PART 2

THE TECHNICAL EXPERTISE
THE CAR

DIMENSIONS
• Overall length: 5224 mm
• Overall width: 1900 mm
• Overall height: 1097 mm
  (including FOM roll hoop camera)
• Wheelbase: 3135 mm
• Overall weight: 755 kg
  (driver on-board)

ENGINE
• V6 - 3.4 litre single turbo charged Mecachrome engine.
  • Rated to 620 HP @ 8750 rpm.
  • Fly by wire accelerator system.
  • Rebuild after 8000 km.
  • Maximum Torque 570Nm @ 6000 rpm.

PERFORMANCE
• Acceleration:
  0 - 100 km/h: 2.90 sec
  0 - 200 km/h: 6.60 sec
• Maximum speed: 335 km/h
  (Monza aero configuration + DRS)
• Max. braking deceleration: -3.5 G
• Max. lateral acceleration: +/- 3.9 G

STEERING SYSTEM
• Non assisted rack and pinion steering system.
• XAP steering wheel with dashboard, gear change, clutch and DRS paddles,
  marshalling & VSC display.

WHEELS AND TYRES
• F1 2016 standard wheel dimension.
• O.Z. Racing
  Magnesium rims 13" x 12" front
  13" x 13.7" rear
• F2 specific Pirelli slick / wet tyres.

SAFETY STANDARDS
• Same functionality of DRS used in Formula One.
  • Hydraulic activation.

MONOCOQUE AND BODYWORK
• Survival cell - Sandwich Carbon/
  aluminium honeycomb structure/Zylon
  anti-intrusion panels made by Dallara.
• Front and rear wing - Carbon structures
  made by Dallara.
• Bodywork - Carbon - Kevlar honeycomb
  structures made by Dallara.

GEARBOX
• 6-speed longitudinal Hewland sequential gearbox.
• Electro-hydraulic command via paddle shift from steering wheel.
  • 2F SACHS Carbon clutch.
  • No on-board starter.
  • Non hydraulic ramp differential.

SUSPENSION
• Double steel wishbones, pushrod operated,
  twin dampers and torsion bars suspension
  (Front) and spring suspension (Rear).
• Adjustable ride height, camber and toe.
• Two way (F) / Four way (R) adjustable Kens
dampers.
• Adjustable anti-roll bar (Front/Rear).

FUEL CELL
• FIA Standard
• Premier F1S 125 litres.

DRS
• Same functionality of DRS used in Formula One.
  • Hydraulic activation.

BRAKES
• 6 pistons monobloc Brembo callipers.
• Carbone Industrie carbon-carbon brake
discs and pads.

EXTINGUISHER SYSTEM
• LIFELINE (electrically operated).

ENGINE
• Magneti Marelli Marello SRO 480
  ECU/GCU including data logging system.
• Magneti Marelli PDU 12.42 power supply
  management unit.
• CAN data acquisition pre-equipment.
• Beacon receiver.
• F1 type VSC system.

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The power behind the F2 car lies in the 3.4 litre turbocharged V6 engine, which powers every car on the grid.

Assembled, maintained and rebuilt by Mecachrome in the same plant in which the marque’s F1 engines are prepared, it is the beating heart of the F2 car.

**TECHNICAL SPECIFICATIONS**

- Designed, built and maintained by Mecachrome.
- V6 - 3.4 litre single turbocharged Mecachrome engine.
- Rated to 620 HP @ 8750 rpm.
- Fly by wire accelerator system.
- Rebuild after 8000 km.
- Maximum Torque: 570Nm @ 6000 rpm.

**PERFORMANCES**

- Acceleration:
  - 0 - 100 km/h: 2.90 sec
  - 0 - 200 km/h: 6.60 sec
- Maximum speed: 335 km/h (Monza aero configuration + DRS)
Pirelli has been exclusive supplier of tyres to Formula 2 since 2011, the same season that the Italian firm entered Formula 1.

Pirelli has a range of four slick tyres for Formula 2 with new colours for 2019: P Zero White (hard), P Zero Yellow (medium), P Zero Red (soft) and P Zero Purple (supersoft). In addition to this, there is a wet-weather tyre, which has blue markings.

For each race weekend, Pirelli supplies two out of the four slick tyre compounds. Every car will have five sets of slick tyres and three sets of wet-weather tyres available for the race weekend. The five sets of dry tyres comprise three sets of the harder nominated compound and two sets of the softer nominated compound.

This year’s Formula 2 tyres are the same as used last season. They are designed to make tyre strategy an integral part of the show, with the aim of helping drivers refine their skills thanks to cars that are identical, meaning that the emphasis is purely on skill and talent.

