	430.0	460.0	480.0	500.0	520.0	550.0
Chain stay	mm	405.0	405.0	405.0	405.0	405.0	405.0	405.0
BB offset	mm	-67.0	-67.0	-67.0	-67.0	-67.0	-67.0	-67.0
BB height	mm	272.0	272.0	272.0	272.0	272.0	272.0	272.0
Stand-over height	mm	722.0	735.6	763.5	782.5	801.5	820.5	844.6
Wheel base	mm	972.6	978.6	971.5	981.7	991.6	1004.4	1024.6
Reach	mm	367.6	375.8	378.8	383.1	387.1	394.2	408.4
Stack	mm	512.9	519.4	545.4	564.5	583.6	602.8	621.9

Foil Aero Technology

ADDICT	plasma 3	F01
		
Addict Tube. **Ratio: 1:1** ++ Light structure + Stiffness - Aerodynamic	**Plasma Tube.** **Ratio: 1:3 UCI rules** ++ Aerodynamic - Stiffness - - weight	**F01 Aero Technology** **Ratio: 3:2** + Aerodynamic + Stiffness + Light structure

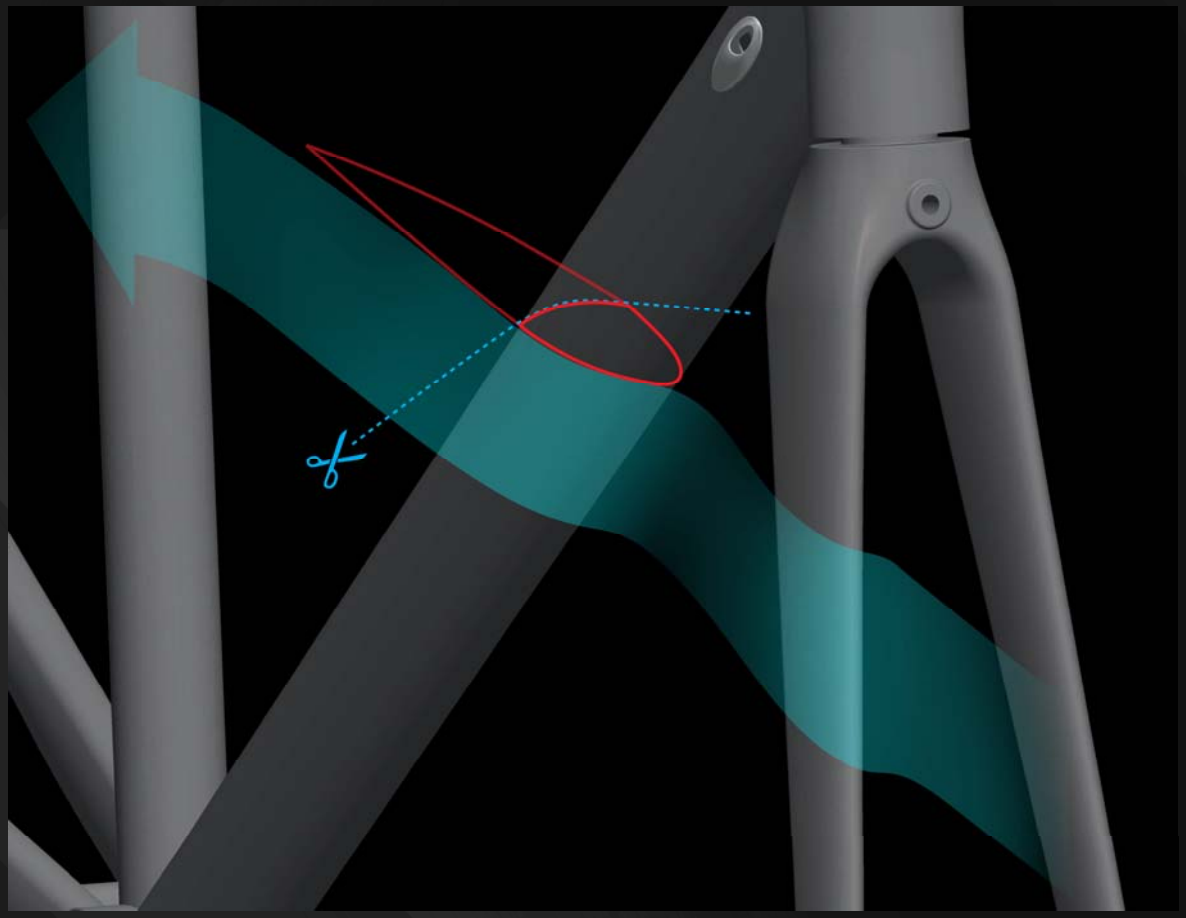
- Optimised NACA profiles.
- Efficient at lower air speeds.
- Removal of trailing edge.
- UCI compliant.
- Stiffer and lighter than a full aero tube.
- More aerodynamic than a round tube.

