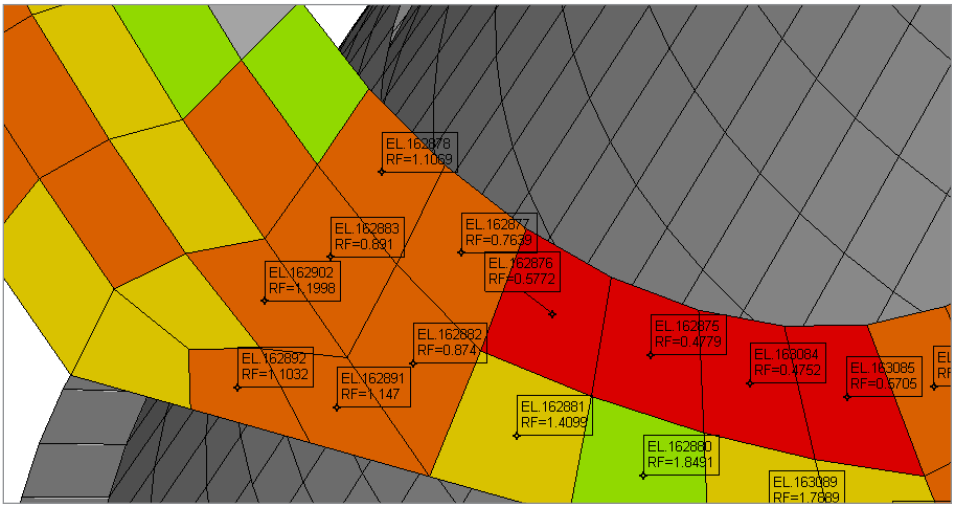
Altair | HyperWorks®

RUAG Space Streamlines Composite Analysis with Improved Data Workflow



RUAG

Aerospace Defence Technology

"Today the bi-directional interface between HyperWorks and ESAComp is mature enough to be tasked with RUAG's demanding real cases: set up the finite element model, to run the quasi-static and dynamic load cases and to evaluate the results."

Ralf Usinger
Product Lead Engineering Satellite Structures
RUAG Space

Challenge

Combine the very powerful meshing and post-processing capabilities of Altair HyperWorks with the advanced composite failure analysis methods provided by ESAComp software from Altair.

Solution

- Rely on standardized, state-of-the-art analysis tools.
- Creation of the bi-directional interface between HyperWorks and ESAComp, by integration of the two pieces of software.
- Graphical display of ESAComp results within HyperWorks, fast identification of critical load cases, critical elements, critical plies, and failure modes.

Impact

- Streamline and accelerate the analysis of composite structures by a significant reduction of unnecessary breaks in the data flow.
- One integrated work environment for producing results needed in the design verification of satellite structures. Offered as standard interface between ESAComp and HyperWorks to all customers.
- The solution is now mature enough for project work: Tested on MetOp Second Generation meteorological observation satellite.

Looking Forward: RUAG Space plans to...

- Take successful integration between HyperWorks and ESAComp to the next level.
- Expanding post-processing capabilities for different data (sine or random response).
- Meeting demands of clients in other industry sectors.

Keywords: HyperWorks, ESAComp

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About Altair

Altair is focused on the development and broad application of simulation technology to synthesize and optimize designs, processes and decisions for improved business performance. Privately held with more than 2,000 employees, Altair is headquartered in Troy, Michigan, USA and operates more than 45 offices throughout 24 countries. Today, Altair serves more than 5,000 corporate clients across broad industry segments.

www.altair.com

About HyperWorks®

Performance Simulation Technology

HyperWorks is an enterprise simulation solution for rapid design exploration and decision-making. As one of the most comprehensive, open-architecture CAE solutions in the industry, HyperWorks includes best-in-class modeling, analysis, visualization and data management solutions for linear, nonlinear, structural optimization, fluid-structure interaction, and multi-body dynamics applications.

www.altairhyperworks.com

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