



### FORMULA 1 AND PIRELLI: ALL THE NUMBERS FROM 2017 SEASON

Milan, December 5, 2017 – "From a record-breaking season, we have collected some record-breaking numbers. Formula 1 introduced some radical new technical regulations this year, which resulted in the fastest cars ever seen in the history of the sport. So, our mission was to build the fastest-ever tyres, 25% wider than their predecessors to cope with the massively increased cornering speeds and energy loads, which nonetheless allowed the drivers to push hard from the start to the finish of every stint. We developed these tyres throughout 2016, despite not even seeing a 2017 car until the first pre-season test at Barcelona. Over the course of this year, pole position was on average 2.450 seconds faster than in 2016, and the fastest race lap was on average 2.968 seconds quicker than last year. In spite of forces that were sometimes up to 35-40% higher than 2016 through the quickest corners, our 2017 tyres achieved all the targets established at the beginning of the season, with an optimal level of reliability and consistency. Now we look forward to next season, with an even faster tyre introduced to the 2018 range and with every compound going a step softer, which should help contribute to even more speed and spectacle in the future".

# Mario Isola, Head of Car Racing

#### **TYRES**

- Total number of tyres supplied in 2017: 38,788
- Of these, **33,520** were supplied for race weekends and **5,268** for testing
- Of the **38,788** tyres, **25,572** were slicks and **13,016** were rain or intermediate tyres
- Total number of tyres used during race weekends: **12,920**, of which **11,532** were slick tyres and **1,388** were rain or intermediates
- Total number of tyres that were recovered: all
- Maximum number of kilometres driven on each compound (excluding tests):

Hard: **74** km (Esteban Ocon, Force India)

Medium: 587 km (Lance Stroll, Williams)
Soft: 4,696 km (Lewis Hamilton, Mercedes)
Supersoft: 6,261 km (Sergio Perez, Force India)
Ultrasoft: 4,674 km (Stoffel Vandoorne, McLaren)

Intermediate: **433** km (Lance Stroll, Williams)
Wet: **242** km (Felipe Massa, Williams)

## **PIT STOPS**

- Total number of pit stops: **533** (of which **6** drive-throughs and one was a stop and go)
- This makes an average of 26.7 per race, and 1.5 per driver in each race
- Most pit stops in a race: 41 at the Azerbaijan Grand Prix
- Fewest pit stops in a race: **18** in Austria.

## **OVERTAKING**

- Total number of overtaking manoeuvres during the season: **435** (\*), with an average of **21.8** per race
- Highest number of overtaking manoeuvres at a dry race: 42 in Azerbaijan
- Highest number of overtaking manoeuvres at a wet race: 31 in China





- Fewest number of overtaking manoeuvres at a dry race: 1 in Russia
- Driver with the most overtaking manoeuvres during the year: Daniel Ricciardo,
   43
- Driver with the most overtaking manoeuvres at a single race: Daniel Ricciardo,
   13 (British Grand Prix)
- Driver who has been overtaken least: Max Verstappen and Lewis Hamilton, 2 times (\*\*).
- Driver who made up most places on the opening lap: Lance Stroll, who gained 36 positions on the opening lap
- Team that carried out most overtaking: **Red Bull**, **65** moves **43** by Daniel Ricciardo, **22** by Max Verstappen.
- Team that has been overtaken least: 11, Red Bull (9 Daniel Ricciardo, 2 Max Verstappen) and Ferrari (8 Kimi Raikkonen, 3 Sebastian Vettel).
- (\*) **How overtaking moves are calculated:** an overtaking manoeuvre is counted as one that takes place during complete flying laps (so not on the opening lap) and is then maintained all the way to the lap's finish line. Position changes due to major mechanical problems or lapping/unlapping are not counted.
- (\*\*) Only drivers who have taken part in the whole season are counted.

## **CIRCUITS AND RACING**

- Longest race of the year: Azerbaijan, 2 hours, 3 minutes and 55.753 seconds
- Shortest race of the year: Monza, 1 hour, 15 minutes and 32.312 seconds
- Fastest race of the year: Monza, winner's average speed (Lewis Hamilton)
   243.626 kph
- Highest speed reached by a Pirelli P Zero Formula 1 tyre during a grand prix: **362.4** kph by **Sebastian Vettel** in **Mexico**.
- Highest number of fastest laps: **Lewis Hamilton**, **18** (**7** in races and **11** in qualifying)
- Highest number of laps led: 527, by Lewis Hamilton.

