**Benefits**

The composite optimization design process facilitated by Altair HyperWorks technology and followed by Altair ProductDesign has the following benefits:

- Cuts development time and cost by providing high performance designs in the initial stages of the product development process
- Reduces product design time by eliminating the “trial and error” process of typical design iterations
- Automates calculation of the number of plies needed for each ply fiber orientation
- Automates composite laminate stacking sequence determination
- Automates incorporation of manufacturing constraints and Ply Book Rules for certified designs
Impact Simulation

As composites make their way into primary structure, designers have to be increasingly aware of the performance of these structures under adverse conditions. Altair RADIOSS is the leading simulation code for assessing the performance of composite structures under dynamic and high velocity impact events. From bird strike, ditching, and ballistic impact of aerospace structures to crash performance of automotive vehicles, Altair has the technology and expertise to help you design better composite structures in all types of loading conditions.

Composites Conversions

In order to reduce weight, many companies are switching to composites from metals. The design process for composites is much different than for metals and hence, many companies struggle with realizing the full benefits of composites. Altair ProductDesign has extensive experience helping companies develop optimized designs of parts converted from metals to composites.

Complete Program Partner

Altair Engineering and Altair ProductDesign provide support from concept to launch. For more than two decades, we have helped companies around the world to bring innovative products to market in an efficient manner. We can manage entire programs as well as provide targeted assistance from inception to manufacturing. As a full program partner, we have a strong history in successfully combining technology with subjective evaluation, objective benchmarking, industrial design, design studies, target setting, and design and engineering release activities.