



1. What did ANSYS announce today?

ANSYS today acquired Reaction Design, a leading developer of chemistry simulation software. Reaction Design is a former partner of ANSYS.

2. What does Reaction Design do?

Reaction Design's solutions enable transportation manufacturers and energy companies to rapidly achieve their clean technology goals by automating the analysis of chemical processes via computer simulation and modeling solutions. Reaction Design also provides best-in-class engineering services in its fields of expertise.

3. Why is this acquisition strategic?

Understanding and predicting the effects of chemistry in a combustion system is key to developing competitive products that meet ever-tightening fuel efficiency and greenhouse gas emissions norms in transportation, energy and materials processing applications. Effective simulation of the detailed chemistry underlying a combustion system is critical to advancements in engine and fuel technology.

ANSYS is the leader in providing comprehensive simulation solutions that provide, fast, accurate and reliable answers. For years ANSYS has provided tools to simulation combustion systems such as internal combustion engines, gas turbines and chemical reactors. ANSYS' strength is in the area of accurate simulation of the airflow in these systems through our industry-leading CFD software packages. In addition to airflow computations, accurate simulation of combustion systems also requires detailed simulation of chemical reactions. Reaction Design is the undisputed leader in detailed simulation of chemical reactions. So the combination of ANSYS and Reaction Design is a union of the best CFD solvers with the best chemistry solvers, which will provide the best-in-class combustion simulation tools to customers.

4. What was the relation between ANSYS and Reaction Design in the past?

ANSYS and Reaction Design have partnered in the past to offer customers a holistic solution to their engine, gas turbine and internal combustion design challenges.

5. How does combustion simulation fit into ANSYS' long-term strategy?

The reduction of greenhouse gases and improvement of fuel efficiency is a central initiative for major engineering sectors, such as the automotive, aerospace, turbomachinery and industrial machinery industries. Providing simulation tools that enable customers to bring new innovations to life in the areas of fuel economy and emissions reduction is a key focus of ANSYS' long-term strategy. Various combustion systems such as automotive engines, aircraft engines, industrial burners, thermal power plants and chemical reactors are central to the topic of fuel economy and emissions. The key to improving fuel economy and reducing pollutant emissions is in improving the combustion processes in these devices. Adding Reaction Design's proven simulation software for combustion gives manufacturers insight into making those improvements. Combined

with other ANSYS fluid dynamics solutions, companies will have an unparalleled view into the performance of their existing products, and how to create even more energy-efficient ones in the future.

6. What are Reaction Design's key products?

CHEMKIN-PRO is a robust and mature chemistry simulation tool that has been widely used for an impressive range of applications. CHEMKIN-PRO is widely regarded as the gold standard in simulating gas phase and surface chemical reactions. CHEMKIN-PRO's wide array of accurate, fast and robust kinetic models make it the most trusted kinetic simulation tool for asking "what-if" questions in the conceptual design phase. Engineers can quickly explore the impact of design variables on performance, pollutant emissions and flame extinction using large, accurate fuel models and gain the results they need to make key product development decisions.

FORTÉ is a tool for simulating the combustion system of Internal Combustion (I.C.) engines used in cars, trucks, locomotives, ships, lawn mowers and other devices. FORTÉ's ability to calculate combustion with accurate chemistry reduces reliance on costly calibration, enabling superior Time-to-Solution metrics that fit in commercial-development timeframes. FORTÉ is the only CFD simulation package for combustion engines that incorporates proven CHEMKIN solver technology to account for chemical reactions accurately and efficiently. With this tool engine designers can investigate key design issues, such as soot formation and engine knock.

ENERGICO is a complex system-design simulation tool that works by applying detailed chemistry models within a network of reactors that is constructed from a CFD solution. The high degree of accuracy afforded by ENERGICO's novel approach can be used to solve the toughest combustor and burner engineering challenges related to emissions reduction and stability. Typical ENERGICO simulation times range from a few minutes to a few hours. This allows engineers to set up and run many cases using a "design-of-experiments" strategy in a fraction of the time that it takes to run a single CFD case. This also enables designers to develop accurate information on trends for combustion performance and emissions with realistic geometries, helping to drive the design process. By using ENERGICO to model and test new combustor designs, companies can save millions in gas turbine development costs and substantially reduce time-to-market when compared to development approaches that exclusively utilize physical prototype testing strategies.

MODEL FUELS LIBRARY (MFL) is a library of accurate and well validated fuel models for combustion simulation developed as part of the Model Fuels Consortium (MFC) hosted by Reaction Design. The MFC pioneered the use of surrogate modeling, which represents complex fuel chemistry by a reduced number of molecular models and reactions. The FORTE engine simulator, together with the MFL and the CHEMKIN-PRO solver, provides one of the most accurate and efficient internal combustion fuel simulators available today.

7. Who are Reaction Design's customers?

Reaction Design provides software and service solutions to industries in which internal combustion and increasing fuel efficiency play a major role, including aerospace, automotive and turbomachinery.

8. How will this affect ANSYS and Reaction Design customers?

Customers of both companies will benefit from the acquisition. ANSYS customers will have direct access to Reaction Design's leading combustion simulation products, while legacy Reaction Design customers can choose from proven product development solutions to meet all of their simulation needs.

The company will continue to provide high-end engineering services to the market and continue growing that area as well. Customers should experience few changes in the services provided.

9. How many people does Reaction Design employ?

Reaction Design currently employs 26 people. Many are located at the corporate headquarters in San Diego, while others work in Reaction Design offices in Asia and Europe.

10. Do you intend to retain Reaction Design's employees?

ANSYS is acquiring Reaction Design to accelerate our development plans and to acquire key industry knowledge and competencies. For this reason, ANSYS is making efforts to retain employees to help grow this key business.

11. How does Reaction Design fit into the overall structure at ANSYS?

While the specifics are still being evaluated, most of the Reaction Design's development team will integrate into ANSYS' existing product development organization.

12. Who will be responsible for the integration of the two businesses?

As with past acquisitions, leaders from both companies will work collaboratively to plan and leverage each individual company's strengths for the benefit of the combined organization.

13. What are the plans for integrating Reaction Design's products with ANSYS' existing solutions?

Each of Reaction Design's tools adds crucial technology to further build upon existing ANSYS solutions. The optimal value of solutions from both ANSYS and Reaction Design can be fully realized by enabling the tools to operate closely with each other. While the specifics are still being decided, it is clear that the integration of the two product streams will provide the most benefits. For instance, the integration will allow CHEMKIN to enhance the combustion simulations done in ANSYS' CFD solvers.

Forward-Looking Information

The Company cautions investors that its performance is subject to risks and uncertainties. Some matters discussed herein may constitute forward-looking statements that involve risks and uncertainties which could cause actual results to differ materially from those projected. These risks and uncertainties are discussed at length, and may be amended from time to time, in the Company's Annual Report to Stockholders and its filings with the SEC, including our most recent filings on Forms 10-K and 10-Q. We undertake no obligation to publicly update or revise any forward-looking statements, whether changes occur as a result of new information or future events, after the date they were made.

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