

**ROAD**  
TWO  
THOUS  
AND  
18

***DT SWISS***

# ROAD R:EVOLUTION |8

Revolution is defined as a fundamental change, taking place in a relatively short period of time, rising up in revolt against the current status quo. Evolution is defined as a gradual, peaceful, progressive change or development. Combining the characteristics of both revolution and evolution our roadrevolution18 campaign is unique above all.

***DT SWISS***

# DISCOVER NEW ROADS

Developing new products means to make a statement. We are willing to make such statements time and time again. Putting up a completely new road line up for 2018, together with a new naming concept, is proof of that. By taking this step, every road riding enthusiast will find an easier way into the world of DT Swiss road wheels. So go ahead and discover our five new roads:

**Aero, Performance, Endurance, Crossroad and Track.**





# AERO

## #FLATOUTFAST

Aerodynamics describe the interaction of an object with its surrounding medium: air. To us aero means minimal drag in all conditions, allowing you to go faster than ever, without any compromises in weight, stiffness and braking performance. We want to create the most efficient and complete system.

# THE AERO REVOLUTION

When setting ourselves the goal of developing benchmark-setting aero wheels, it was clear we needed to team up with the industry leader in aerodynamics. After all, DT Swiss is an industry leader

when it comes to wheel manufacturing, so we wanted to work with the absolute best. Being close both geographically and regarding our mindset, with SWISS SIDE we have found the ideal partner.

**DT SWISS** AERODYNAMICS BY **SWISSIDE™**

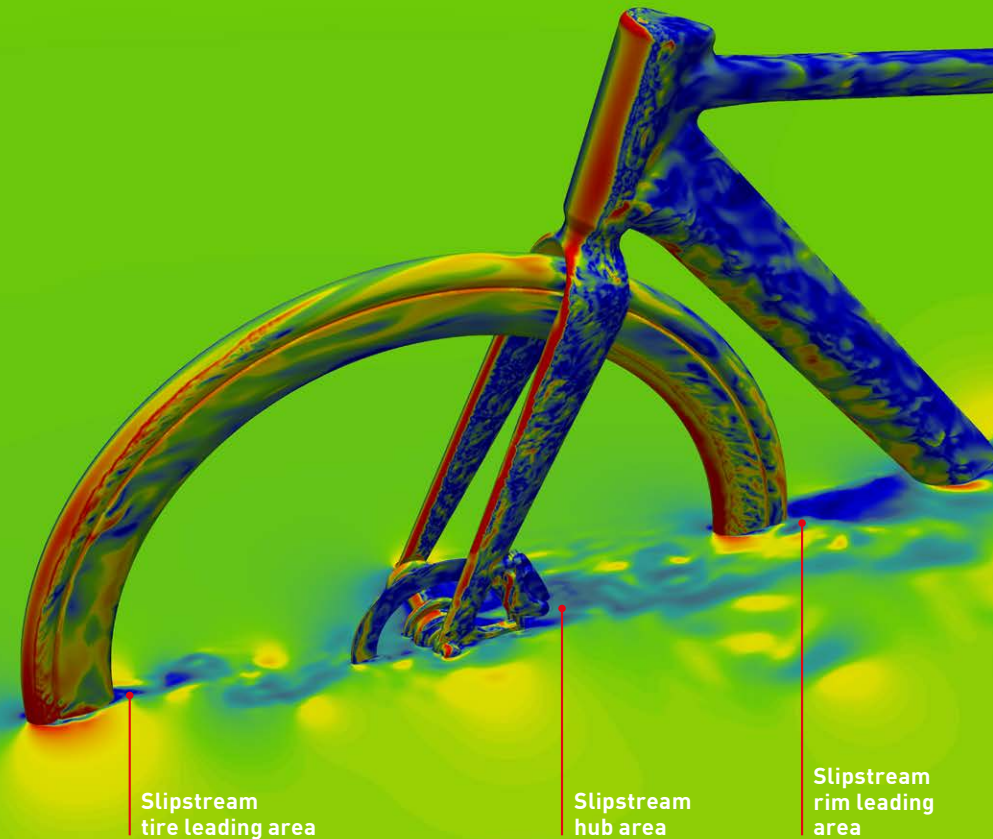
With over 50 years of Formula 1 experience the Swiss Side team is revolutionizing cycling aerodynamics by bringing previously unseen development techniques to the cycling industry in order to maximize the performance of cycling products. Contrary to popular opinion, when it comes to aerodynamic optimization of wheelsets there is still a lot of potential for improvement. While everyone else is discussing about the optimization of the rim shape we took a far more holistic view, looking at