MARIO ISOLA, PIRELLI’S HEAD OF CAR RACING, COMMENTED: “Formula 2 has shown itself to be a fantastic training ground for Formula 1, with drivers such as Charles Leclerc among the stars who have graduated to the very top of the sport. The regulations have been designed to make tyre strategy an integral part of the show, with the aim of helping drivers refine their skills thanks to cars that are identical, meaning that the emphasis is purely on skill and talent.”

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COLOUR CODE

- HARD: WHITE
- MEDIUM: YELLOW
- SOFT: RED
- SUPERSOFT: PURPLE
- RAIN: BLUE
- SOFT: GREY

TYRE DIMENSIONS

| SLICK FRONT TYRES: 245 mm width | 660 mm diameter |
| SLICK REAR TYRES: 325 mm width | 690 mm diameter |
| WET FRONT TYRES: 245 mm width | 660 mm diameter |
| WET REAR TYRES: 325 mm width | 670 mm diameter |

Formula 2 tyre sizes are different to those in Formula 1 which are much wider.

Summary

- Formula 2 uses slick Pirelli tyres in four specifications (supersoft, soft, medium and hard).
- Two slick compounds are nominated by Pirelli and the championship organisers for each race weekend.
- Each driver has five sets of slick tyres per weekend – three of the harder compound and two of the softer compound.
- Each driver will also be provided with three sets of wet-weather tyres.
- The drivers and teams are free to use their entire tyre allocation as they like, but at least one set of each compound must be used in the feature race unless it is a wet race.
- During the feature race (Race 1) the drivers have to carry out a compulsory pit stop during which all four tyres must be changed for a different compound.
- Drivers must use both compounds during the feature race (Race 1) unless it is declared a wet race. The pit stop may not be carried out until the driver has completed six laps.
- Pit stops during the sprint race (Race 2) are optional.
As one of the five core values of FIA F2, the safety of our drivers is of paramount importance as they race at speeds very close to F1.

The F2 2018 car has passed every one of the stringent F1 FIA crash tests, and includes the Halo driver head protection system and anti-intrusion panels.

Wearing the HANS device is also compulsory.

The championship puts its commitment to safety ahead of all other considerations.
With over 100 years of motorsport victories, Pirelli remains a leader in its field. The Italian company returned to open wheeled racing with the GP3 Series in 2010, and in 2011 became sole suppliers to GP2 and Formula One. Since 2017, it has become the sole suppliers to Formula 2.

www.pirellityre.com

The Dallara designed F2 2018 is our stunning fourth generation car built by the Italian design gurus. Safe and strong, it is also both efficient and effective.

www.dallara.it

Mecachrome’s successful history in Formula One goes back to 1990s, and the French company is now responsible for the engineering side of F2, providing a brand new V6 turbocharged engine for 2018.

www.mecachrome.com

Providing F2’s electronics systems, Italian giant Magneti Marelli is synonymous with quality and innovation in the automotive world and has played a huge role in the sport’s development.

www.magnetimarelli.com

One of the most famous brand names in global motorsport. Hewland Engineering invented the bespoke racing car gearbox, and has supplied numerous racing car constructors ever since.

www.hewland.com

Carbone Industrie is a brand of Messier-Bugatti-Dowty [Safran] which is the world leader in aircraft landing, braking systems but also in carbon brakes, equipping more than 6,800 aircraft in service. In 2016, the company joins F2 as brake suppliers.

www.safranmbd.com

EM Motorsport Ltd has operated within the Motorsport industry since 2003 offering products and services such as image acquisition and distribution technology, and F1 Marshalling system. EM motorsport is providing F2 with DRS & data acquisition Hardware & software.

www.emmotorsport.com

The core business of Duqueine Engineering is the design and manufacture of composite parts and sub-assemblies, in different business lines such as aerospace, industry and sport & leisure. Their electronic department supply F2 with electronic engineering and components for the cars.

www.duqueine.fr

From bikes to cars, snowboards to BMX, there is perhaps no clothing, uniform and race kit provider deemed cooler than Italian superbrand Alpinestars.

www.alpinestars.com

XAP designs and manufactures motorsport electronics products and provides F2 with steering wheel with dashboard,marshalling display, gear change and clutch paddles.

www.xap.fr

The heart of R-engineering beats for motoring. Providing high quality wiring looms within tight times frames is their specialty.

www.r-engineering.com

LAT is one of the world’s largest and best known motorsport photographic agencies holding over 12 million images dating back into the late 1800s.

www.motorsportimages.com