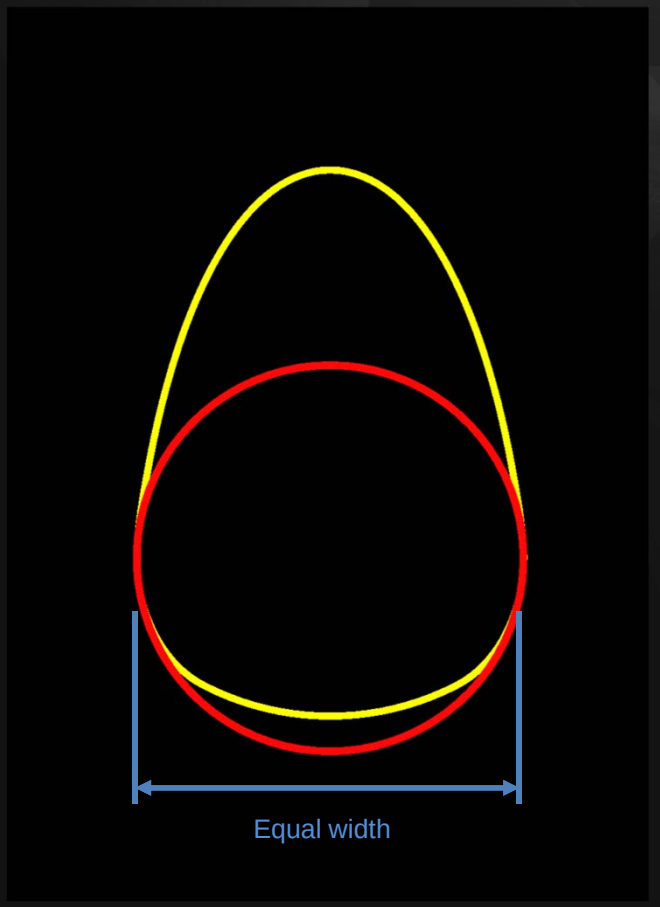
Foil Aero Technology



- Optimisation to minimise drag.
- The Foil tube shape easy to form in aluminium.

