



SAMTECH to release version 12.1 of its FEA suite SAMCEF

Liege, Belgium, October 2007. SAMTECH, the European technology leader for the development of Integrated Computer Aided Engineering Solutions, announces today the launch of the new commercial release 12.1 of its Finite Element software suite SAMCEF.

SAMCEF is recognised as one of the most powerful FEA suites in the world. It is renowned in particular for its integrated non-linear module SAMCEF Mecano/SAMCEF Thermal embedding in one single solver rigid and flexible multi-body simulation, non linear metallic/composite structures analysis and thermal analysis. SAMCEF contains also powerful linear FEA capabilities and linear modules of SAMCEF can also be used after a non-linear analysis. This allows for example to perform a modal analysis of a pre-stressed structure or to predict the resonances of a flexible mechanical system in various configurations.

Aimed at meeting its customers' needs, SAMTECH focuses continuously on the improvement of capabilities: overall CPU performance, robustness, ease-of-use and result reliability of **SAMCEF**. With close to 100 new enhancements, **SAMCEF V12.1** offers major advances in linear and non-linear mechanical modeling, thermal analysis, parallel computing and results post-processing. Among the extensive list of new features, the following are worth mentioning:

- ❑ Direct parallel solver for linear static analysis (SAMCEF Asef) and non linear mechanical, thermal and thermo-mechanical ablation analyses (SAMCEF Mecano, SAMCEF Thermal and SAMCEF Amaryllis), including the parallelization of elements generation;
- ❑ Inverse analysis in SAMCEF Mecano with un-deformed geometry as unknown;
- ❑ Improved face-to-face contact feature both in SAMCEF Mecano and SAMCEF Asef;
- ❑ New second degree heterosis shell element for linear and non-linear analyses;
- ❑ Improved thermal post-processing after SAMCEF Thermal;
- ❑ Multi-stage cyclic symmetry dynamic modal analysis (SAMCEF Dynam) and time&frequency response (SAMCEF Repdyn);
- ❑ A Monte Carlo Ray tracing method for the calculation of view factors for thermal analysis (SAMCEF Thermal);
- ❑ ...

SAMCEF V12.1 runs on Linux, Unix and Windows 64 bits platforms.

"SAMCEF is being used more and more by industry with extensive references in all sectors. New developments in SAMCEF by SAMTECH are strategic in helping its customers access state-of-the-art numerical methods thus reducing the time-to-market and to lowering development costs", explains Didier Granville, Chief Marketing Officer of SAMTECH.

Depending on the industrial constraints, SAMCEF solvers can be run either within the standalone CAD Based pre- and postprocessor **SAMCEF Field** or within **CATIAV5**. Both user environments offer highly efficient and innovative capabilities enabling our customers to be ever more competitive. Design problems can also be solved by using jointly SAMCEF solvers and BOSS quattro, the Optimisation platform developed by SAMTECH. Finally, the extensive capabilities of the SAMCEF toolbox are more and more used as internal solver for advanced Professional Products dedicated to specific applications.



Through **SAMCEF Field**, the Integrated FEA approach of **SAMCEF** can also be complemented by advanced Multi-Physics capabilities available in **OOFELIE** for example for vibro-acoustics, electrostatics, electromagnetism, optics, phase change and fluid-structure interaction.

About SAMTECH

SAMTECH s.a. is a European specialist in Computer Aided Engineering (CAE) software for Finite Element Analysis (FEA) and Multi-Disciplinary Optimization (MDO). SAMTECH develops and markets the general-purpose Finite Element Analysis code **SAMCEF**, the Multi-Disciplinary Optimization platform **BOSS quattro**, the Open CAE Design Framework **CAESAM**, the Multi-Physics solver **OOFELIE** as well as **Professional Products** such as **S4WT** (*SAMCEF for Wind Turbines*), **S4R** (*SAMCEF for Rotors*), **S4PL&S** (*SAMCEF for Power Lines & Substations*) resulting from the integration of specific and customized skills with these proprietary software. SAMTECH Group currently employs over 220 people in Belgium, France, Germany, Italy, Spain, UK and China for technical support, sales and engineering services. The company relies also on a network of technically qualified distributors in other markets all over the world. SAMTECH is also a DASSAULT System partner for the development of its products embedded in or connected to CATIAV5.

Visit <http://www.samcef.com> for further details on SAMTECH Product/Service offer!

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