how every component of the wheel influences its aero performance. The development target of our new AERO wheel lineup has been clear: Maximum support of the complete system of the rider and his bike through low drag number and – most importantly – a linear and predictable side force in windy conditions to secure a better handling while riding in the aero position. On top of all that, the wheels need to create a sailing effect improving forward thrust in crosswind conditions.

## CFD OPTIMIZATION

To meet our targets some key factors that influence aerodynamic performance had to be considered. An important first step is the Computational Fluid Dynamics (CFD) simulation, which shows the airflow behavior on the wheel model – fed by real world

data – and all forces acting on the 3D model. Resulting from the CFD simulation the most promising wheel geometry is then built up to a prototype, which is not rideable yet but ready for wind tunnel testing.





# THE MOMENT OF **TRUTH**

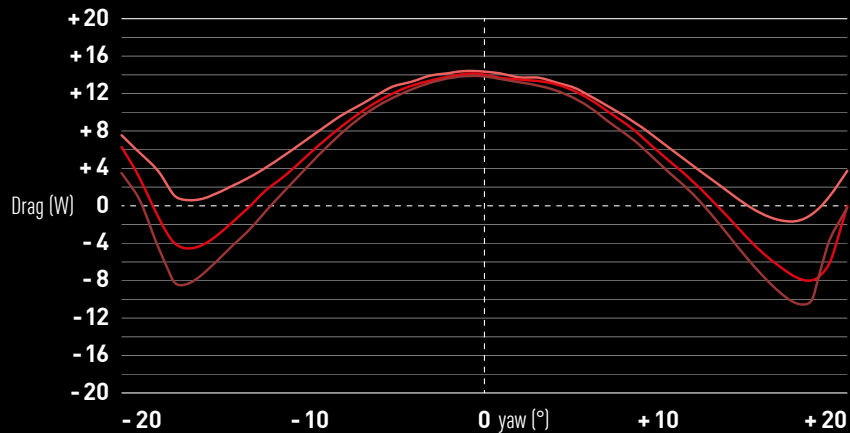
How do the prototypes perform and what about the competitor comparison? When taking a look at the data of our new ARC 1100 DICUT® wheels, it gets clear that we did not only meet the development target but clearly set a new benchmark for aerodynamic performance. All three rim depths in their rim brake and disc brake iterations perform brilliantly with low drag number across the entire yaw range and a linear, smooth steering behavior. Find out about the numbers on the following page:

## DT SWISS AERO WHEELS

No matter which rim depth you choose, the ARC 1100 DICUT® line up with its three rim depths gives you the perfect option depending on your demand. Independent of the rim depth all wheels have a very low base drag level with a delta of only 0.4 watt at 0° yaw angle. The ARC 1100 DICUT® 62 & the ARC 1100 DICUT® 80 even

create negative drag and show the desired sailing effect at higher yaw angles above 12°. The ARC 1100 DICUT® 48 is the perfect wheel for gusty wind conditions creating very low steering moment at higher yaw angles and having a smooth and predictable stall behavior.

AERO DRAG ARC 1100 DICUT® 80 // ARC 1100 DICUT® 62 // ARC 1100 DICUT® 48



There is a lot of discussion about the influence of disc brakes on aerodynamics. Here are the true facts:

**+2 WATT**

The disc brake models show the same aerodynamic behavior than the rim brake models with a slightly higher base

