

Mentor Graphics has announced that it has acquired the Flowmaster Group, a UK-based provider of computational fluid dynamics (CFD) simulation software. Flowmaster's core product is a one-dimensional CFD solution (versus the more well-known 3D CFD approach) that allow for more rapid modeling of fluid and thermal flows in systems upfront in the design.

This isn't the first time Mentor has reached into the mechanical world. In 2008, Mentor acquired Flomerics, a provider of 3D CFD software focused primarily on thermal analysis. Unlike most of its main competitors, Mentor has a complete arm dedicated to mechanical analysis that goes beyond wire harness and cabling. Mentor sees the Flowmaster acquisition as broadening its set of solutions for the mechanical space and going deeper into industry verticals.

It's not quite clear to us just how the Flowmaster products will be positioned or integrated with the Mentor's existing mechanical offerings, nor how this acquisition, along with the Flomerics products, might change who Mentor is actually selling to (mechanical engineers, analysts, dedicated CFD groups, corporate CAE). What would be really interesting is to see just how high up the ladder purchasing decisions for historically mechanical-based solutions -- from an EDA vendor -- will be made. Our guess is that currently, CFD decisions are typically made by the actual user, in this case, the CFD group within a company. But, with Mentor being able to offer solutions that delve more deeply into any one industry vertical, will some of these companies begin to see just how the EDA and mechanical worlds might fit together? It will also be interesting to see how Mentor, with stronger marketing power and deeper pockets, might be able to bring the benefits of CFD -- like faster time to market-- into the forefront.

Nevertheless, Mentor is clearly thinking out of the box here. We've been waiting for the EDA and mechanical worlds to come together, or at least near each other. The mechanical vendors have been trying to bridge this gap for years, but so far, it hasn't been wildly successful. Initial attempts by the mechanical vendors to penetrate the EDA market with PDM tools failed because PDM didn't accommodate the data management and design flows of EDA. We were hoping that Ansys might be able to bring both worlds closer together with its suite of analysis solutions, but Ansys doesn't have the same marketing and financial reach that Mentor has. We hope that Mentor is looking into the future where the EDA and mechanical worlds overlap; and we welcome Mentor to take on this challenge.