



PREDICTING PRODUCT QUALITY AT TEN TECH AERO

TEN TECH AERO DELIVERS SPEED, QUANTITY AND QUALITY WITH ALTAIR CHANNEL PARTNER TRUE INSIGHT

About the Customer

TEN TECH AEROSPACE & DEFENSE, INC. provides multi-discipline engineering services including high-end mechanical engineering design, analysis, physical testing support and hardware prototyping services. Because their customer list includes, but is not limited to, large defense contractors, accuracy and speed to result are top priorities. With decades of industrial experience and high expertise in computer-aided engineering (CAE) tools and methods, TEN TECH AERO is able to predict product performance without the use of costly physical prototypes.



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William Villers,
Managing Director, TEN TECH
AEROSPACE & DEFENSE, INC

TEN TECH AERO pride themselves on being the most responsive, cost-effective and highest quality partner in the market. "Speed, quality, and quantity do not have to be mutually exclusive," says Managing Director, William Villers.

Their Challenge

Because speed and accuracy are top priorities for TEN TECH AERO, they are constantly evaluating their tools to ensure they can provide the type of service that they are known for. At one point, they were seeing consistent crashing and long processing times from their previous tool, to the extent that processing could take up to two weeks. These were classified as "known bugs," so rather than receiving support for these challenges the recommendation was to recreate the models.

Since they historically have worked with large designs, where more than 200 million elements are common, they knew they needed a better solution for every step of their CAE process from preprocessing, solving and postprocessing. TEN TECH AERO also needed a tool that could work with their existing legacy data, as they could not afford to lose many years' worth of models the teams had created and stored.

Processing time was a big issue for them as well. One of TEN TECH AERO's key differentiators is that they do not charge their customers for solving and processing time. This means that extra time spent on processing is time that isn't spent on billable services. With their previous tools, at times processing could take up to a full day.

Our Solution

"I first heard about Altair® SimLab® around 2 years ago, mainly because of their built-in BGA (Ball Grid Array) tools," Villers says. During their trial of Altair SimLab, they knew this was going to be the solution they chose. Outside of the built-in automation tools, they found that SimLab also had an intuitive interface that allows them to stay in the same tool for the entire process from meshing and setup to solving and visualization. They are also able to use their legacy data efficiently, ensuring their customers are fully protected.

A few other things that really set Altair apart from other tools they were evaluating is their licensing model and the availability of training. The licensing model meant they weren't tied to any one specific software; they can take advantage of other tools within the Altair portfolio at no extra cost. "One of the things we enjoy is not having to use a specific product for our customers," says Villers about being able to choose the best solution for the problem versus being forced to use a specific software tool. The self-paced, instructor led, and online trainings included with the purchase of their Altair Units is also a huge benefit.

Results

Villers notes, "Models that would take hours with competitive software tools, we were able to convert in roughly 10-20 minutes with Altair." They also saw a 2 to 3 times time savings while using Altair® Optistruct® versus their previous solver for shock response analysis. With large models, analysis used to run for up to 24 hours, with SimLab, that is 3 hours.

To learn more, please visit altair.com/simlab and altair.com/optistruct



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