

F1-2022 New Generation Cars – More Overtaking – More Excitement!

The application of iconCFD® Products & Expert Services to F1 aerodynamics simulation

02/2022 - Author: Christian Taucher & the ICON Team

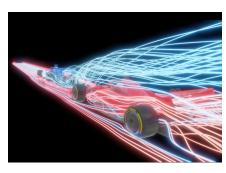
It has been claimed that, with the new generation F1 cars, it will be easier to overtake and that the regulations have been set-up in such a way to minimize the aerodynamic loss experienced by the car following closely behind.

To give some insight into the flow topologies, we have used our iconCFD® simulation software and performed an investigation of performance loss in close proximity driving with the new generation F1 cars.

For this investigation both cars have identical configurations, close to that of the F1 2022 show car presented at Silverstone GP. No dynamic ride height due to downforce loss is taken into account, both cars are set-up at an end of straight ground clearance. Consequently, the ride height values are low.

Approaching from 5 car lengths distance, you can see still reasonable reduction in downforce. However, from the flow field, it is evident how the new design pushes the dirty air further upwards allowing the following car to remain in less disturbed air of better flow quality. This is only an investigation on a rough representation of the car shapes, with the Formula 1 teams spending considerable amounts of engineering hours to optimize the details.

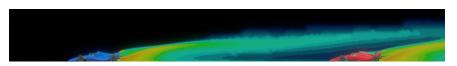
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