



PRESS RELEASE

31 March 2020

Ricardo Software 2020.1 release heralds a new approach to transmission design

A completely new approach to the design and optimization of transmission systems for all types of vehicle – including the latest hybrid and pure battery electric concepts – is encompassed in the latest 2020.1 release of powertrain design and optimization software from Ricardo, along with a wealth of new features and capabilities

The 2020.1 Ricardo Software release marks the completion of the Ricardo transmission analysis solution, which provides a seamless toolchain – based on the SABR, FEARCE and VALDYN products – enabling engineers to optimize systems intended for all types of vehicles, including the complex systems required for hybrid powertrains. This robust toolchain now provides a comprehensive virtual product development environment enabling the creation of designs offering improved fuel economy, better shift quality and driveability, and – increasingly important for pure-electric vehicles – optimized NVH characteristics. This toolchain, which is available with the 2020.1 release, enables all of these functional benefits while also offering the potential for much shorter transmission development timescales. A demonstration of the Ricardo transmission analysis solution will be provided in a webinar on Thursday 26 March, and in a recording shortly after the initial presentation:

<https://www.automotiveworld.com/webinars/finding-the-optimal-vehicle-transmission-for-the-future-using-virtual-design/>



Elsewhere, the 2020.1 release provides the benefits of recent development effort in improving the fatigue life calculation for structures in FEARCE and improving the implementation and calculation speed of the German research association of mechanical engineering (Forschungskuratorium Maschinenbau) FKM method.

In the fluid simulation products, the VECTIS computational fluid dynamics product is further enhanced in the 2020.1 release with improved combustion physics and solver enhancements for better applicability to a wider range of simulation challenges. This has included support for sub-domains, including porous media, which enables the user to model heat exchangers, radiators and aftertreatment devices. Spray models within VECTIS are now also compatible with sub-domains so that the user can simulate rain and other particles in under-hood simulations.

Ricardo's WAVE engine performance and gas dynamics simulation product is also further improved, particularly in the faster than real-time WAVE-RT version. Increased integration enables users of competitor commercial products to import their models into WAVE and WAVE-RT much more rapidly and efficiently than before.

"I am pleased that we have been able to deliver the new 2020.1 release to Ricardo Software customers," commented Ricardo Software MD Kimberly Matenchuk. "The 2020.1 release marks the first time that the full Ricardo transmission analysis solution toolchain has been made available, providing a much-needed virtual product development environment for the more complex and refined electrified powertrains of tomorrow. Together with this, we are offering a wide range of improvements to our entire suite of state-of-the-art CAE software, which I am sure will be of value to our global customer base."

Further details of the full range of upgrades available in the Ricardo Software 2020.1 release – together with information on product licensing – can be found at <https://software.ricardo.com/software-updates/ricardo-software-2020-1>

Ends



NOTES TO EDITORS:

Ricardo plc is a global, world-class, multi-industry consultancy for engineering, technology, project innovation and strategy. Our people are committed to providing outstanding value through quality engineering solutions focused on high efficiency, low emission, class-leading product innovation and robust strategic implementation. With a century of delivering excellence and value through technology, our client list includes the world's major transportation original equipment manufacturers, supply chain organizations, energy companies, financial institutions and governments. Guided by our corporate values of respect, integrity, creativity & innovation and passion, we enable our customers to achieve sustainable growth and commercial success. Ricardo is listed in the FTSE4Good Index, which identifies global companies that demonstrate strong environmental, social and governance (ESG) practices. For more information, visit www.ricardo.com.

Media contacts:

Anthony Smith
Ricardo Media Office
Tel: +44 (0)1273 382710
E-mail: media@ricardo.com