

Koenigsegg – Smarter Thinking

HPC-Competence Center

High Performance Computing (HPC) Wales is Wales' national super-computing service provider. Host to the UK's largest national distributed supercomputing network, HPCWales provides businesses and researchers with local access to world-class technology and the support to fully exploit it.



Enterprise

With ~50 employees, Koenigsegg is very small compared with many of its competitors – some of which are parts of companies employing hundreds of thousands of staff. Having embarked on an ambitious challenge to develop a market-leading hyper car in just six months with a small advanced-engineering team, Koenigsegg needed to think differently and smarter in order to stay ahead of the competition.

How HPC makes the difference

Koenigsegg's quest was to deliver a vehicle that would outperform all production cars on the track and, without modification, also be able to reach a top speed of 440 km/h.

Computer simulation would replace fine-tuning with prototypes and thus the simulations needed to be as close to real life as possible. Working with HPC Wales, Fujitsu and the team at ICON, Koenigsegg's engineers were able to carry out more than thirty different computationally-intensive Detached Eddy simulations which ensured the simulation was as close to real life as possible and which significantly accelerated the design process for Koenigsegg.

Koenigsegg's Technical Director, Jon Gunner, agreed that, without access to HPCWales' technology and ICON's unlimited and parallel software, it would have been impossible for Koenigsegg to design the car in the timeframe necessary to stay ahead of their competitors.



Fig: IconCFD software has accelerated the design process for Koenigsegg

