



Helping motorsport companies gain advantage

The use of simulators by the motorsport industry is growing. In fact they are now an established every day tool for teams from Formula 3 and above.

Track testing is expensive. Hire costs, transportation, consumable parts and testing time devour budgets. There is further increasing pressure as championship organisers seek ways to minimise costs through mileage limits or by restricting testing at designated tracks. Circuit testing can be inconsistent at the best of times with changeable weather and varying track conditions as well as a lack of availability. Restricted track time also prevents less experienced drivers from gaining circuit knowledge, driving the demand for accurate race simulation.

Cruden driver-in-the-loop simulators offer the most realistic and accurate solution by interfacing a virtual model of the vehicle and its environment to a real driver. This enables engineers to test and adjust suspension, chassis, power train and tyre parameters - or compare and develop drivers - before the car even turns a wheel.

Here is a selection of the ways in which simulators can add value to motorsport businesses:

- Vehicle and component testing
- Driver and engineer training and evaluation
- Pre and post-race strategy analysis
- Circuit familiarisation
- Circuit design
- Evaluation of new technologies and when to use them e.g. KERS
- Driving around problems - e.g. how to drive with a malfunctioning transmission
- Vehicle settings
- Evaluation of driver performance e.g. in different conditions or time zones

The companies that embraced simulator technology some years ago are now seeing the results in the shape of race and championship wins and better prepared drivers and engineers. Speak to Cruden to explore how you can gain a competitive advantage by using our technology.