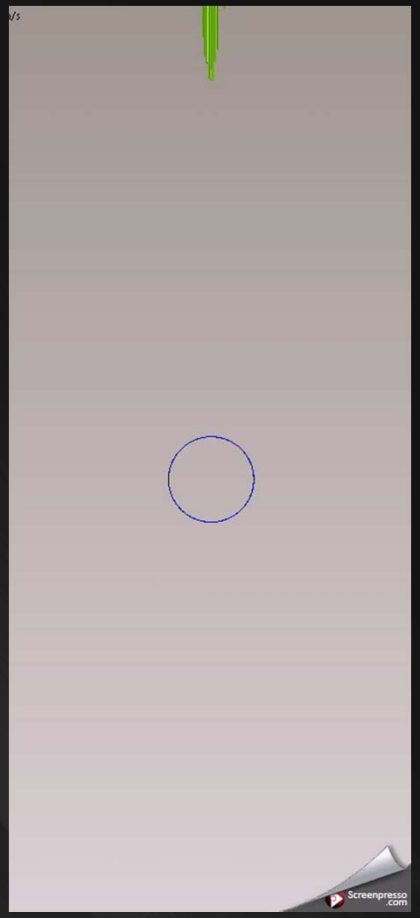
Computational Fluid Dynamics



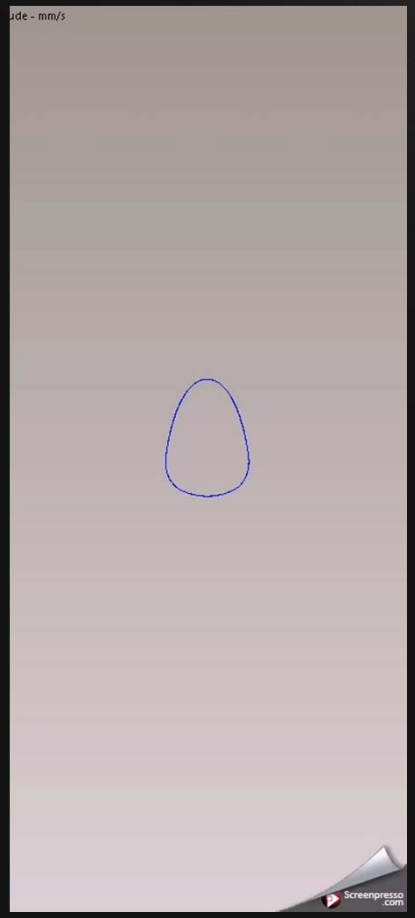


Computational Fluid Dynamics

- 20% increase in aerodynamic performance.