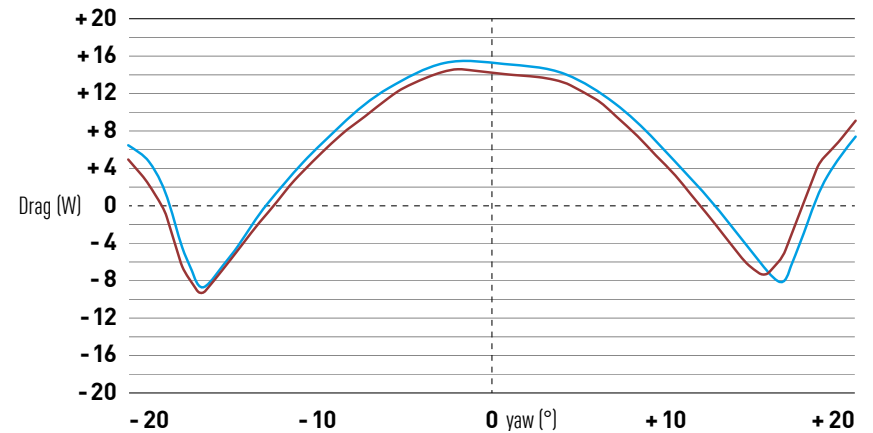
drag level, which comes from the unavoidable larger hub necessary for disc brakes.

## BENCHMARK COMPARISON

How fast are the ARC 1100 DICUT® wheels when compared to the industry benchmark? We can proudly say: They are the new benchmark! Comparing the ARC 1100 DICUT® 80 with the industry benchmark Zipp 808 NSW we notice a one watt shift across the entire yaw range which

translates into a drag reduction of 10 %. The sailing effect of both rims is identical. The steering moment magnitude is also slightly reduced with the ARC 1100 DICUT® 80 compared to the Zipp 808 NSW wheels, which means superior handling.

AERO DRAG ARC 1100 DICUT® 80 // ZIPP NSW 808



The ARC 1100 DICUT® 80 wheels are made to go #flatoutfast with supreme aero-stability and minimal aero drag, beating the industry benchmark Zipp 808 NSW by a full watt during our windtunnel testing.

**-1 WATT**

The facts & figures are clear, but what about the real world performance? Well, at DT Swiss we have some pretty impressive test riders. Exceptional athletes like Daniela Ryf, the Ironman World Champion, and Boris Stein who set the fastest

bike split at Kona 2016. Both of these have tested the ARC 1100 DICUT® wheels down to the tiniest detail. So far, both have a 100% win rate on the new wheels, so what are you waiting for?



## ARC 1100 DICUT® 80

WEIGHT FROM 1750 g

DISC BRAKE  
RIM BRAKE

EUR 2388\*  
USD 3146\*



## ARC 1100 DICUT® 62

WEIGHT FROM 1620 g

DISC BRAKE  
RIM BRAKE

EUR 2388\*  
USD 3146\*



## ARC 1100 DICUT® 48

WEIGHT FROM 1470 g

DISC BRAKE  
RIM BRAKE

EUR 2388\*  
USD 3146\*

\* PRICE PER WHEEL SET

DT SWISS



# PERFOR- MANCE

## #LEADTHERIDE

Performance is the part of your energy that is brought to the road and that part is pretty big with DT Swiss performance wheels. Just what you need when you are leading your buddies up epic mountain roads or when making the decisive move on the days last descent.

# PRO DEVELOP MENT

The PRC 1400 SPLINE® wheels can be seen as the result of our 4-year sponsorship with the Swiss Pro-Team IAM Cycling. Endless hours of testing and discussing with world-class riders and their mechanics brought us tons of valuable feedback which has flown into the development of the PRC 1400 SPLINE® wheels. Improved carbon lay-up for precise and safe braking on long down-hills, the perfect spokes combination for ideal stiffness and the most advanced hub technology for thousands of kilometers with low friction and outstanding quality are only a few points to mention. Go ahead and find out about the fruits of this unique partnership.



