

Find out why MSC Cradle is getting attention in Aerospace!

With industry leading technologies, driving unparalled simulation performance speed and accuracy MSC Cradle is one of Japan's most trusted simulation toolsets and the fastest growing provider of CFD and thermal simulation software.

MSC Cradle CFD is less CFD science project and more of a focused, sharp, practical thermo-fluid toolset you can trust to help drive your design performance with.

World leading meshing performance

MSC Cradle CFD embraces powerful meshing capability and enables evaluation of 30,000 component electronic assemblies with no preparations, creating 0.5 billion elements). Users can simulate contac,t free bodies, movement, and design variations.

Automative adaptive mesh refinement is also possible, which helps users increase mesh resolution at where precise model representation is needed. As shown in figures on right, more detailed Mach number distribution can be acquired by mesh refinement, which helps obtain realistic simulation results as possible.



Powerful fluid, aerodynamic & thermal modelling

MSC Cradle CFD covers wide range of aerospace development aspects, including fluids, aeroelasticity, thermal, as well as coordinates with 27 structural, acoustic, and other software.



Industry leading accuracy & speed

 MSC Cradle V14.1 is setting new accuracy and speed standards and shaking things up.



Aerodynamic Prediction Challenge (APC) ,organized by JAXA



Solution	Mass flow rate (kg/s)	Deviation
Experiment	34.573	NA-Baseline
MSC Cradle	34.285	0.008%
Other CFD 1	33.0	0.045%
Other CFD 2	33.25	0.038%

Validation : NASA Rotor 67

(Laser anemometer measurements in a transonic axial-flow fan rotor)

Award-winning post processing

In addition to having won awards for post processing, the MSC Cradle post processor provides some unique pragmatic tools to help you understand your design's performance. It also supports Nastran, Marc and a number of other result types, making it available for wide users.



Next generation co-simulation

Closely coupled solutions, including solving, meshing & post-processing capabilities, bringing together over 27 different disciplines, provides our customers with some incredible insight into the true performance of their designs.



• Equalization of air flow and deformation (coupling with Nastran and Marc)



• TSTO (Two-Stage-To-Orbit)



· Deployment of flaps on an aircraft wing (coupling with Adams)

Highly trusted by users

MSC Cradle CFD has a rich background in Japan. With a renewal rate of 95% it is one of Japan's most trusted and respected tools. As part of MSC and Hexagon, it's now expanding into other areas, bringing with it an unparalleled level of focus & pragmatism.

"I love this software"

— Aerodan

"The Cradle pre-processor is a jewel"



"(MSC Cradle CFD) has been our main CFD/thermal tool for the last 5 years for electronics cooling applications, and we have not regretted it."

- TEN TECH LLC

• Our current users include companies below



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