



Customer Airbus S.A.S.

Interior B-brackets calculation

Introduction of the Customer:



Airbus stands tall as one of the world's two leading aircraft manufacturers. The company employs 47,600 people and produces a comprehensive range of commercial aircraft renowned for their efficiency, innovation, economy and safety. In recent years, Airbus has regularly delivered more aircraft than its rival and has consistently booked at least half of all new orders. It has also captured the imagination of the world with the A380 - the biggest airliner ever built - which is setting new standards for the aviation industry. Airbus gives a chance to the best suppliers to participate on all design & development & production programs (A320 family, A330-340 Long Range, A380 double-decker, A350, A400).

<http://www.airbus.com/en/>

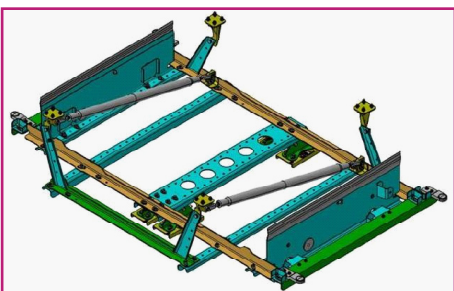
Project description:

Inter-informatics stress analysis department started to cooperate with Airbus on a project of justification of B-brackets for A380.

We make stress analysis reports including justification for complete documentation of airplanes according to Airworthiness standards and defined load cases.

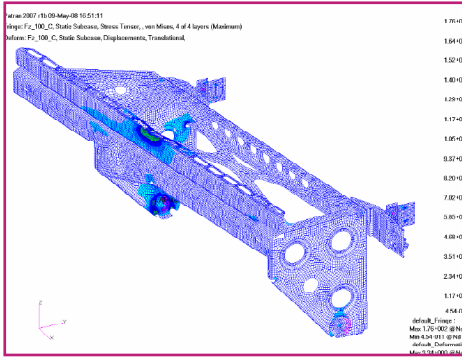
Part of this cooperation is FEM (Finite Elements Method) analysis in MSC Nastran/Patran. We get all necessary data from the customer's database and prepare FEM models from the customer's 3D data.

Task for Inter-Informatics:



Inter-informatics' task is load redistribution of interior panels into the B-bracket according to load cases defined in Airworthiness standards, sequence force redistribution into each part of B-bracket, stress analysis calculation of all parts and calculation of reserve factor for each part of the bracket assembly.

We made stress analysis reports and justifications of B-brackets for Airbus including FEM analysis in MSC Nastran/Patran according to Airworthiness standards.



Inter-Informatics' solution:

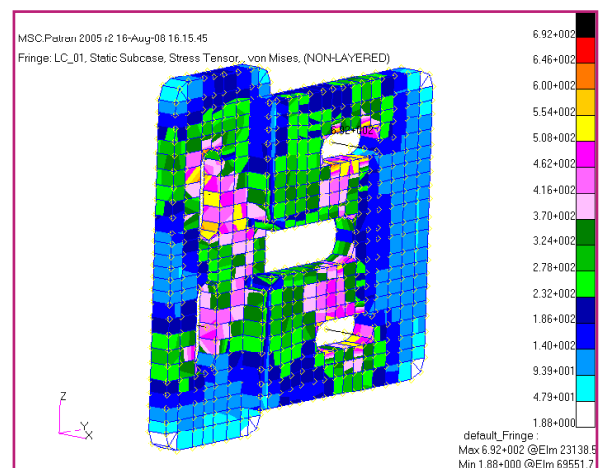
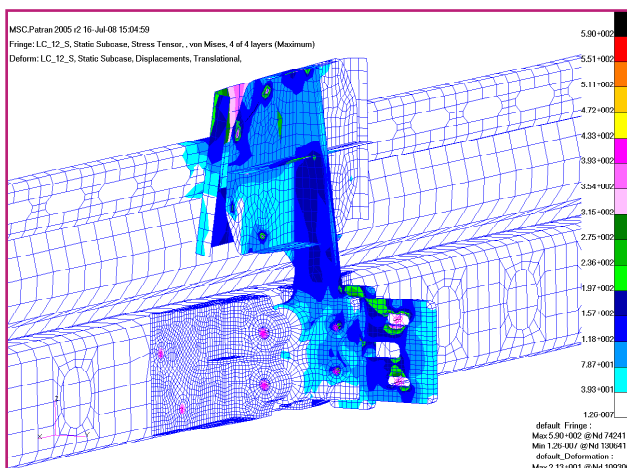
First we had to find the necessary data and standards in the customer's database. Then we created FEM model from the customer's 3D CAD system database which included finding necessary material, weight and heat treating information for a proper stress analysis calculation according to Airworthiness standards.

We made stress analysis reports plus justifications for a complete documentation of various aircraft.

Benefit for the customer

With Stress Analysis we have complete portfolio of services for our customers in development and customization business.

- » Inter-informatics is able to **make a complete stress analysis report and justification for components** of engineering structures according to relevant standards. We could find all necessary information from the customer's database; no major support was required from the customer.
- » Inter-informatics can improve quality of engineering structures, support design departments to find a solution for **the cheapest production and the simplest installation** as well as an optimal material solution – the main goal is to find the best solution in terms of price, weight, material and installation.
- » Inter-informatics can offer a complete solution to the customer!



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