# 5 YEARS OF PRO DEVELOPMENT



2013

**RC 38**  
SPLINE®



2015

**RC 38**  
SPLINE®



2016

**RC 38**  
SPLINE®  
MON CHASSERAL



2018

**PRC 1400**  
SPLINE® 35

# 4 YEARS OF PRO SUCCESS

**MATTEO PELUCCHI**



2013

**STAGE 1  
CIRCUIT DE LA SARTHE**

**SYLVAIN CHAVANEL**



2014

**GRAND PRIX  
PLOUAY**

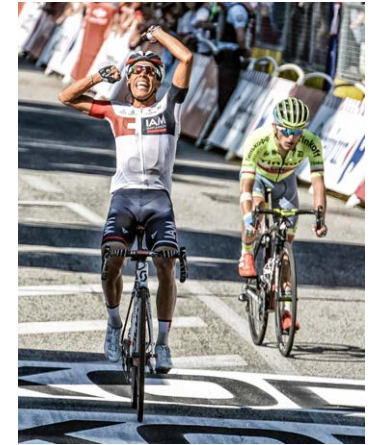
**MATTHIAS BRÄNDLE**



2015

**STAGE 6  
TOUR OF OMAN**

**JARLINSON PANTANO**



2016

**STAGE 15  
TOUR DE FRANCE**

# THE COMPARISON

Comparing the PRC 1400 SPLINE® 35 with the first version of the RC 38 SPLINE® wheels from 2013 a technical evolution is clearly visible. While the weight has stayed the same, the inner rim width was increased to a contemporary 18 mm, resulting in a stiffer rim and improving the support of 25 mm tires, which have become the most popular tire width for both

pros and amateur riders. What might seem to be minor adoptions to the hub result in an increase of 15 % rear wheel side stiffness. Last but not least the optimized architecture of the carbon layup leads to a massive 20 % increase in heat resistance, making the rim brake versions extremely safe in long downhill sections.



**2018 PRC 1400 SPLINE® 35**

# PRC 1400 SPLINE® 65

WEIGHT FROM 1649 g



DISC BRAKE  
RIM BRAKE

EUR 1958\*  
USD 2580\*

The PRC 1400 SPLINE® 65 has been developed to be a “do-it-all” performance wheel: Tested in the wind tunnel, with our pro teams and in countless test lab hours it emerged fast and reliable. A smooth straightpull SPLINE® hub in combination with the wide and tubeless ready rim

provide excellent rolling performance and high comfort. Equipped with disc brakes and the 36T DT Swiss Ratchet System it features superb braking performance and quick engagement to precisely time your attack.