### **PIRELLI IN FORMULA 1 (SINCE 1950)**

Races: 340Wins: 181

• Pole positions: **184** 

Podiums: 550Fastest laps: 188Driver titles: 12Team titles: 7

### **OTHER INTERESTING NUMBERS**

- Number of drivers (including third drivers and young drivers) who have driven a Pirelli-equipped Formula 1 car since 2010: 112
- Kilometres driven by all the compounds throughout 2017 (including tests, practice, qualifying and races): **329,170** km (excluding prototype tyres)





• By compound, it works out as:

Hard 1,549 km
Medium 20,259
Soft 94,893
Supersoft 118,729
Ultrasoft 83,465
Intermediate 7,089
Wet 3,186

- Distance covered in races in 2017: 102,856 km
- Distance covered during development test: 14,285 km
- Number of fastest laps (in qualifying and races) set by the world champion in 2017: **18** (**7** in races and **11** in qualifying)
- Lowest average speed at which a dry race has been won in 2017: 148.176 kph
   (Daniel Ricciardo, Azerbaijan Grand Prix)
- Lowest asphalt temperatures recorded during a race (on Sunday): 14° in China
- Lowest asphalt temperatures recorded during a race weekend: 14° in China
- Highest asphalt temperatures recorded during a race (on Sunday): 55° in Hungary.
- Highest asphalt temperatures recorded during a race weekend: **56°** in **Bahrain**
- Lowest ambient temperatures recorded during a race (on Sunday): 13° in China
- Lowest ambient temperatures recorded during a race weekend: 13° in China
- Highest ambient temperatures recorded during a race (on Sunday): 33° in Hungary
- Highest ambient temperatures recorded during a race weekend: 43° in Bahrain.

#### **2018 TYRE TESTS**

- Circuits: **8**, respectively Abu Dhabi, Barcelona, Budapest, Magny-Cours, Mexico City, Paul Ricard, Sakhir, Silverstone.
- Prototypes tested: 198 (147 slick, 18 intermediate and 33 rain tyres).
- Teams and related kms driven during 2018 tyre tests:

Red Bull: **2,637.74** km McLaren: 2,350.11 Mercedes: 1,974.69 Ferrari: 1,546.12 Renault: 1,210.30 Toro Rosso: 1,200.99 Haas: 995.58 Sauber: 942.58 Williams: 936.67 Force India: 490.66

#### **PIRELLI TEAM AND ITS GUESTS**

- Pirelli team members who travel to each race: **60** (on average)
- Nationalities represented within the Pirelli Formula 1 team: 10
- Different languages spoken by team members: 10





Press releases written by Pirelli Formula 1 Team: 210

Infographics: 167

F1 Tweets sent by @PirelliSport account via Twitter: approx. 2,400

• Pirelli notebooks distributed throughout the season: approx. 3,000

• Guests: 6,350

• Pirelli podium caps sold: 13,580

# **PIRELLI'S HOSPITALITY IN 2017**

• Meals served within Pirelli's hospitality unit (including tests): 15,900

• Litres of water drunk in Pirelli's hospitality during the year: 14,400

Pasta cooked by Pirelli's chef: 870 kg

Rice cooked by Pirelli's chef: 320 kg

• Parmesan cheese used: 120 kg

Kilograms of prosciutto eaten: 80

• Pizzas cooked by Pirelli's chef: 400

• Number of different dessert recipes prepared at Pirelli's hospitality: 55

Ice creams eaten at Pirelli's hospitality: 7,600

Coffees served at Pirelli's hospitality: almost 30,200

Litres of olive oil used during the year: 520





# **2016 – 2017 DATA COMPARISON**

# **TYRE CHOICE COMPARISON**

GRAND PRIX	2016	2017	S O F T E R CHOICE
Australia			*
Bahrain			
China			
Russia			*
Spain			
Monaco			
Canada			
Azerbaijan*			
Austria			
Great Britain			<b>*</b>
Hungary			
Belgium			*
Italy			
Singapore			
Malaysia			<b>*</b>
Japan			*





United States		*
Mexico		*
Brazil		*
Abu Dhabi		

(\*) Europe Grand Prix in 2016.

# **CORNERING SPEEDS**

CIRCUIT	2016	2017
Barcelona Turn 3	212 kph	248 kph
Barcelona Turn 9	215 kph	245 kph
Silverstone Copse	260 kph	290 kph
Spa-Francorchamps Pouhon	253 kph	289 kph





