

3-1. 2019-2020 TS050 HYBRID Chassis

Pascal Vasselon, Technical Director



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How is the 2019-2020 car different to the previous car?

Our car for this new season is not radically different from last season's car. We introduced the TS050 HYBRID in 2016 so there has been a lot of ongoing development over the years; this year's updates are really about optimising details and reliability. The most obvious change is the bodywork; we have updated the aerodynamics of the car. But elsewhere there are only minor modifications for reliability.

After winning seven of eight races last season, why have you updated the TS050 HYBRID?

Obviously, last season we had the strongest package and this showed in the race results. But when you look at the development rate of our competitors, from Le Mans 2018 to Le Mans 2019, you can see a big step in their performance. Out of respect for their ability to improve their cars and extract more performance from their package, we could not stand still. We have never under-estimated their capabilities so we needed to continuously improve our package wherever it was possible and efficient.

Was there a lot of additional performance to extract from the TS050 HYBRID?

Within a stabilised set of regulations, the development rate will naturally drop, so we have been working mostly on fine details and reliability. Aerodynamics is an area which always offers potential improvement because there are numerous degrees of freedom; the more you develop, the more performance you will find even within stable regulations. So we have made some steps there, as I'm sure our competitors have done.

What changes have been made in terms of reliability?

Our car has been extremely reliable last season, with very few technical issues, but we are always pushing to achieve better. For us, one technical issue is one too many and we constantly work to make our processes more robust, to detect and prevent issues. This process has continued with the updated TS050 HYBRID. There are no major new parts; we have been analysing everything in fine detail and in some areas we have found small things to improve: changing the size of a bolt, or the specification of an o-ring, for example can have a positive consequence for reliability. So the process has been more about details rather than designing new parts.

Away from the technical side, how will the new sporting regulations impact the racing?

I expect the big story this year will be the success handicap, which I believe will make it impossible for a team to dominate in the way we did last year. Actually, this is something we want and something we worked hard to achieve alongside the ACO and FIA. Maybe that sounds strange, but we know the fans want closer racing at the front in WEC and we all want a stronger championship, so we are happy with this solution. The success handicap is intended to be strong enough to slow down a car so that it cannot continue to win. The system targets that after two race victories, a team would face a handicap large enough that it is unlikely to win the third race. This will be achieved via a combination of weight increases and fuel flow restrictions and it is a system we fully support.

What about the driver line-up?

Our only change in the race driver line-up is to bring in Brendon as a direct replacement for Fernando. He will fit in very well on car #8 alongside Kazuki and Sébastien, who already get on very well together after growing up together in junior racing. Brendon is the perfect replacement for Fernando because he brings speed, experience of LMP1 and a good team mentality. Our existing drivers – Mike, Kamui, José María, Sébastien and Kazuki – are proven winners so we know they are able to perform at the top level. As well as Brendon, we also welcome Thomas Laurent into the team as our test and reserve driver. It will be interesting to see how Thomas develops during the next months because we see him as a likely star of endurance racing in the future. So all in all I am confident we have a strong driver line-up and I expect a good atmosphere with some healthy rivalry.