## PRC 1400 SPLINE® 35

WEIGHT FROM 1486 g

DISC BRAKE  
RIM BRAKE

EUR 1958\*  
USD 2580\*



## PR 1400 DICUT® OXIC

WEIGHT FROM 1500 g

RIM BRAKE

EUR 998\*  
USD 1315\*



## PR 1400 DICUT® 21

WEIGHT FROM 1415 g

DISC BRAKE  
RIM BRAKE

EUR 828\*  
USD 1091\*



## PR 1600 DICUT® 21

WEIGHT FROM 1489 g

DISC BRAKE  
RIM BRAKE

EUR 678\*  
USD 894\*



## P 1800 SPLINE® 23

WEIGHT FROM 1434 g

DISC BRAKE  
RIM BRAKE

EUR 388\*  
USD 512\*



## PR 1600 SPLINE® 23

WEIGHT FROM 1595 g

DISC BRAKE  
RIM BRAKE

EUR 558\*  
USD 735\*



## P 1800 SPLINE® 32

WEIGHT 1735 g

DISC BRAKE

EUR 408\*  
USD 538\*



## PR 1600 SPLINE® 32

WEIGHT FROM 1737 g

DISC BRAKE  
RIM BRAKE

EUR 558\*  
USD 735\*

# ENDURANCE

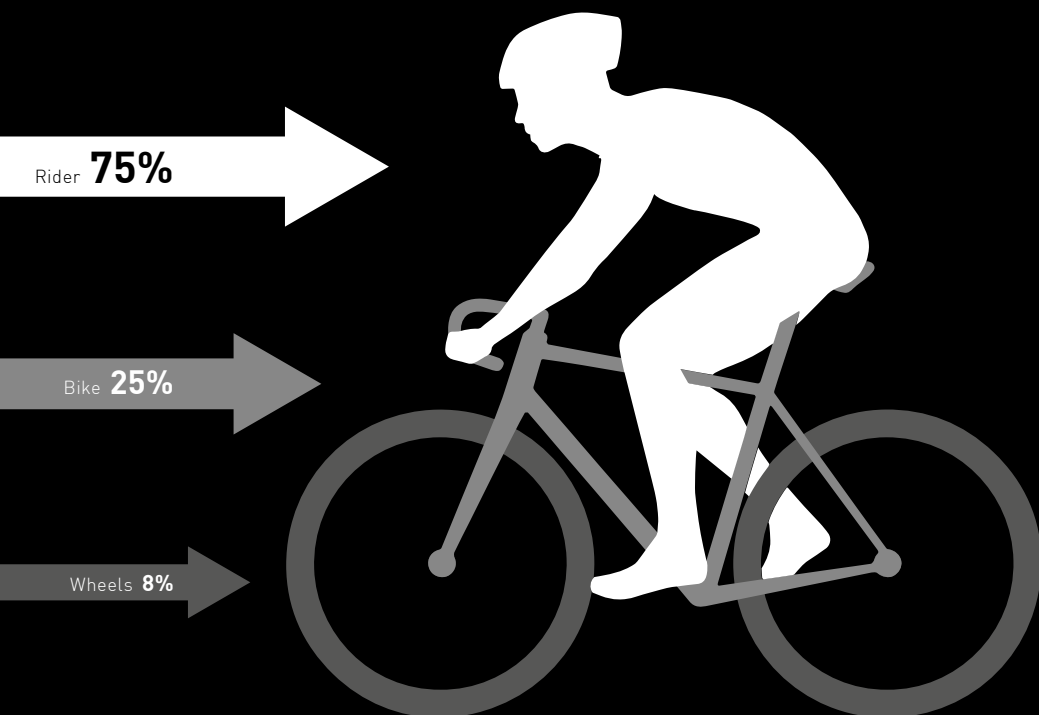
## #LONGDAYSOUT

Endurance means to pursue a goal, no matter what might happen along the way. Each and every wheel in the DT Swiss Endurance line up is designed with this goal in mind. They unite top notch aerodynamics with comfort and reliability. Now bring on the cobbles, rain and head-wind situations.



# AERO+

## THE ESSENCE OF #LONGDAYSOUT



AERO+ describes our approach to optimize a wheelset via numerous engineering techniques all through its development process to guarantee the resulting product performs as good as humanly possible at a given moment in human and technological development. Aero+ is based on three pillars: **DRAG, HANDLING & EFFICIENCY**

### DRAG

Wind is anything but unidirectional. A lot of factors have to be considered when trying to optimize a road wheel. Although the rider is responsible for the majority of drag, it's the wheel aerodynamics which can have the biggest influence on reducing the drag. The ERC 1100 DICUT® has super low drag numbers at all relevant yaw angles. Best of all it is right in the ballpark with the competition both when run with 25 mm and 28 mm tires.

**DRAG -**  
*The longitudinal aerodynamic force slowing the rider down*

### HANDLING

The complete bike only accounts for 25% of your overall drag, and the wheels are only 8% of that number, while the rider weights in with the other 75%. So why is the wheel important? In order to stay aero in the first place, you have to stay comfy no matter the riding situation, because only then will you be able to keep an aero position, which affects those big 75%. And this is why the handling characteristics of a wheel are key. The ERC 1100 DICUT® is the best handling wheel in wind situations commonly found on the road. This is true independent of the tire width you chose to ride.

**SIDE FORCE -**  
*The lateral aerodynamic force pushing the rider to the side*

### EFFICIENCY

Comfort, grip and rolling resistance all define your efficiency. Wheels have a direct and important influence on how the tires will perform in all three of those categories. During the development of the ERC 1100 DICUT® we paid close attention to these factors as they play an integral role in the AERO+ concept, because you can only stay aero, when you stay in control.

**AERO+ -**  
*More infos can be found under roadrevolution18.dtswiss.com/endurance*

# DT SWISS FACTORY TESTING TEAM

Nothing in the world replaces real world testing. We take great care every single one of our products feels right out on the road. After all, this is what it's all about. As we all are enthusiast riders we have a big stable of kilometer crunching riders who roll on our prototypes long before a courier delivers the first set to a bike shop. Here are three of them:

## MARCO CAPTEINA

Head of Graphics

Bike: BH G7

Tires: Continental GP4000S 25 mm @ 8.0 Bar

*«I'm a speed junkie, I chase KOMs on small gravel paths, go all out on the traffic signs, this is where I play the aero advantage.»*

## ALEX SCHMITT

Road Marketing

Bike: Focus Cayo disc

Tires: Schwalbe Pro One 25 mm @ 6.8 Bar

*«I chase moments. Aero+ means to explore new roads no matter where and on what kind of tarmac. Doing 6h rides through the Jura, setting new KOMs and looking for ultimate riding memories.»*

