NewtonWorks Corporation Launches NewtonSuite Aves and OPTISHAPE-TS for European Automotive and Brake Manufacturers

[Tokyo, 29 April 2025] – NewtonWorks Corporation is proud to announce the European launch of NewtonSuite Aves and OPTISHAPE-TS, two simulation software tools designed specifically for automotive and brake manufacturing engineering teams.

These solutions will be unveiled at the EuroBrake 2025 and FISITA World Mobility Conference (WMC), held jointly in Barcelona, Spain, from June 3 to 5, 2025. Attendees can preview the software at booth 15 and book an appointment for a one-on-one demonstration.

Advancing noise, vibration, and structural software simulation

Developed through close collaboration with industry experts, NewtonSuite Aves and OPTISHAPE-TS are tailored to meet the increasing demands of automotive and brake manufacturing.

NewtonSuite Aves provides advanced support for brake squeal simulation and is exceptionally effective in evaluating noise and vibration (NV) characteristics of assembly components, such as stators inside electric motors, an area of growing importance with the expansion of electric vehicles. Its ability to predict and optimise the vibration behaviour of assembled parts helps engineers shorten development cycles and improve system performance across a wide range of applications beyond braking alone.

OPTISHAPE-TS provides structural optimisation tools for brake components, eAxle cases, and other critical systems where weight reduction, increased rigidity, and noise minimisation are essential. It enables design engineers to simulate the effect of performance parameters from part to system level, supporting both customer comfort and efficient outcomes.

"We're excited to officially bring NewtonSuite Aves and OPTISHAPE-TS to the European market during EuroBrake and WMC," said Naomichi Taketa, Account Manager at NewtonWorks Corporation. "Our software results from close collaboration with engineering teams across Asia. It's designed and tailored to the evolving needs of automotive and brake manufacturers with speed, efficiency, and complete system visibility. We're proud to expand our footprint in Europe and support the innovation of leading brake and automotive OEMs."

Supporting innovation in Europe

While brake manufacturers remain a key target at EuroBrake 2025, NewtonWorks also recognises the broader demand for effective motor NV countermeasures across the automotive industry. Following the successful debut of NewtonSuite eSeal in March, the launch of Aves and

OPTISHAPE-TS marks the next step in NewtonWorks' commitment to supporting material and software engineers with state-of-the-art solutions.

Both products are now available for engineering teams in Europe. To learn more or book an informational session, visit our website or see us at the NewtonWorks booth 15 during EuroBrake 2025 and FISITA WMC 2025.

About NewtonWorks Corporation

NewtonWorks Corporation delivers world-class CAE software solutions through strategic partnerships with top developers. With extensive expertise in 1DCAE and 3DCAE technologies, NewtonWorks supports manufacturing clients in building optimal systems for their business, from initial concept to final production.

For more information about NewtonWorks products, please visit newtonworks.com or contact Megan Thudium for further information.

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NewtonSuite AVES improves prediction accuracy and provides efficient evaluation of vibration characteristics, including assemblies (credit: Adobe Stock).



OPTISHAPE-TS is a structure optimisation software for designing and developing various machine parts for brakes, motor parts, electric apparatus, construction, etc. (credit: Adobe Stock).