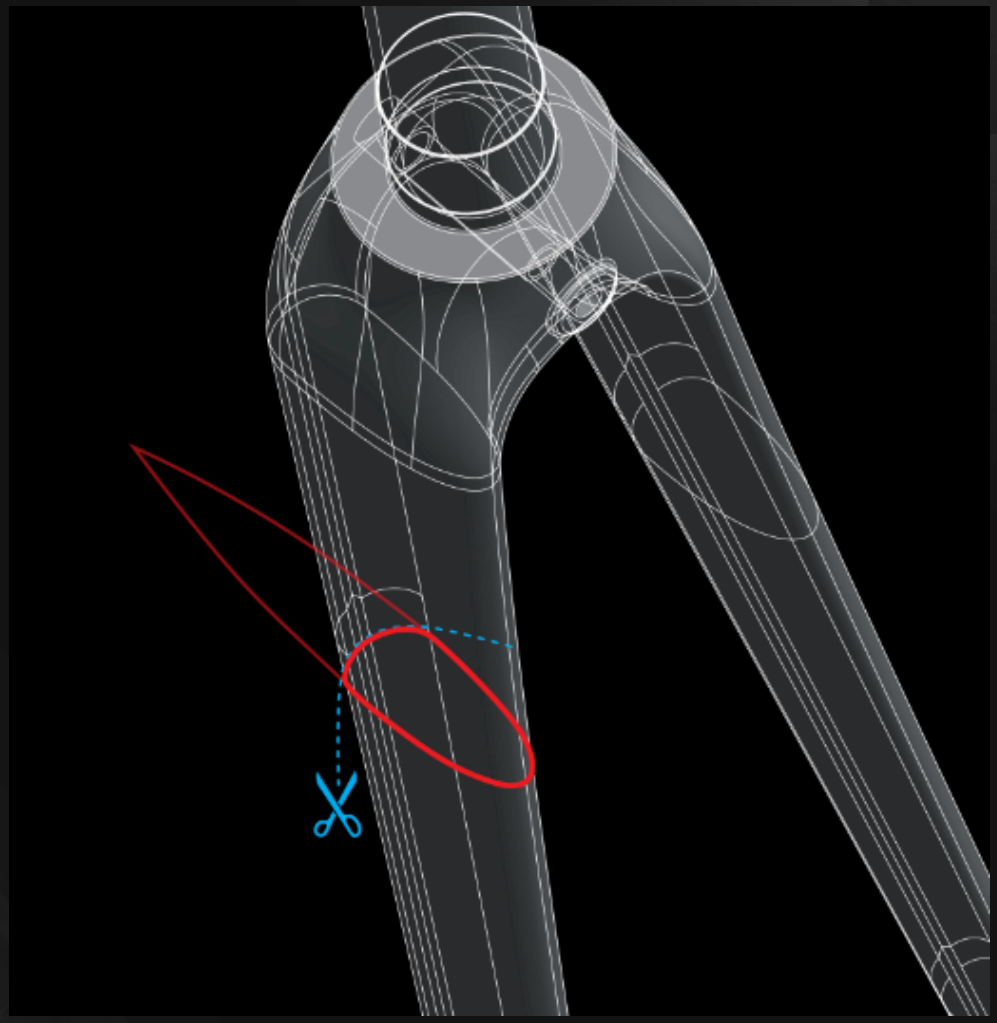


Round tube, 0° yaw angle, 45km/h air speed.



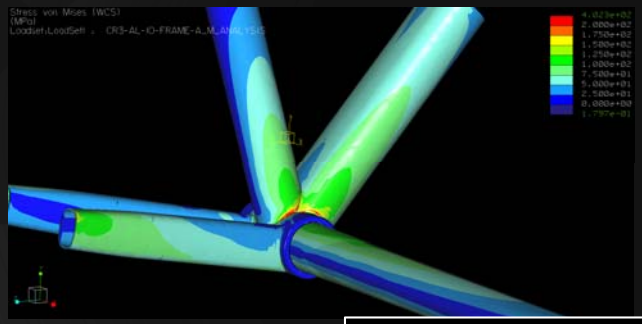
Speedster F01 tube, 0° yaw angle, 45km/h air speed.

Aero Fork

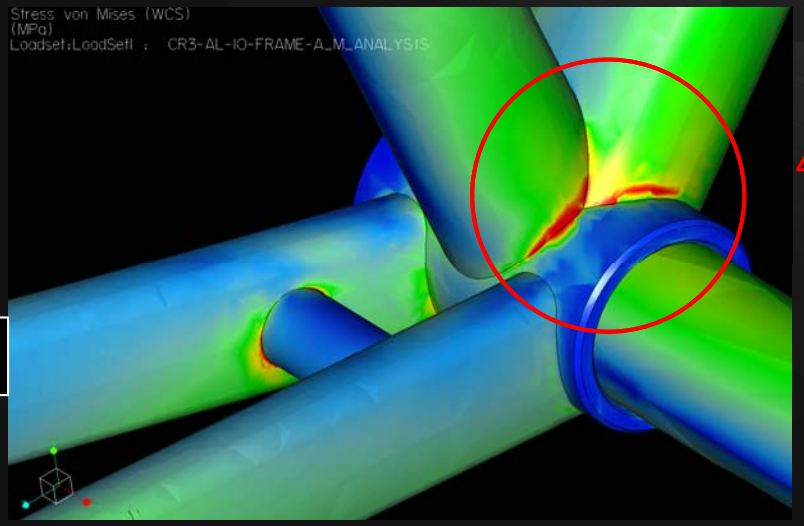


Stiffness and Stress

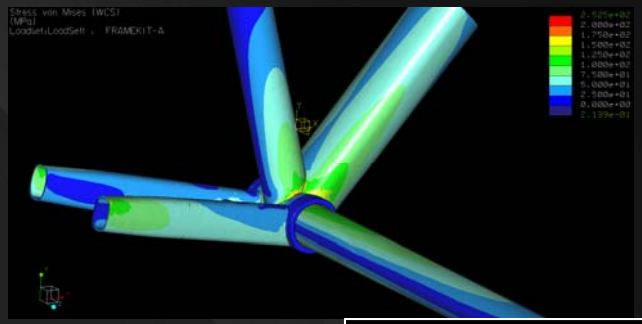
- Reduction in peak stress.
- BB stiffness is increased by around 6%.