## MICHAEL RIEHLE

Sales Project Manager

Bike: Genesis croix de fer

Tires: Continental GP4000S 28 mm @ 6.0 Bar

*«I go for the long distances. After many hours in the saddle and 200k's on the road, comfort has to be kept up for the final 100 kilometers.»*



# ERC 1100 DICUT<sup>®</sup> 47

WEIGHT FROM 1513 g



DISC BRAKE

EUR 2408\*

USD 3173\*

AERODYNAMICS BY  
**SWISSIDE**

Developed by  
DT Swiss in cooperation  
with Swiss Side

Whatever road you choose the ERC 1100 DICUT<sup>®</sup> delivers the best performance. Benchmark aerodynamics developed with our partner SWISS SIDE generate maximum speed on tarmac. Unparalleled handling comes through the revolutionary AERO+ development approach.

Plus, rethinking the wheel from scratch has led to a 47 mm deep, 1530 g tool for any road mission, leaving you with no excuses and giving you all the more reasons to get out and ride – wherever the road may take you.

**DT SWISS**

\* PRICE PER WHEEL SET





## ERC 1400 SPLINE® 47

WEIGHT FROM 1538 g

DISC BRAKE

EUR 1978\*

USD 2606\*



## ER 1600 SPLINE® 32

WEIGHT FROM 1771 g

DISC BRAKE

EUR 578\*

USD 762\*



## ER 1400 SPLINE® 21

WEIGHT FROM 1549 g

DISC BRAKE

EUR 848\*

USD 1117\*



## E 1800 SPLINE® 23

WEIGHT FROM 1655 g

DISC BRAKE

EUR 408\*

USD 538\*



## ER 1600 SPLINE® 23

WEIGHT FROM 1638 g

DISC BRAKE

EUR 578\*

USD 762\*

# CROSS ROAD

## #OFFTHEBEATENROADS

Crossroad stands for those «there may be a road» rides. Inspired by the tough world of cyclocross, DT Swiss Crossroad wheels perform on any surface, whether you choose to explore new roads or that muddy farm track that ends up to be a single-trail. So where was that road again?

# CR 1600 SPLINE® 23

WEIGHT 1728 g



DISC BRAKE

EUR 578\*

USD 762\*

What feels better than passing a mountain biker on his trail while your gripping the hoods of your cross bike? Not much, but the CR 1600 SPLINE® offers more than that. Whether you are cutting through mud, dancing on icy, frozen trails or exploring dusty desert roads, you will feel the

great efficiency of these wheels. Wide straight pull spokes attached to a beautifully machined, high end Ratchet System hub will keep encouraging you to attack new challenges as soon as the last one is over, and the CR 1600 SPLINE® is totally up to it.

# C 1800 SPLINE® 23

WEIGHT 1745 g



DISC BRAKE

EUR 408\*

USD 538\*

When heavy duty riding is your passion, the C 1800 SPLINE® is the right partner for any mission. With its high end sleeved rim ready to take up MTB-sized rubber and the tough build featuring our sturdiest bladed spokes, it is right at home at anything from

jumping obstacles, cutting through the mud to sprinting up steep. Trademark DT Swiss reliability coming from the precision hubs and the superb wheel building quality guarantee trouble free rides year in year out.



