

## ESI Releases the Newest Version of Flagship Software Virtual Performance Solution 2015

## Unveiling advanced modeling capabilities for multi-domain simulation

Paris, France – January 26, 2016 – <u>ESI Group</u>, pioneer and world-leading solution provider in <u>Virtual Prototyping</u> for manufacturing industries, announces the latest release of its flagship software <u>Virtual Performance Solution</u>. This newest version provides industry leaders with new applications for water flow simulation, enhanced performances for the full NVH chain, and improved CAE process efficiency for virtual testing. Using a single core model to run simulations across multiple domains, engineering teams from various departments and from different geographical sites can collaborate efficiently towards the creation of a full virtual prototype. This virtual prototype is in turn used to predict the future behavior of industrial parts or products, in all domains of performance. Used by most automotive OEMs and their suppliers, Virtual Performance Solution also supports industry sectors ranging from aerospace to energy, heavy machinery, electronics, and consumer goods.



Photo courtesy of Dirisolar.

**Mr Eisei Higuchi**, Chief Engineer, HONDA R&D Co. Ltd, states: "HONDA R&D has been using ESI's Virtual Performance Solution for over 20 years. Today, we are leveraging the capacities of Virtual Performance Solution's single-core model on a full car for our latest vehicle platform development. The consistent chaining of virtual manufacturing results and virtual performance — not only for crash and safety domains but also for NVH and durability — is a definite technological breakthrough. Virtual Performance Solution enables us to ensure the right levels of product performance for lightweight design, and to face challenges related to evolving regulations." Relative to the newest features added to Virtual Performance Solution, **Mr. Higuchi** continues: "We look forward to implementing ESI's advanced water management solutions and to benefiting from the latest enhancements of Virtual Performance Solution, especially regarding NVH."

ESI's <u>Virtual Performance Solution 2015</u> delivers new functionalities that extend virtual testing capabilities across multiple domains, while improving Computer-Aided Engineering (CAE) process



efficiency. For instance, the improved High Performance Computing efficiency for the full NVH (Noise, Vibration & Harshness) chain enables users to investigate larger NVH models in more details, including the complete car trim interior.

Additionally, ESI's <u>Virtual Performance Solution</u> includes features relative to modular input, to allow CAE teams to organize models in a more flexible way. By supporting increased model granularity, the modular input function is better adapted to end-to-end Virtual Prototyping processes, allowing engineers to refine models as they advance along the product development phase.

Furthermore, new improvements for chaining manufacturing results with performance testing empower industrial manufacturers, from early on in the product design stages, to predict the impact of manufacturing effects onto product performance.

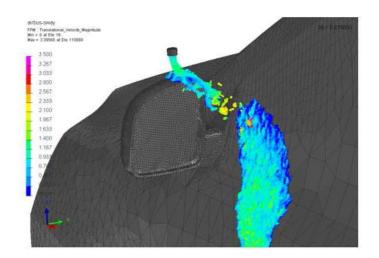


Image: Water drain around rear mirrors, as simulated using the new Water Flow simulation capabilities, in ESI Virtual Performance Solution.

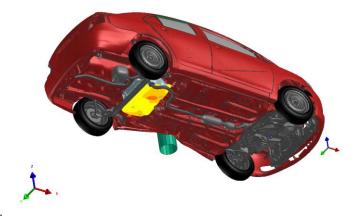


Image: Tank sloshing, modeled using ESI Virtual Performance Solution.



Thanks to the new Water Flow simulation capabilities in VPS, automotive manufacturers can now predict how water is drained around different parts of the car. Indeed, <u>Virtual Performance Solution</u> 2015 enables the virtual testing of water flows on sealing, closure and car body, in order to improve seal design and thus prevent water leakages. By coupling this new capability with crash simulation, automotive manufacturers can also anticipate tank sloshing effects.

For more information about ESI Virtual Performance Solution, please visit www.esi-group.com/VPS

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ESI is a world-leading provider of Virtual Prototyping software and services with a strong foundation in the physics of materials and Virtual Manufacturing.

Founded over 40 years ago, <u>ESI</u> has developed a unique proficiency in helping industrial manufacturers replace physical prototypes by virtually replicating the fabrication, assembly and testing of products in different environments. <u>Virtual Prototyping</u> enables <u>ESI</u>'s clients to evaluate the performance of their product and the consequences of its manufacturing history, under normal or accidental conditions. By benefiting from this information early in the process, enterprises know whether a product can be built, and whether it will meet its performance and certification objectives, before any physical prototype is built. To enable customer innovation, <u>ESI</u>'s solutions integrate the latest technologies in high performance computing and immersive Virtual Reality, allowing companies to bring products to life before they even exist.

Today, ESI's customer base spans nearly every industry sector. The company employs about 1000 high-level specialists worldwide to address the needs of customers in more than 40 countries. For further information, visit <u>www.esi-group.com</u>