# **QUALIFYING FASTEST LAP COMPARISON**

GRAND <b>PRIX</b>	2016	2017	GAP	GAP/KM
Australia	HAMILTON 1:23.837 SSN	HAMILTON 1:22.188 USN	-1.649s	-0.311
Bahrain	HAMILTON 1:29.493 SSN	BOTTAS 1:28.769 SSN	-0.724s	-0.134
China	ROSBERG 1:35.402 SSN	HAMILTON 1:31.678 SSN	-3.724s	-0.683
Russia	ROSBERG 1:35.337 SSN	VETTEL 1:33.194 USN	-2.143s	-0.366
Spain	HAMILTON 1:22.000 SN	HAMILTON 1:19.149 SN	-2.851s	-0.612
Monaco	RICCIARDO 1:13.622 USN	RAIKKONEN 1:12.178 USN	-1.444s	-0.433
Canada	HAMILTON 1:12.812 USN	HAMILTON 1:11.459 USN	-1.353s	-0.310
Azerbaijan*	ROSBERG 1:42.520 SSN	HAMILTON 1:40.593 SSN	-1.927s	-0.321
Austria	HAMILTON 1:06.228 USN	BOTTAS 1:04.251 USN	-1.977s	-0.458
Great Britain	HAMILTON 1:29.243 SN	HAMILTON 1:26.600 SSN	-2.643s	-0.449
Hungary	ROSBERG 1:19.965 SSN	VETTEL 1:16.276 SSN	-3.689s	-0.831
Belgium	ROSBERG 1:46.744 SSN	HAMILTON 1:42:553 USN	-4.191s	-0.598
Italy	HAMILTON 1:21.135 SSN	HAMILTON 1:34.660 W**	**	**
Singapore	ROSBERG 1:42.584 USN	VETTEL 1:39.491 USN	-3.093s	-0.611
Malaysia	HAMILTON 1:32.850 SN	HAMILTON 1:30.076 SSN	-2.774s	-0.500
Japan	ROSBERG 1:30.647 SN	HAMILTON 1:27.319 SSN	-3.328s	-0.573
United States	HAMILTON 1:34.999 SSN	HAMILTON 1:33.108 USN	-1.891s	-0.343
Mexico	HAMILTON 1:18.704 SSN	VETTEL 1:16.488 USN	-2.216s	-0.515
Brazil	HAMILTON 1:10.736 SN	BOTTAS 1:08.322 SSN	-2.414s	-0.560
Abu Dhabi	HAMILTON 1:38.755 USN	BOTTAS 1:36.231 USN	-2.524s	-0.454
GP Average			-2.450s	-0.477

<sup>(\*)</sup> Europe Grand Prix in 2016 (\*\*) 2017 Italian Grand Prix - Qualifying took place in wet conditions.





# **FASTEST LAPS TIMES COMPARISON**

GRAND PRIX	2016	2017	GAP	GAP/KM
Australia	RICCIARDO 1:28.997 SS	RAIKKONEN 1:26.538 S	-2.459s	-0.464
Bahrain	ROSBERG 1:34.482 S	HAMILTON 1:32.798 S	-1.684s	-0.311
China	HULKENBERG 1:39.824 SS	HAMILTON 1:35.378 S	-4.446s	-0.816
Russia	ROSBERG 1:39.094 S	RAIKKONEN 1:36.844 SS	-2.250s	-0.385
Spain	KVYAT 1:26.948 S	HAMILTON 1:23.593 S	-3.355s	-0.721
Monaco	HAMILTON 1:17.939 US	PEREZ 1:14.820 US	-3.119s	-0.935
Canada	ROSBERG 1:15.599 S	HAMILTON 1:14.551 SS	-1.048s	-0.240
Azerbaijan*	ROSBERG 1:46.485 S	VETTEL 1:43.441 SS	-3.044s	-0.507
Austria	HAMILTON 1:08.411 S	HAMILTON 1:07.411 US	-1.000s	-0.232
Great Britain	ROSBERG 1:35.548 M	HAMILTON 1:30.621 S	-4.927s	-0.836
Hungary	RAIKKONEN 1:23.086 SS	ALONSO 1:20.182 S	-2.904s	-0.654
Belgium	HAMILTON 1:51.583 M	VETTEL 1:46.577 US	-5.006s	-0.715
Italy	ALONSO 1:25.340 SS	RICCIARDO 1:23.361 SS	-1.979s	-0.342
Singapore	RICCIARDO 1:47.187 SS	HAMILTON 1:45.008 US	-2.179s	-0.430
Malaysia	ROSBERG 1:36.424 S	VETTEL 1:34.080 SS	-2.344s	-0.423
Japan	VETTEL 1:35.118 S	BOTTAS 1:33.144 SS	-1.974s	-0.340
United States	VETTEL 1:39.877 SS	VETTEL 1:37.766 SS	-2.111s	-0.383
Mexico	RICCIARDO 1:21.134 S	VETTEL 1:18.785 US	-2.349s	-0.546
Brazil	VERSTAPPEN 1:25.305 W	VERSTAPPEN 1:11.044 SS	**	**
Abu Dhabi	VETTEL 1:43.729 SS	BOTTAS 1:40.650 SS	-3.079s	-0.554
GP Average			-2.698s	-0.518

(\*) Europe Grand Prix in 2016 (\*\*) Wet race in 2016

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