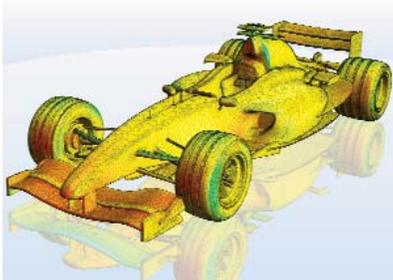


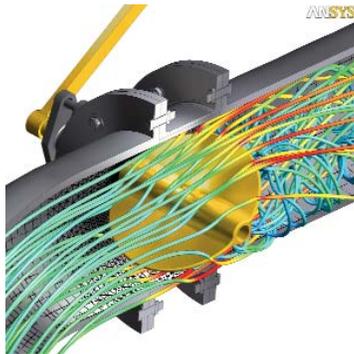
ANSYS®

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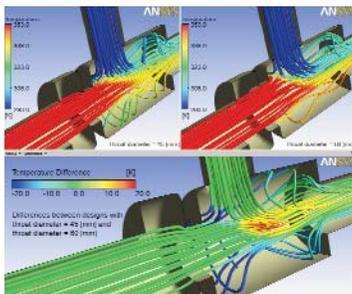
12.1 RELEASE



ANSYS CFD-Post software incorporates many advanced features to generate powerful graphical renderings of fluid flow solutions.



The complete range of visualization options and exhaustive quantitative analysis capabilities of ANSYS CFD-Post software ensure complete insight into simulation predictions.



Results from different analyses or design variants can be directly compared, either by examining them side by side or by evaluating differences, all within a single ANSYS CFD-Post session.

Geometry courtesy CADFEM GmbH

ANSYS® CFD-Post™

Get the Most Out of Your Results with ANSYS® CFD-Post™

Computational fluid dynamics (CFD) simulations don't end with the fluid flow prediction. Benefiting from the prediction requires post-processing that gives users complete insight into their fluid dynamics simulation results. ANSYS CFD-Post software, the common post-processor for all ANSYS fluid dynamics products, gives users everything they need to visualize and analyze their results.

Within a modern and intuitive user interface, ANSYS CFD-Post software sets no limits on creativity when generating powerful images to illustrate the flow in any desired level of detail. From vector plots and streamlines to vortex cores and flow animations, ANSYS CFD-Post software provides users all the tools they need to produce insightful solution visualizations, including 3-D images. These high-quality visuals are invaluable in communicating results to colleagues and customers by helping to explain and provide an understanding of complex flow phenomena.

High-end graphical post-processing is only one part of ANSYS CFD-Post technology; its quantitative post-processing abilities are at least as important and powerful. With the functions of ANSYS CFD-Post at their fingertips, users can quickly get all the data they need out of their calculation; weighted averages, mass flows, forces, maximum/minimum values and many more functions enable precise analysis of the CFD results. Add tabulated results presentation, chart plotting and special turbomachinery functionality along with automatic report generation, and there is virtually no limit to the post-processing possibilities with the ANSYS CFD-Post solution.

The final touch is automation. Users can easily create macros — for example by recording the interactive steps in a session file for replay and reuse with similar cases — and create images, charts, tables and reports automatically for different simulation results. CFD-Post software can also run completely in batch mode for fully automated processes and integration in optimization.

Beyond a plethora of individual features and options, ANSYS CFD-Post technology provides key functionality that allows users to get full value from their CFD simulation:

- **Results Comparison**

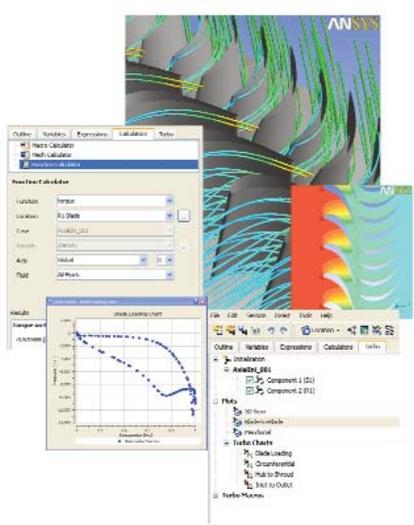
ANSYS CFD-Post software allows multiple solution datasets to be loaded simultaneously, significantly easing the comparison of different design alternatives or operating conditions. Results, including those for fluid structure interaction (FSI), can be examined side-by-side with synchronized views, as well as with synchronized time for transient simulations. Additionally, differences between two results can be computed and analyzed both visually and quantitatively.

- **3-D Images**

All images created in the ANSYS CFD-Post software can, of course, be saved in standard 2-D image formats like JPG and PNG. However, it is often difficult to find the right 2-D views to effectively communicate results to managers, customers and colleagues. For these situations, ANSYS CFD-Post technology provides the ability to write 3-D image files that anybody can view with a freely distributable 3-D viewer available from ANSYS. It is even possible to embed these 3-D images in applications like Microsoft® PowerPoint® to add a new dimension to presentations.



ANSYS CFD-Post report templates can be easily customized to include company logos, 2-D or 3-D images, and charts and tables summarizing analysis input and results.



Numerous post-processing options specifically designed to meet the needs of turbomachinery analysts are directly integrated into ANSYS CFD-Post software.

• Custom Reports

Each session in ANSYS CFD-Post software includes a standard template for report generation. Simple selection and deselection of items to include in the report allows users to customize the content with user-defined text, images, charts or tables, as well as with the company logo at the top. The report is dynamic, updating automatically with new datasets. The final report can then be exported to HTML, optionally with 3-D images.

• Turbo-Post

ANSYS CFD-Post software provides a dedicated mode for post-processing turbomachinery simulation results, starting with the ability to produce plots in a meridional view (e.g., circumferentially averaged solution values) and unrolled blade-to-blade views at any span-wise position between hub and shroud. Specific turbomachinery charting options and templates that help to create automatic reports for different types of machines complete this key component of the suite of turbomachinery simulation tools from ANSYS.

• Flow Animation

Whether simulations are steady or transient, animations help bring CFD results to life. Animations can be quickly defined, including powerful key frame settings, and the resulting animation saved to high-quality and compact MPEG-4 output formats. With the many graphical features and rendering options like texturing, animations from ANSYS CFD-Post software are sure to make a strong impression on your audience.

• Calculators and Expressions

To quickly probe the solution and perform integral operations on the results data, ANSYS CFD-Post software provides a range of functions with its integrated calculators. The same functions can also be applied in a powerful expression language that is part of ANSYS CFD-Post to extract values from the original data or from any desired derived variables and quantities not in the original dataset.

Insightful visualization, flexible calculation and comprehensive automation are fundamental to the advanced post-processing provided by ANSYS CFD-Post software, all in an advanced, easy-to-use user interface.

The ANSYS Advantage

With the unequalled depth and unparalleled breadth of engineering simulation solutions from ANSYS, companies are transforming their leading edge design concepts into innovative products and processes that work. Today, 97 of the top 100 industrial companies on the "FORTUNE Global 500" invest in engineering simulation as a key strategy to win in a globally competitive environment. They choose ANSYS as their simulation partner, deploying the world's most comprehensive multiphysics solutions to solve their complex engineering challenges. The engineered scalability of our solutions delivers the flexibility customers need within an architecture that is adaptable to the processes and design systems of their choice. No wonder the world's most successful companies turn to ANSYS — with a track record of almost 40 years as the industry leader — for the best in engineering simulation.

