

# PRESS RELEASE

## Fluid Dynamics Expert Counts on MSC Cradle CFD

### MantiumCAE becomes MSC Software Distributor in Germany

Munich, Germany, February 7, 2019 - [MSC Software Corporation](#) (MSC) global leader in simulation software and services, looks forward to cooperating with [MantiumCAE](#). The German engineering service company MantiumCAE specializes in Computational Fluid Dynamics (CFD) and will sell the Software [MSC Cradle CFD](#) from now on. This highly productive CFD software, developed in Japan, was integrated into MSC's portfolio in 2016. The integration enables development engineers to perform co-simulations across all relevant simulation disciplines.

MantiumCAE was founded as a CFD engineering service company and focuses on aerodynamics, optimization, and CFD process optimization. The company helps their customers to create products with better aerodynamic properties and also to establish and enhance their CFD capabilities. However, there have been some projects in the past where the existing software reached its limits. This is changing now with MSC Cradle CFD.

While it is beneficial for optimizations to use rather simple simulations as a basis, the performance of Cradle CFD also allows fluid dynamics experts to optimize sophisticated systems with their complex physics. André Zimmer, Managing Director of MantiumCAE, is well pleased: "We are now able to support our customers even with high-end analysis tasks which require an all-inclusive multiphysics simulation software, for example the simulation of aircraft turbines with supersonic flow and combustion."

MSC Cradle CFD users can perform advanced flow analyses, like simulating heat conduction, radiation, boiling, and condensation.



The robust tool provides several methods to handle moving meshes, including morphing, IB methods, overset mesh, and moving regions with sliding interface or contact, to simulate for example the inlet tract of a combustion engine. Coupling with rigid body simulations allows to analyze the interaction of parts or debris with an aircraft. MSC Cradle CFD can also simulate phenomena like hypersonic or highly compressible flow. Very efficient aeroacoustics analyses are enabled by coupling MSC Cradle CFD with the acoustics software Actran.

André Zimmer explains his decision in favor of MSC Cradle CFD: “The software allows fast and very complex CFD simulations. Therefore, it fits very well with the services and products that MantiumCAE offers its customers. In addition, MSC presented itself from the beginning as a very professional company, which not only offers excellent products, but also provides competent and motivated employees as contact persons. Working with such people is the best basis for a good cooperation.”

Dr. Tarik El Dsoki, Managing Director of MSC Software GmbH, adds: “Highly complex flow processes can be covered, represented, analyzed, and optimized in an easy and precise way using modern CFD simulation. This requires not only the right software tools, but also engineers who know how to handle them. Thus, we are looking forward to working with MantiumCAE. This engineering service company employs proven fluid dynamics experts who provide optimum support to users with selecting suitable CFD software and implementing complex projects.”

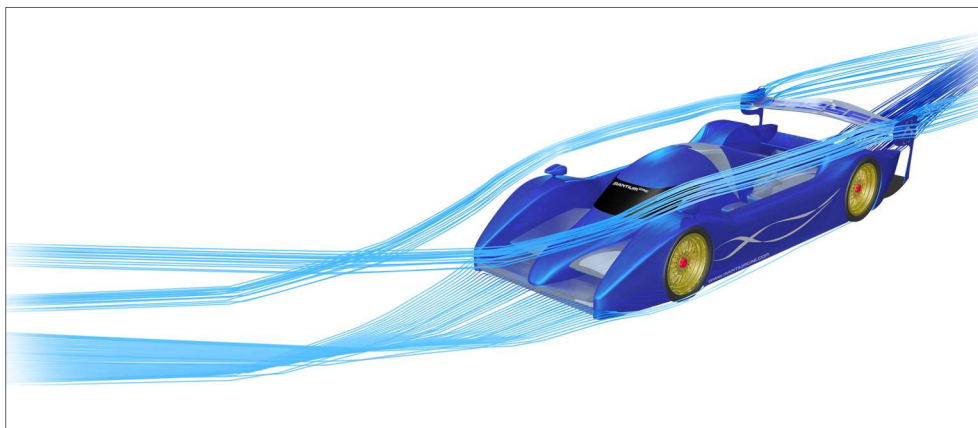


Image 1: MantiumRacer from the MVRC Challenge (Source: MantiumCAE)



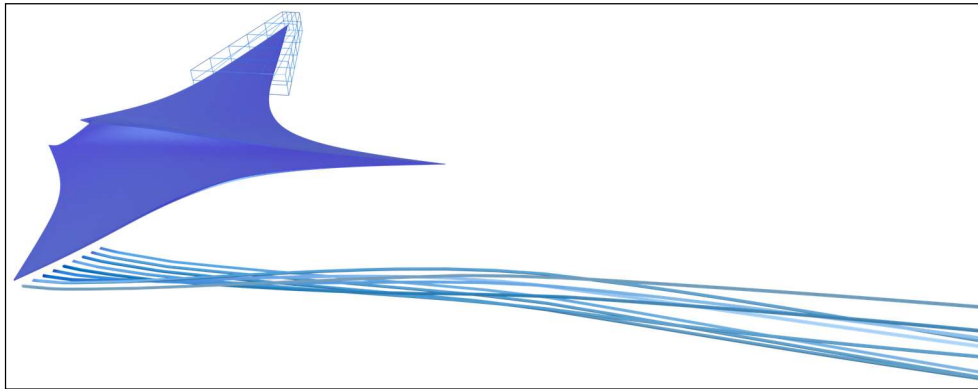


Image 2: MantiumManta, ready for optimization (Source: MantiumCAE)

For additional information about MSC Cradle CFD, please visit:

[www.mscsoftware.com/application/computational-fluid-dynamics](http://www.mscsoftware.com/application/computational-fluid-dynamics)

### **About MantiumCAE**

MantiumCAE was founded as a CFD simulation company in 2015. From the beginning, MantiumCAE has - apart from in-house developments - also distributed software products from other vendors. This software portfolio enables MantiumCAE to cover a wide range of CFD simulation tasks, including both comparatively simple analyses - also in large numbers - and complex optimizations. Thus, MantiumCAE has successfully simulated and contributed to the development of vehicles, fans, boats, tools, UAVs, and a lot of other products.

For additional information please visit: <https://mantiumcae.com>

### **About MSC Software**

MSC Software is one of the ten original software companies and a global leader in helping product manufacturers to advance their engineering methods with simulation software and services. As a trusted partner, MSC Software helps companies improve quality, save time, and reduce costs associated with design and test of manufactured products. Academic institutions, researchers, and students employ MSC's technology to expand individual knowledge as well as expand the horizon of simulation. MSC Software employs 1,400 professionals in 20 countries. For more information about MSC Software's products and services, please visit: [www.mscsoftware.com](http://www.mscsoftware.com)



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