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### VERUS AERODYNAMIC PACKAGE

PORSCHE 981 GT4 CAYMAN INFORMATIVE PACKET



## **OVERVIEW**

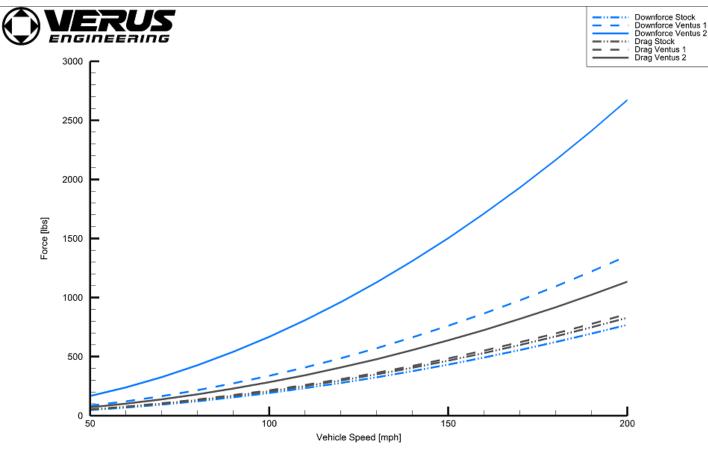
This is an informative packet on the Verus Engineering aerodynamic package for the Porsche 981 GT4 Cayman, with information on testing and data gathering.

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# **AERODYNAMIC PERFORMANCE**

The data was calculated with the rear wing at 10 degrees angle of attack, ride height 80FRH/mm 210RRH (measured from the splitter and center rear diffuser), and at standard temperature and pressure. For more detailed data, please see our setup pdf.





# PACKAGED COMPONENTS

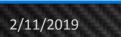
The aero package was designed to enhance the track performance of your Porsche 981 GT4 Cayman by providing proven aerodynamic gains. All the components are designed to work together as a system to improve your track times. The aero package was designed with street driving in mind as well.

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### <u>Ventus 2</u>

1. Dive Planes

- <u>Ventus 1</u>
- 1. Dive Planes
- 2. Rear Diffuser with Flat Underbody Panel
- 2. Rear Diffuser with Flat Underbody Panel
- Front Splitter and Air Dam
- High Downforce
  Single Element Rear
  Wing

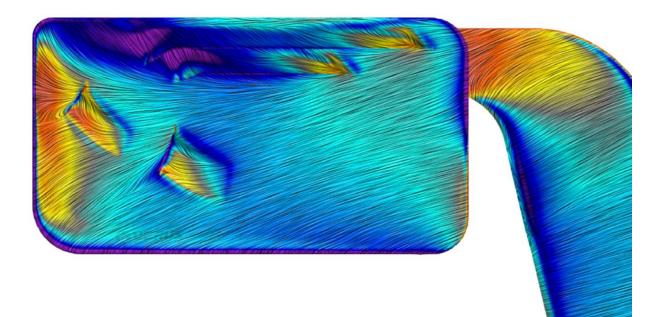






## **REAR WING**

The rear wing is our universal 300mm high downforce single element wing. The wing's profile was optimized and developed in house to maximize downforce while still being very efficient. The wing endplates were optimized to increase the efficiency of the wing airfoil to help increase downforce and decreasing drag.



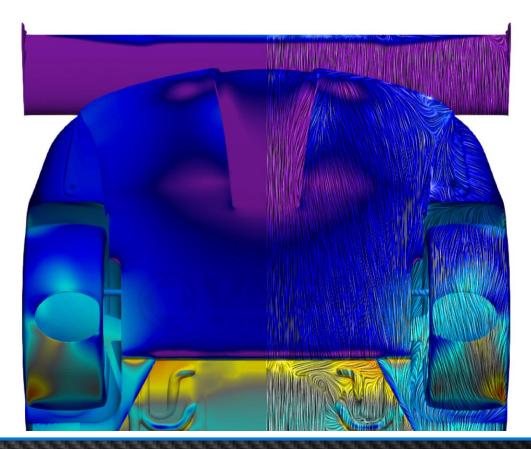




### **REAR DIFFUSER AND FLAT UNDERBODY PANEL**

The rear diffuser and flat underbody panel was designed to tie together the rear aerodynamic package of the 981 GT4. The design maximized the area under the car to hit specific performance goals. The diffuser is carbon fiber with high density rubber strakes that will not break or damage. They are also very replaceable.