# TRACK

## #THEPURELINE

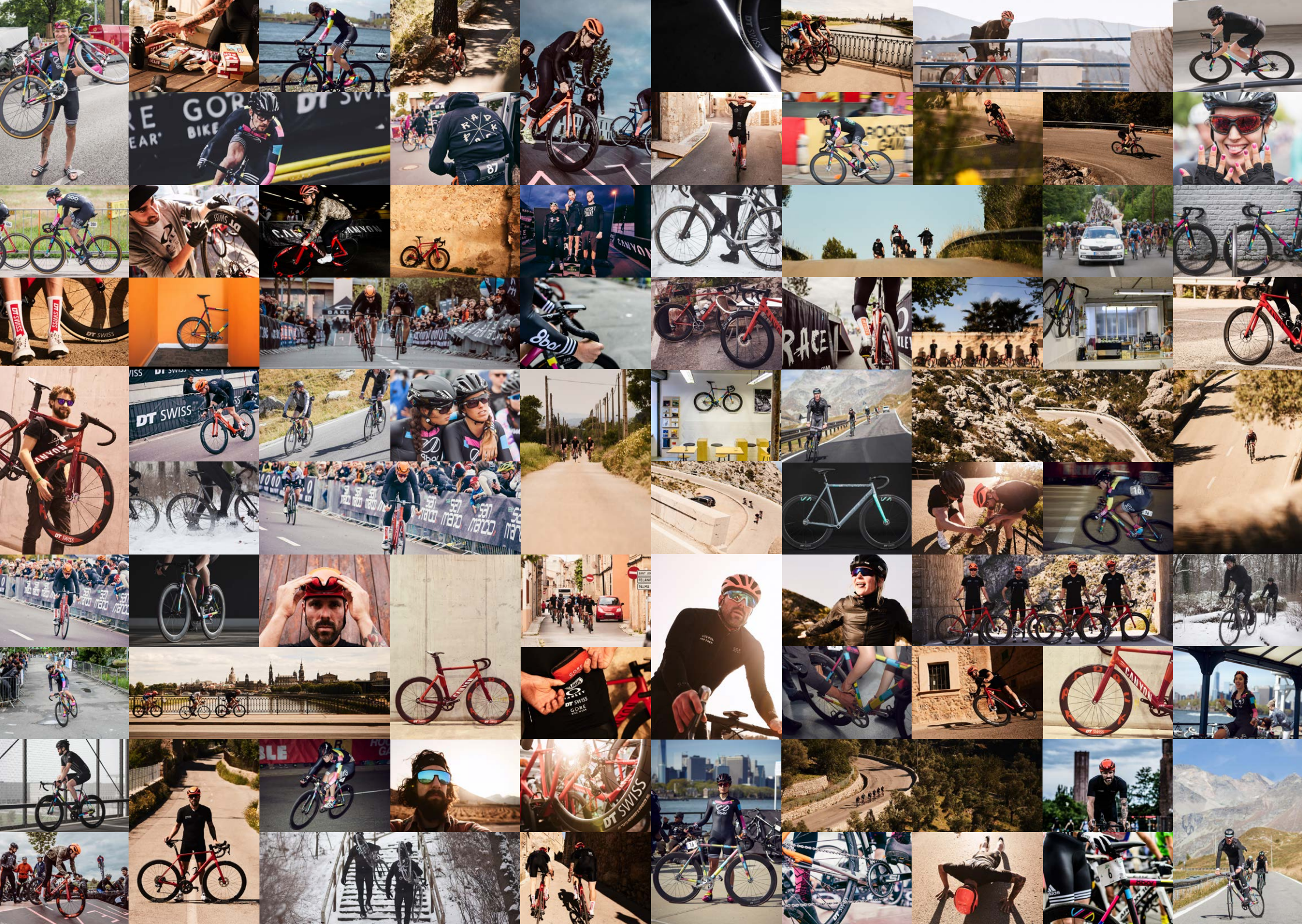
In our mind, the track can be a line in the velodrome or your visualized line through city traffic. Simplicity is key, from the minimalistic graphics to the purist hubs and a classic wheel build. DT Swiss Track wheels are a beautiful choice, whether your loop ends at the finish line or at your front door.



# A PICTURE IS WORTH A THOUSAND WORDS

Especially when speaking about our fancy new track wheels and the crazy dudes riding these wheels at the Fixed 42 world champs or the Red Hook Crit in Brooklyn.







# TRC 1400 DICUT® 65

WEIGHT 1520 g



CLINCHER  
TUBULAR

EUR 2028\*  
USD 2672\*

Tucked in the pack with a narrow profile for maximum efficiency, that's what you're aiming for when racing your friends and competitors in the oval or a crit. The TRC 1400 DICUT® makes this wish come true. The deep section rim comes with a

classy design and offers the least possible resistance when cutting through air. With a stiff wheel build on a classic, championship proven hub, this wheel provides all the power needed when it's time to sneak out from behind to launch your attack.

# T 1800 CLASSIC 32

WEIGHT 1896 g



CLINCHER

EUR 478\*  
USD 630\*

With the T 1800 Classic track style is taken to the streets. From the wide, medium profile alloy rim to the extra flat bladed spokes it oozes muscles. And that muscle is needed when zipping around corners at full pace. Its simplicity comes with

DT Swiss engineering know how, ensuring a long, trouble free life navigating city roads and procuring big grins on riders faces. That said, it doesn't mean it can't go fast on an oval, because it can.

