

Case Study

Airbus Helicopters

Streamlining the Weight Data Management Process to Improve Decision Making

Airbus Helicopters Weight & Balance (W&B) team is tasked with collecting and analyzing data to forecast the weight of a product during the conceptualization phase. Collecting useful and up-to-date data in a standardized way from this wide group of stakeholders was proving to be a challenge for the W&B team, slowing down both the interrogation of data and the resulting decision making. With the manual upload of data, there was no way to create a standardized report that could be updated in real time, either internally by the different product development departments or externally by suppliers. These were the problems Altair was tasked with creating a solution for.



Solution

After an extensive benchmarking period, Airbus Helicopters selected Altair's Weight Analytics as it was the only solution that could fulfill the project brief in its entirety while still allowing secure access to its third party suppliers. Once the Weight Analytics solution was set up, Altair's specialists supplied a comprehensive services package which included on-site training and support sessions to help the W&B team gain a full understanding of the solution and the processes involved in importing data and exporting reports. The solution was customized to support several different import templates and setup to automatically initiate a daily data import of each departments' and each suppliers' weights data in .csv format. Once imported, the data could be quickly checked by the Weight Managers and tracked in Weight Analytics.

Result

With the solution Altair setup on-site the W&B team is now able to estimate earlier the weight of the entire helicopter, not only the baseline version but for various configurations of the helicopter for different missions such as oil and gas applications, rescue missions, military use etc. Due to the implementation of Weight Analytics, the weights team can now visualize, analyze, and predict risk and opportunities at any point in the product lifecycle and track and control the maturity of the product while running what-if scenarios that result in actionable information for key decision makers.

Due to the success of the first service package with Altair ProductDesign, Airbus Helicopters are now working in partnership with Altair to build upon and improve the current features in Weight Analytics to generate more custom processes and increase training support as the company continues to expand the solution to more of its global supplier base.

"At every point during development, we can provide moment of inertia calculation as input for load computation. This previously took us 4 weeks preparation using Excel, now it takes us just 1 day."

Kai Thraene, Head of Weight & Balance, Airbus Helicopters