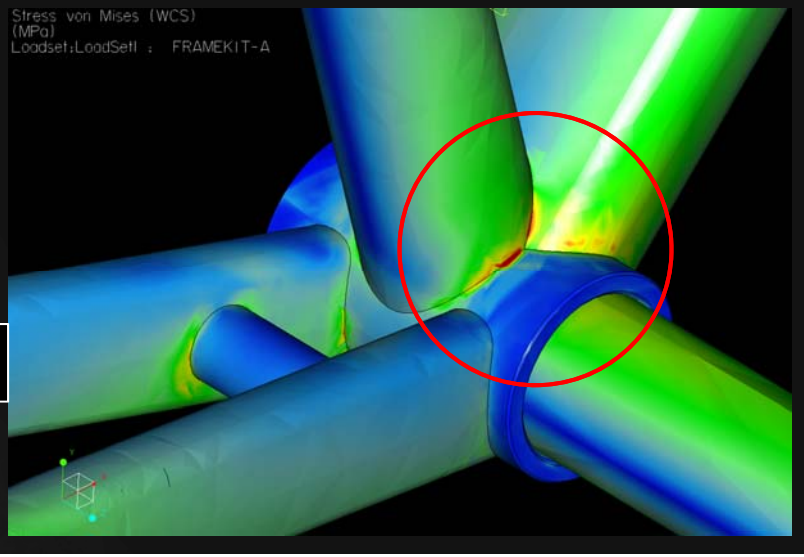
Speedster 2010



400MPa



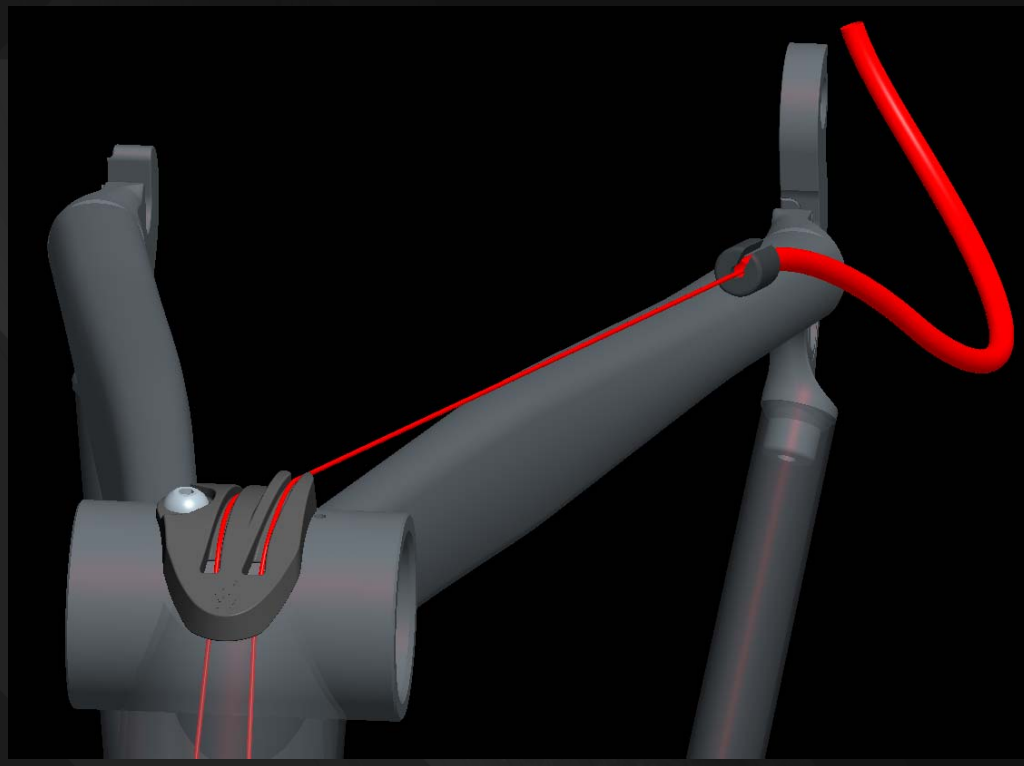
Speedster 2013

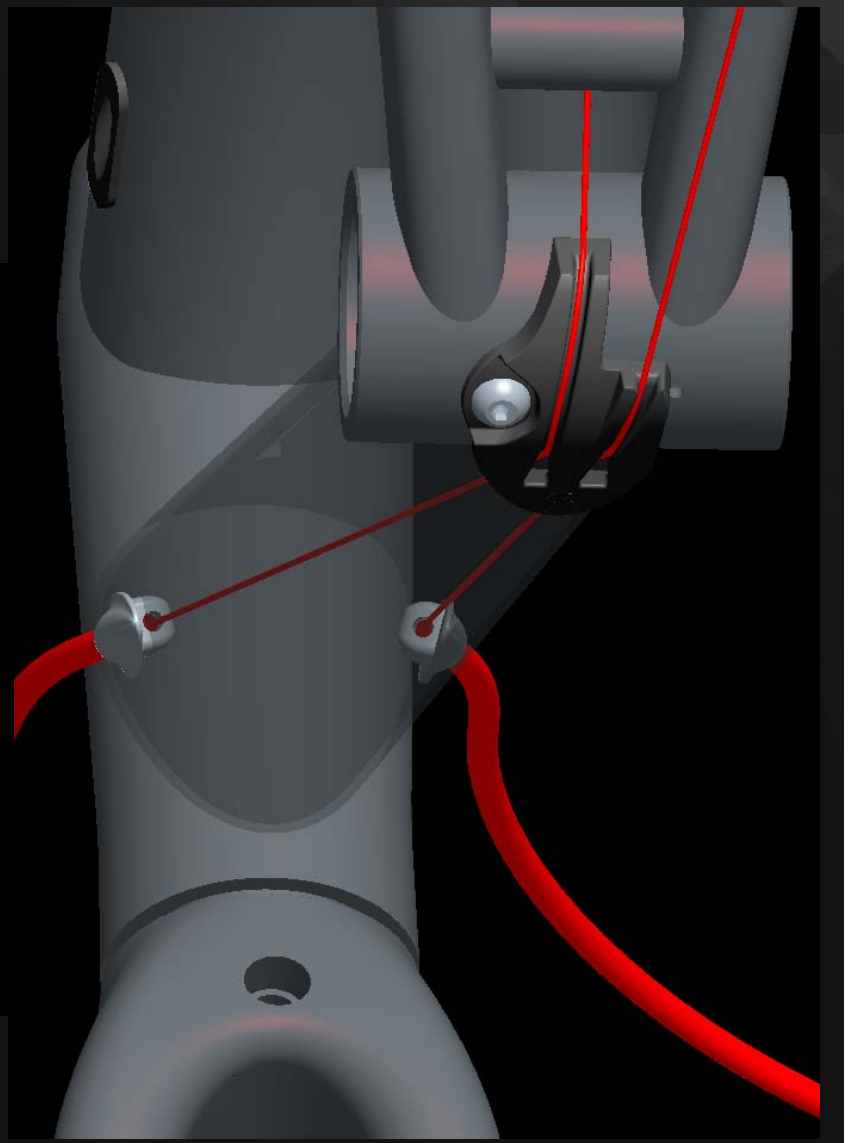


250MPa

Down Tube Internal Cable Routing

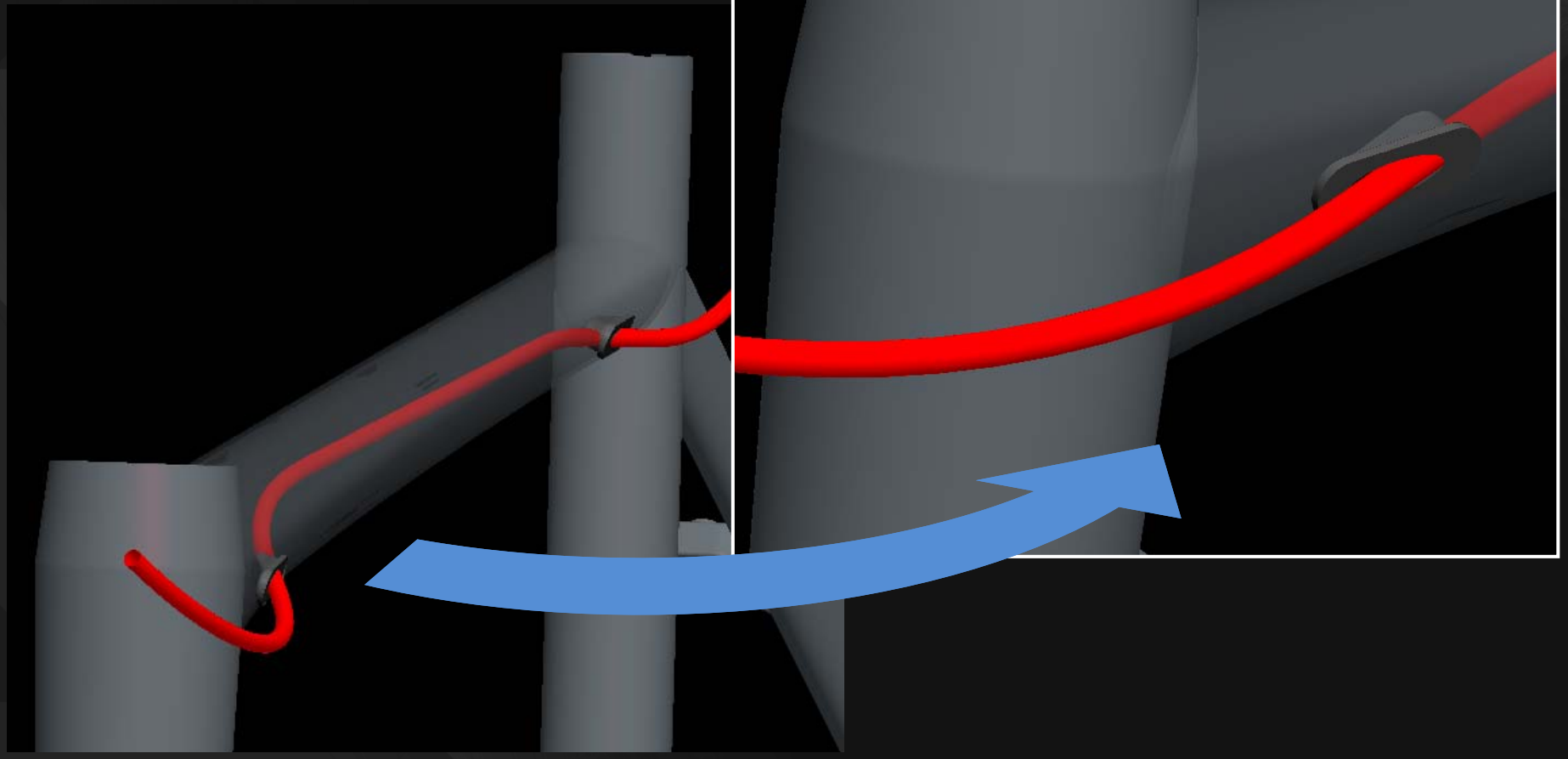
- Brazed on cable stops at head tube.
- Plastic BB cable guide.





TT Internal Cable Routing

- Clip in plastic cable guides.
- Uninterrupted full length cable outer.



Speedster Range and Features

- 3 frame models.
- 10 bike models.

	Speedster						Contessa Speedster			
	10	20	30	40	50	60	15	25	35	45
F01 Technology	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
Aero Fork	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
Formed Tubes	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
Double Butting	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
Internal TT Routing	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
Internal DT Routing	✓	✓	✗	✗	✗	✗	✓	✗	✗	✗
Smooth Welding	✓	✓	✗	✗	✗	✗	✓	✗	✗	✗

Strength and Weight

- Frame and fork pass rigorous EFBe tests at the Top Performance level.
- This is the same standard as the Foil and all other Scott frames.
- Competitive weight at 1.55kg (Speedster 10, 20 and 15).

2013 Speedster

speedster