# OVERVIEW

## ROAD WHEELS

CATEGORY	AERO	PERFORMANCE
<b>INTENDED USE</b>	Time Trial Triathlon	Road Racing Training
<b>BRAKE INTERFACE</b>	Rim brake, Disc brake	Rim brake, Disc brake
<b>RIM INNER WIDTH</b>	17 mm	18 mm
<b>TIRE DIMENSION</b>	23 mm FW, 25 mm RW	23 – 25 mm
<b>RIM</b>	Carbon	Carbon and aluminum
<b>FAMILY</b>	DICUT®	DICUT® SPLINE®
<b>TOPICS</b>	Aerodynamics Rolling Resistance Clincher Tubeless	Stiffness to Weight Rolling Resistance Clincher Tubeless

ENDURANCE	CROSS ROAD	TRACK
Gran Fondo Marathon	Cyclocross Adventure	Track Fixed Gear
Rim brake, Disc brake	Rim brake, Disc brake	Rim brake
19 – 20 mm	21 – 22 mm	18 mm
25 – 28 mm	30 – 45 mm	23 – 25 mm
Carbon and aluminum	Carbon and aluminum	Carbon and aluminum
DICUT® SPLINE®	SPLINE®	DICUT® CLASSIC
AERO+ Comfort Aerodynamics	Knobby tires Travel bikes Cyclocross bikes	Stiffness to Weight Rolling Resistance Aerodynamics

# COMPONENTS

A wheelset is only as good as its separate components are. As a matter of fact DT Swiss components meet the highest standards for quality and set the foundations for our outstanding product quality. Ever since DT Swiss spokes, hubs and rims are synonymous with precision Swiss manufacturing. In order to keep this quality level, the consistent improvement of our components is given the highest priority in our R&D process.

# RIMS

## RR 411

Symmetric



18 mm

**RIM BRAKE**

## RR 411

Asymmetric



18 mm

**RIM BRAKE**

## RR 411

Asymmetric



18 mm

**DISC BRAKE**

## RR 511



18 mm

**RIM BRAKE**

## RR 511



18 mm

**DISC BRAKE**

## RR 521



20 mm

**DISC BRAKE**

## R 460



18 mm

**RIM BRAKE**

## R 460



18 mm

**DISC BRAKE**

## RR 421

Asymmetric



20 mm

**DISC BRAKE**

## R 470



20 mm

**DISC BRAKE**

## R 500



22 mm

**DISC BRAKE**

# HUBS

**180**  
CARBON  
CERAMIC



**240 S**  
CLASSIC



**240 S**  
STRAIGHTPULL



**350**  
CLASSIC



**350**  
STRAIGHTPULL



**540**  
TANDEM



**370**  
TRACK



# RWS

**RWS**  
TITAN



**RWS**  
STEEL



**RWS**  
E-THRU ROAD



**RWS PLUG IN**  
THRU AXLE



# SPOKES

**DT CHAMPION®  
CLASSIC**



**DT CHAMPION®  
STRAIGHTPULL**



**DT COMPETITION®  
CLASSIC**



**DT COMPETITION®  
STRAIGHTPULL**



**DT COMPETITION®  
RACE  
CLASSIC**



**DT COMPETITION®  
RACE  
STRAIGHTPULL**



**DT SUPER COMP®**



**DT REVOLUTION®**



**DT ALPINE®**



**DT ALPINE® III**



**DT AEROLITE®  
CLASSIC**



**DT AEROLITE®  
STRAIGHTPULL**



**DT AERO SPEED®**



**DT NEW AERO®**



**DT AERO COMP®  
CLASSIC**



**DT AERO COMP®  
STRAIGHTPULL**



# NIPPLES

**DT STANDARD  
BRASS**



**DT STANDARD  
ALUMINUM**



**DT PRO HEAD®  
BRASS**



**DT HIDDEN  
ALUMINUM**



**DT SQUORX  
PRO HEAD®  
BRASS**



**DT SQUORX  
PRO HEAD®  
ALUMINUM**



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