



1. **What did ANSYS announce today?**

ANSYS announced that it has acquired 3DSIM LLC, the global leader in additive manufacturing simulation technology.

2. **What does 3DSIM do?**

3DSIM develops the world's most powerful simulation software for metal additive manufacturing. 3DSIM's software empowers manufacturers, designers, materials scientists and engineers to achieve consistent success in additive manufacturing through simulation-driven innovation rather than physical trial-and-error.

The company was led by Brent Stucker, a leading authority on additive manufacturing, and boasts a corporate team with more than 100 years of combined additive manufacturing experience.

3. **Who is 3DSIM used by?**

3DSIM's product lines target both additive manufacturing design/manufacturing teams, as well as analysis and research professionals. Its customers include aerospace and automotive OEMs, parts manufacturers, metal additive manufacturing machine manufacturers, universities and leading government labs.

4. **Why is this acquisition strategic?**

Additive manufacturing is the fastest growing engineering market segment. However, serious challenges are raised when attempting to implement additive manufacturing at an industrial level. Parts can deform in the print process, and they can be left with residual stresses. Printing certain parts can even break expensive 3-D printers, keeping them offline for days. In addition, gaining understanding and control of material microstructure during the build process is important to ensure consistent material behavior.

For several years, ANSYS has been developing simulation tools to aid and guide the additive manufacturing process. The 3DSIM team has also developed software to guide and simulate the additive manufacturing process. To date, the focus areas of each company have been remarkably distinct, leading to outstanding synergies in a combined offering. Going forward, ANSYS will offer a unique, complete solution for additive manufacturing simulation including design, validation and process simulation within a single suite of software.

5. **What are 3DSIM's key products?**

3DSIM offers two main product lines for the simulation of additive manufacturing:

- **exaSIM:** An easy-to-use, ultra-powerful tool developed specifically for machine operators and designers of parts created through additive manufacturing. exaSIM enables unparalleled predictions of part shape, distortion and stress, automatic prediction of optimal support structures and distortion compensated

stereolithography files, alleviating the need for physical trial-and-error experimentation.

- **FLEX:** The most powerful metal additive manufacturing simulation tool available. FLEX enables engineering analysts, materials researchers, machine OEMs and powder suppliers to dial in the best process parameters for a given machine and material combination, to achieve the highest level of part integrity and to predict microstructure and properties before building the part.

This revolutionary solution enables users to:

- Predict temperature history and track phase transformations from powder, to liquid, to solid through the entire build process, giving users the power to control the final properties of the printed part
- Easily evaluate thousands of criteria virtually via parametric functionality, without having to run physical experiments
- Use custom curated databases, including non-linear temperature-dependent thermophysical properties for each material as a function of physical state
- Leverage machine, laser/material interaction, powder bed characteristics, exact additive manufacturing process parameters and scan strategy to build a part
- Predict chemistry-dependent and thermal-gradient-dependent phase change details

Due to proprietary intellectual property, FLEX runs millions of times faster, with result files that are much smaller, than competing finite element analysis solutions.

#### 6. **How will this acquisition affect ANSYS and 3DSIM customers?**

This acquisition will bring significant benefits to both ANSYS and 3DSIM customers. ANSYS customers will benefit from easy access to best-in-class additive manufacturing process simulation technology. 3DSIM's customers will benefit from 3DSIM's inclusion in the ANSYS platform, which offers leading geometry tools for part manipulation, additive manufacturing support generation and many other tasks and functions. 3DSIM's customers will also benefit from simulation platform capabilities such as advanced visualization and post-processing, expanded materials libraries and design optimization.

#### 7. **How many people does 3DSIM employ?**

3DSIM employs 21 people; mostly at its headquarters in Park City, Utah.

#### 8. **Do you intend to retain 3DSIM's employees?**

ANSYS is acquiring 3DSIM to accelerate our development plans and to acquire key industry knowledge and competencies in additive manufacturing simulation. 3DSIM employs thought leaders in the field, and ANSYS is making every effort to retain employees to help grow this key business segment.

#### 9. **How does 3DSIM fit into the overall structure at ANSYS?**

While the specifics are still being evaluated, most of the 3DSIM development team will integrate into ANSYS' existing product development organization. The 3DSIM sales and field-facing engineering team will integrate into ANSYS' sales force and support organizations.

10. **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 to leverage each individual company's strengths for the benefit of the combined organization.

11. **What are the plans for integrating 3DSIM's products with ANSYS' existing solutions?**

As previously mentioned, ANSYS and 3DSIM technologies will combine with excellent synergies. While certain specifics are still being decided, we plan to release a combined offering in the first half of 2018.

**Forward-Looking Information**

The Company cautions 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, including statements regarding customers relying more on simulation for developing the products of tomorrow, statements regarding the physical and the digital worlds combining, statements regarding ANSYS and 3DSIM uniquely enabling companies to gain insight from their simulation data and to quickly act upon it, statements regarding ANSYS accelerating its development plans through the 3DSIM acquisition, and statements regarding the integration of 3DSIM and its products. 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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