# FRONT SPLITTER AND AIR DAM

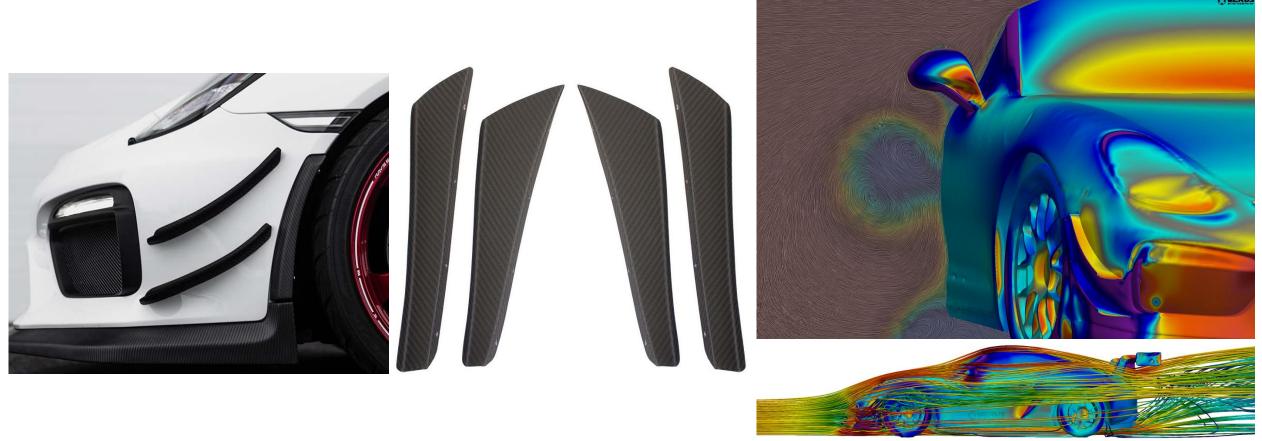
The front splitter is a specialty carbon fiber which does not shatter and break with impacts. The splitter will take a beating on track without failing. The splitter is designed to aid the rear diffuser and front diffusers to maximize performance. The air dam is carbon fiber and designed to help the front splitter and aid the airflow around the car.





### **DIVE PLANES**

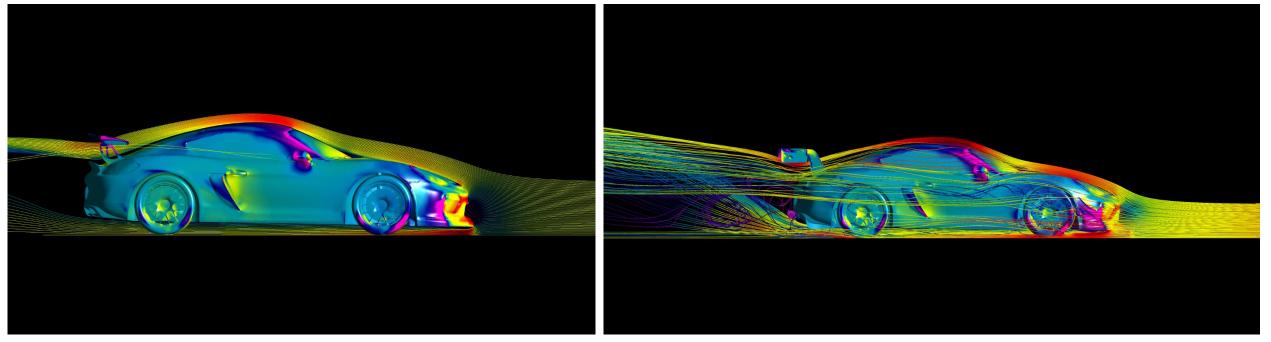
The dive planes help tune the aerodynamic balance and shift the balance forward without the need of a larger front splitter. A larger front splitter can be prohibitive to driving the car on the street. The dual dive planes were also designed to direct more airflow to the engine inlet ducts.





## **DEVELOPMENT TESTING**

During the development of the kit, computational fluid dynamics (CFD) was used. We use ANSYS Fluent for all CFD which is the industry standard and used throughout professional motorsport. We use CFD because it allows us to validate design changes for better vehicle performance.



#### Stock Body

Verus Engineering Kit