

A View on the Technology of both Vehicle Content and the Product Creation Process for Supercars

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ABSTRACT

All road cars have benefited from constantly improving technology; many of these improvements are not always obvious to the consumer. In the category of Supercars the improvements can be measured in ways that are exciting to an automotive enthusiast.

The improvements most visibly noted are items that are part of the content of the car, such as electronic fuel injection, airbags, and items cars have always had, such as tires. These technological improvements can fall into 2 categories; Steady improvements and Breakthroughs. Examples in both categories will be discussed.

Less obvious are the improvements in automotive design and development processes. The advent of computer technology, powerful and plentiful enough to make CAD and CAE integral parts of the design and development process, is the most important contributor to this ability. The simulation and analysis that is now possible has contributed to the ability to improve many attributes of a car through optimization, and has also allowed the timescales of the design and development process to be compressed.

While not as visible as changing the content of the car, improving the design and development process has had just as profound an affect on opening up the performance envelope of Supercars.

